A LABORATORY FOR MILITARY PROFESSIONALS (WARGAMING ROOM)

By Doug Winton and Ken Gilliam November 10, 2020
https://warroom.armywarcollege.edu/wargaming-room/laboratory/

Welcome to **WAR ROOM** the official podcast of the U.S. Army War College Online Journal. Graciously supported by the Army War College Foundation, please join the conversation at warroom.armywarcollege.edu. We hope you enjoy the program.

The views expressed in this presentation are those of the speakers and do not necessarily reflect those of the U.S. Army War College, the U.S. Army, or the Department of Defense.

Ken Gilliam: Hi, I'm **Colonel Ken Gilliam** and today on A Better Peace, we will once again venture into the Wargaming Room, a series dedicated to war games and other innovative methods used at the Army War College and other institutions for education, research and experience. This is episode 2 in the series, and it was originally recorded in May 2020 at the beginning of the COVID-19 pandemic in the United States. My guest is **Colonel Doug Winton**, the Chair of the Department of Military Strategy, Planning and Operations at the Army War College, and also the Henry L. Stimson Chair of Military Studies. Doug explains some of the history behind the game Joint Overmatch and how it came to be a part of the Army War College Resident Program. Dr. Winton, welcome to the Wargaming Room.

Doug Winton: Hey, thanks Ken. I appreciate being here.

KG: I ask the same opening question of all our first-time guests, which is really more personal than professional, what was your favorite game or play activity as a kid and do you still play it?

DW: So as a kid, I think it wasn't really a game, so play activity, I would say would be building blocks or Legos or tinker toys, anything I could build with, I could make things, I think was my favorite thing to do as a young kid. In particular, something that was prefabricated, right? I was never one to go in and try and carve my own thing, but if I could construct things a little bit with models, but I really don't do any of that stuff anymore. I think mostly just because I wasn't particularly good at it. I'm a real reward seeker and nobody was ever telling me, wow, what an amazing thing you just built, but I got all kinds of accolades and affirmation for grades I could get in school. And so, I think my energies in my inclinations just sort of shifted to those sorts of things. I wouldn't consider myself a builder anymore.

KG: Well, do you find that you actually build other things now?

DW: So, I like to, but I'm not very good at it, right? I have a small wood shop in my garage. I like being able to do that stuff, but nobody ever looks at one of my finished projects, and is like, wow,

that is amazing. Like as an example, for my wedding present to my wife, I built a big trunk like that you would put at the foot of the bed and keep big blankets in. And it's just a box, right? There's nothing artful about it whatsoever. The joints don't look nice, the cuts are kind of lopsided. So, I physically did it and I enjoyed doing it, but it's got zero artistry to it and it's barely functional.

KG: Well you and I are a little more alike than I thought. I have very similar projects that are in various states of disrepair around the house as well. The podcast here is kind of one of those things. I wanted to try building something, so hey, I'm building a podcast.

DW: Yeah.

KG: Doug, I think it's safe to say that your Department is the one that best keeps war in the Army War College, and you conduct instruction on the Unified Command Plan, Theater Strategic Planning, campaign planning through the range of military operations, joint multinational and interagency plans and operations. Does this all sound familiar?

DW: Yeah, it does.

KG: I got it off your web page. That's where I got it from. Joint service support, the unified commanders in war and military operations other than war, organizing, training and sustaining joint task forces and joint and service unique doctrine. I imagine, though, that your faculty spends a significant portion of their time preparing for and delivering the military strategy and campaigning course. Would you describe that course to us and some of the things that you're trying to achieve there?

DW: Sure, so the course is one of the core courses in the Resident Students' War College experience. The way I like to describe the course is it's the course in which we work to improve the students' judgment about using military power to achieve national security objectives. So, as you said, sort of our Department motto is "we keep the war and war college." We refer to ourselves as warfighters. We think a lot about how to apply military power strategically. We want our course, Military Strategy and Campaigning, to help develop students that can be strategically minded joint warfighters. That means we want him to have particular expertise in the role that Army forces can play, and we want them to have the judgment that's going to be necessary in order for them to conceive, design and implement strategies and campaigns so that we can apply military power in coordination with interagency partners and multinational partners to achieve our national security objectives. We need to be able to do that, apply military power in both traditional war and irregular warfare contexts, and we also have to be able to apply military power across the competition continuum, integrating capabilities from multiple services across all the domains and across the joint functions. And we have to be prepared to do that in environments that are contested by peer

adversaries. So, our course tries to give students the knowledge that's necessary for each one of those things and then give them an opportunity to apply and evaluate how well we do that.

