Instructor Buy-In: Pitfalls and Opportunities in Wargaming

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Resumé

Krigsspel är en fundamental del av militär utbildning. Likafullt är krigsspel kontroversiellt, med återkommande cykler av uppskattning och ogillande. Krigsspel kan definieras som en betingad interaktion med mänskliga spelare som påverkar simulerade militära aktioner. Syftet med denna text är att undersöka och förklara hur militära instruktörer mildrar sina bekymmer med att handha ett krigsspel. I texten analyseras relevanta skrifter om utbildningsspel för att belysa frågan om instruktörer och krigsspel. Denna metod kompletteras av ny och explorativ forskning, som inbegriper grundad teori, avseende det substantiella empiriska området krigsspel för militär utbildning. Militära instruktörer använder sig av tre strategier för att uppnå instruktörs-acceptans (*instructor buy-in*). En majoritet av instruktörerna verkar sträva efter att undvika explicit spelifiering (*gamification*). Detta undvikande utgör en förklaring till att vissa krigsspel inom militär utbildning förändras eller upphör. Av denna anledning är det vitalt att militära instruktörer har en förståelse för instruktörs-acceptans för att stärka praktiken krigsspel.

THE USE OF wargaming in the military is a distinct area of study within simulation and modelling.[1] There are many definitions of wargaming.[2] Recent definitions of wargaming in academia are inclusive and cover many forms of simulations, exercises and even exceptional activities such as gladiator fights.[3] One reason for this inclusiveness is that defence forces do not have a common definition of military wargaming.[4] In order to focus on military educational wargaming, and exclude other non-relevant activities, this text defines wargaming as *a playable simulation of military action.* Playability refers to human interaction. Hence, a simulation with no affiliation to military action, and with no (or completely scripted) human participation, are not considered to be wargaming. In essence, a fundamental element of wargaming is the inclusion of human players in order to construct a narrative by contingent interaction involving some form of symbolic and simulated military action.[5] Human participation thus not only delineates wargaming as a certain activity, it also provides credibility for the wargame.

This text endeavours to explore, and explain, how instructors alleviate their concerns about wargames. One common denominator in wargaming is the challenge for instructors to manage player criticism regarding potential unrealism, such as misrepresentation in models or of adversary behaviour.[6] Even worse, the entire premise of a wargame can be false, as exemplified by misguided wargames conducted by the USA during the war in Vietnam.[7] More common, however, are concerns centred on details such as specific models within the wargame. Authentically modelled weapon systems with realistic effects are often seen as necessary in order to increase the players' level of immersion and for the game to become a viable training system.[8]

The somewhat derogatory phrase 'unrealistic games' suggests why military educational wargaming has been controversial since its inception as a military educational method in the early 19ᵗʰ century in Prussia as Kriegsspiel. This controversy can be exemplified by the unequivocal expression 'it is not a game' from the pivotal sponsor, General von Muffling, in 1824.⁹ Today, a common view among military instructors can be paraphrased: if wargaming is simply a game, it is simply not credible.¹⁰ Accordingly, there exists a 'dichotomy between games as serious military tools and games as a form of entertainment.'¹¹ On the other hand, some military instructors have promoted the use of wargaming as explicit game-based learning. Historical examples of such pro-game instructors are von Moltke (Germany), Livermore (USA) and Akiyama (Japan).¹² In addition, implicit endorsement of game-based learning in the context of learning by doing, the possibility to try, fail, learn and try again, can be said to be inherent in military educational pedagogy.¹³

The connections between military instructors and contemporary military educational wargaming is in this text mapped by two methodological approaches. First, a text analysis offers a theoretical foundation on the general importance of wargaming instructors. Arguably, the importance of instructors is in itself not very original. Hence, the main contribution of this text is this proposition: since instructors are important for wargaming, what are said instructors doing to alleviate their concerns. For this reason, the second and most important methodological approach in this text is the use of data from five empirical case studies. This data has been analysed with a grounded theory approach.¹⁴ The result from the analysis by the author is the discovery of a core category, the term instructor buy-in. Since this term is grounded in collected and analysed data – interviews and observations in several countries that utilise military wargaming – instructor buy-in encompasses the instructors' concerns and explains how instructors overcome their concerns with military educational wargaming.¹⁵

Wargaming is not the only pedagogical method available for military education. Sometimes there are better ways of attaining certain learning objects than by relying on a wargame