KG: Over the past couple of years, I think the Department of Strategic Wargaming has had an opportunity to work with you and some of your faculty on the design of that end of course exercise and there's a few of them that have gone on. Can you explain what you're trying to achieve in the end of course exercise?

DW: Yeah, gladly. I mean we make a big investment in that end of course exercise, it's close to 25% of the students' overall time in the course. And it's designed to be an active learning problem solving event where the students can put into practice the concepts of the course and demonstrate how well they've achieved all of our course outcomes. So, we want this exercise to give students an opportunity to apply and evaluate the various frameworks that we've introduced in the course. There's a particular emphasis on operational design as a framework for thinking about strategic environments and designing campaigns and we want them to be able to demonstrate their critical thinking skills and their creativity in how they design and adapt the campaign plan that's intended to achieve national security objectives.

KG: As a Department Chair, I assume you have the unique ability to see across multiple classrooms and the delivery methods in those classrooms. Can you talk a little bit about the similarities and differences between the different exercises? I'm tracking really three basic ones: Kalimantan, MDO 1943 and Joint Overmatch.

DW: Yeah, so this is a really interesting journey that the department has been on for the past few years. So, I'll start by describing the Kalimantan exercise because it's been the one that's been used in the department the longest. It's been the base of our end of course exercise, I think for almost a decade. It's a fictitious scenario. It's set in Southeast Asia and there's a fictitious country, Kalimantan, that's supported by the PRC and is threatening Malaysia and Brunei with military action to seize territory. And in this fictitious scenario, the U.S. military is charged with deterring and, if necessary, defeating Kalimantan aggression. So, there's some significant advantages with this exercise to student learning because it's fictitious, right? We made it all up. It's really easy for us to manipulate the scenario to get the very specific outcomes or force the student actions or dilemmas that any individual instructor is particularly interested in. Because it's fictitious, it's very easily tailorable to the specific outcomes that we want. The main drawback of the exercise is that the faculty and the students have to invest significant amounts of time in creating and learning this scenario. The scenario is based in contemporary reality. At its core it's about a fictitious country and so you have to invest time in learning this fictitious history, geopolitical relationships, economic factors and military capability. And there's a drawback of that, right? That's a substantial investment of student time and faculty time. I'm not convinced that it's the best use of our limited time that's available to us. The other drawback that I think that we have with the game is that, at

least in the scenario as written, it doesn't force us to deal with great power competition in a very direct way. The role of the PRC in the scenario is pretty oblique, and our current strategic guidance is telling us that we have to be prepared to operate in an era of great power competition, and this scenario doesn't really get at that. We could update this scenario to give the PRC a bigger, broader role, but again, we're still then stuck with investing time in developing and learning a fictitious scenario. So, the second one that you mentioned that we started developing a couple years ago is this Multi Domain Operations 1943 and that exercise is based in a historic case of the Mediterranean Theater during World War II, specifically in the year 1943, and that creates an opportunity for students to make different choices about how and where to apply military power in a theater context to achieve larger strategic national objectives. One of the things that's great about that is, because this exercise is based in historic events, it's really easy to expose students to the inherent complexity that's going to be in any theater of war. The main advantage that I see in this exercise is that it forces students to dive deeply into an important case, and then in that case, wrestle with the interconnected issues of alliance dynamics, domestic politics, leadership, international politics, technology changes, economic factors and military challenges, and they can experience all the ways that strategic leaders in World War II had to deal with those same issues. Learning from military history is one of the best ways for us to learn about our profession because from my view military history is the database of our profession. So just as we would expect doctors to study past medical cases at post mortems and for lawyers to study case law, military professionals can learn their profession in the same way by studying military history. We're different than biologists or chemists or physicists because we don't have a laboratory where we can learn and develop new knowledge. A game like MDO 1943 brings together the best of military history and a laboratory-like experience that can facilitate learning. But there are some drawbacks of this approach too. The main drawback is not all faculty are comfortable basing their teaching in history, so in order to teach a core course at the Army War College, I have to have a team of 25 faculty members who are prepared to deliver that curriculum, but we're not a faculty of 25 historians. We're a mix of military professionals from across all the services, political scientists and historians. In order to really use the history to bring the learning alive, you have to be well versed in the history yourself as a faculty member, and that's a pretty heavy lift for some of our faculty. And it's also a heavy lift for some of our students. There's not a good way to boil down the history into the very necessary salient points. So, the reading load tends to be a bit heavier, and the reality is that some of our students have an aversion to history and they're just not interested in learning about past battles or campaigns. And then another drawback with trying to get to our course outcomes through this historic case is that there's just not a realistic way to get students to grapple with the implications of new technology. Our course wants students to have good judgment about applying military power to achieve national security objectives. That means they have to be able to think about the implications of cyberspace and space and artificial intelligence and machine learning and man machine teaming and those sorts of things. We also need our students to be able to think about the information environment and how to influence a 21st century information environment which is dramatically different than the information environment of the 1940s. There

are some significant drawbacks of some learning outcomes that are hard to get to with that case. So, the most recent exercise we've been working to develop is the last one you referred to that's Joint Overmatch. In this exercise we've used a scenario in the USEUCOM AOR that requires U.S. forces to engage in conflict with a peer competitor. Now this is not a war game that's trying to replicate a U.S. or NATO war plan in any way. Rather, it's an opportunity for students to demonstrate their ability to integrate military capabilities from various services across the joint functions, across all of the domains to achieve national security objectives. And the game was really artfully designed by your team to have students not replicate units that are moving across the terrain, but rather collections of capabilities. It invites students to think more conceptually about applying military power. It has stripped away the inclination to want to talk about very tactical issues like, what's the precise range of this particular aircraft, or this particular rocket? But just describes general capabilities by function to the various elements, so I've been very pleased with the way that the game was designed, and because it's in a contemporary scenario, all the work that the students are doing to learn the scenario is informing their judgment about current challenges to U.S. security interests. There's a synergistic effect in the research that they're doing to prepare for the game and the research that they need to do to be prepared professionals for the joint force.

KG: You talked a little bit in there about the comfort level of the faculty across all three of those. Is there any comfort level or discomfort level between Kalimantan and Joint Overmatch?

DW: Kalimantan was not originally designed to be a game. It was designed to be a planning exercise, a campaign design exercise, and we've incorporated some gaming into it. Joint Overmatch is a horse of a different color. In order to have students wrestle with the inherent complexity of multiple joint functions, multiple services, multiple domains, and multinational partners, it is a pretty complex game and it has very specific rules for the order in which you do things, and then how the various interactions between red and blue are adjudicated, and that's a pretty heavy lift for some faculty to get into those game mechanics. One of our challenges is, we need an exercise that can deliver outcomes for 25 seminars, each comprised of about 15 students. You don't have 25 game facilitators, you have people that can help us create the game, but we have to be able to facilitate the game with the faculty that we have. So figuring out how to do that within our current time constraints and the way that the course is organized, it essentially means for each game, one faculty member has to be able to adjudicate the game and get the learning points across to the students simultaneously, and that's a pretty heavy lift. We've thought about trying to have two faculty members facilitate a game. One seminar of 15 students plays blue and one seminar of 15 students plays red. The big disadvantage of doing that though, is then it dilutes the student engagement. The big advantage of saying, hey, I've got 7 students playing red, 7 students playing blue is those 7 students are very deeply engaged, which is a great thing, right? So, this is all about tradeoffs, and just the way the core curriculum is laid out now, we could find a way to say, hey, we're going to have half the students play the game this week and half the students play the game

a different week. That could be interesting, but we just don't have the calendar organized to be able to do that yet.

KG: Have you seen a difference in the way the students react to any three of those?

DW: I have. In my view, students get more engaged with the game. This course is not a universal experience, right? All of our students are on a normal bell curve distribution of likes and dislikes. Most of our students are competitive by nature. They want to win. And so, when the game forces them to develop a plan that's going to be challenged by a thinking adaptive adversary, they get more engaged in it. The game draws them in in a way that telling them to prepare a briefing that's going to be evaluated just doesn't. I also think that by playing the game, whatever it is the student learns, is going to stick with the student longer. When you get into the game, my experience is that it's harder to know in advance what lessons the students are going to take away. They're more likely to surprise me with what they found to be impactful or meaningful. But whatever it is, I think they retain it longer. It embeds deeper because they had this very engaged, tactile, competitive experience by which they learned it.

KG: So, there's a different tradeoff I think you're talking about now, and I don't think I've ever framed it in terms of learning the wrong thing versus learning the right thing that sticks longer.

DW: There are absolutely some things we as the faculty know they need to learn even though the student doesn't know it yet. Many of our students come here having had primarily tactical experiences and they haven't had the opportunity to think through what the challenges of a professional military officer post-War College in strategic enterprise level jobs is going to demand them. So, there's some things we as the faculty have to package for them and deliver to them. But because they are such accomplished professionals, and because there's such a diverse group within the profession having had a variety of experiences, we as faculty should accept the fact that they're going to direct and develop some of their own learning. The game allows that to come out in ways that we should be excited, surprise us as faculty.

KG: So where do you think the games are going to go next year?

DW: Well, I really want Joint Overmatch to be the anchoring experience for students in the resident program. But since this is 2020 and we're in the middle of a pandemic, I don't know that the social distancing guidelines are going to allow us to play Joint Overmatch as we developed it. So, part of this goes to the faculty development necessary for the game. In order for our students to play the game, our faculty members have to know the game, which means our faculty members have to play the game, which means starting in August and September, I need faculty members sitting in a room around a game board in close proximity with one another, and I just don't know if the COVID-19 pandemic is going to allow us to do that. We didn't design the game to be played

in a distributed way. And I don't think we have time to go back and try and redesign the game for that. Not before this academic year. The good thing is the Kalimantan scenario has delivered good outcomes for us. It might be the best way for us to get at outcomes in this distributed environment. Although I will say, I got to put a plug in, also, it wasn't a game developed for military strategy and campaigning. It was a game that's been developed as part of one of our Integrated Research Projects that the Joint Warfighting Advanced Studies Program JWASP has been playing during the electives. And they played that game in a distributed way, and I've been really pleased with the student learning that came out of that game.

KG: Yeah, you're talking about Pacific Grid?

DW: That's exactly right game right. That's exactly right. So that game has driven student learning in some really interesting ways that I have been super pleased with. I don't know if it would make sense to try and scale that game up to 25 seminars or not, but I think that one also holds real potential.

KG: I will take that on as a challenge. We have a group of designers and developers who, because of the environment we're in right now, have branched out to see if there are ways that they can put these things in a digital environment. So, at a minimum, the faculty might be able to learn the mechanics much more quickly and not have to come into a room and learn it in that fashion. I'm waiting on them to come back, but they've got some interesting ways that they're doing it, commercial off-the-shelf platforms that we wouldn't normally have access to. And quite frankly, if you would have asked us six months ago to do something like that, I probably would have pushed back and said no, no, no, we do tabletop games. It's much better to be in the same room, to touch and feel and pick these things up and move around and have the one on one interaction but when we're restricted like this, it actually opened up some opportunities to us that I think might come to fruition. We will keep the door open. I will tell you Derek and Ty have done everything they can to make it possible to get to that physical in person place. They printed I think over 1800 different pieces to facilitate some of that, and I talked to them about how they're doing and they're ready to get it done. I think you're right though the INDOPACOM might provide some insight to us on how we might be able to do it in a distributed fashion, because you might not have another choice when it comes down to it next year.

DW: That's exactly right. I agree with you. There's real value in the physical proximity. You just pick up all kinds of cues in seeing a person's facial expression as they observe the action that you're taking. You learn a lot from the tone of voice a person uses when they're describing the action that they're getting ready to take. I do think there's real value in being able to do these games physically in person, but if the environment makes that unwise then we do have a burden to figure out, okay, what's the best way to get to the outcomes with a distributed approach?

KG: So what advice would you give to future game designers and faculty when they're working either on a new game or trying to modify something that you already have?

DW: I'm not an expert at this, but the games that seem to me to work best are games that have been done thinking very deliberately about what's the outcome I'm trying to achieve? What are the experiences that the players are bringing into the game? and tailoring the game for the outcome and the player. So for example, I've participated in some matrix games and my experience with some of those has been because the students weren't real experts in the scenario of the game, they couldn't really get to the learning outcomes through that approach of a game. Just thinking about the outcomes in the students is a super important piece of it. One other thing I think is really important to think about, and you and I have talked about this a little bit before in the past, but we have some war games that we are conducting because we want to build new knowledge about a future environment. We have some war games that we are playing because we want to help students achieve certain outcomes. I think that we should be working hard to combine those two efforts to let students learn by building new knowledge about the future. And again, this requires the faculty member to be more of a coach and less of a transmitter of information to help the students explore future possibilities. But I think there are real gains to be made if we could figure out how to combine our research efforts and our education efforts together and I don't think that would make sense for all 380 students in the resident program. But I think there is a subset of our students that would really get to our program outcomes in a very deep way if they were able to make gaming a primary avenue to do that.

KG: That's kind of along the lines of the commandant's request or recommendation back at, I think October of 2018, where he said, look for opportunities of more project than paper. We tried to do that a little bit, but I don't think we've done it in the war fighting sense. We've had some other game like things, game like projects with students who have tried to do some of those things with varying levels of success. Probably a good vein to go in if we can probably find the right person I think. So that has been my recommendation, is you got to have the right faculty who's passionate about that topic in order to get the students to go in the right way. Pacific Grid in the INDOPACOM IRP, that game I think originally was supposed to be along those lines but has diverged into what would more traditionally be a Strategic Studies Institute paper with students that are writing on that paper, and there's a game that might be on the side that might help us with some of those insights. It just never really got included inside of the research cycle at all.

DW: Yeah. I had the experience this year being a project advisor for two students who developed a game in order to explore various potential outcomes from alternatives to the Army's Sustainable Readiness model. It was super interesting for me, because coming from a very traditional academic background with a PhD in international relations, I value highly the learning that takes place from traditional research and having to write a paper. That's the way I have learned most of the things that are important in my academic field, but these students weren't focused on writing a paper. The

output of their intellectual development was a game that they played several times and learned quite a lot from the game. The game didn't go where they thought it was going to. They sort of confirmed things that the Army already knew. It didn't reveal new insights as they were hoping. It sort of just laid bare what the existing tensions are, but along the way they stumbled onto a really useful tool for educating battalion and brigade-level readiness officer about the Army implications of choices that were being made inside of battalions and brigades and why the Army gives them some of the readiness guidance that they have. So anyway, I'm convinced that there are really important ways for students to learn by trying to develop games.

KG: I couldn't agree with you more. I think I've learned more trying to build some of the projects we've been working on, either for educational or analytical purposes than I would have just doing a standard literature review and trying to write a paper on it. Like you said before, it's been much richer and probably stickier. I've remembered it for longer. Is there anything we haven't talked about that you want to talk about?

DW: I'll just say I've been super impressed with some of the student learning that I've seen take place with Lego Serious play. It's not a competitive game. I've seen it draw students in and create opportunities for students to explain their thinking, which I have found to be quite powerful.

KG: Do you see other opportunities where we might use Lego Serious Play in the classroom?
DW: When you want students to have to explain their thinking, trying to depict something physically challenges them to do that. And the beauty about Legos is a student can say well, I'm not a good drawer, but student Y can draw well. Well, no one is any better at putting Legos together than anybody else, right? You and I can connect blocks just as easily as the next person. It puts everybody on a level playing field in terms of ability, requires them to develop something that's got a physical presence and then explain why they developed it that way. I just think it's a really great tool for forcing students to articulate their thinking.

KG: I think you just used Lego Serious play as a fractal of the game as a project as well. I hadn't thought of it that way before, but I think scale-wise, it's very similar. So, my recommendation on Lego Serious Play is not a specific one. Probably if you're looking for places that you might use it, the first one is, is there any lesson that is so boring that you don't want to do it, but you have to? That's one of those where you go to try to do it instead of cancelling the lesson or doing the standard 'student build a PowerPoint and talk about it.' The other is if there are lessons or concepts where the students normally or even the faculty normally go to other mental models that are not related to the subject matter whatsoever. My biggest one is if they go to a sports analogy, those are ripe places for Lego Serious Play because it is all about coming up with metaphors and describing those metaphors to someone else so they know what your perspective is and you can describe it and turn it around and look at it much, much better.

DW: Yeah, great point.

KG: Doug, thanks for coming today. I really appreciate your time and your insights. This has been well worth my time.

DW: Great Ken, I enjoyed it. If it ends up being profitable then I'm thrilled.

KG: I'm sure it will be. It looks like we're out of time, thanks to Colonel Doug Winton for joining us today in the Wargaming Room. And thanks to all of you for joining us in the Wargaming Room. Please send us your comments on this and all the programs including ideas for future programs. If you want to hear more, subscribe to A Better Peace. After you've subscribed, please rate and review this podcast on your podcatcher of choice because that helps others find us as well. We'll see you here next time, but until then, from the Wargaming Room, I'm Ken Gilliam. Play to win.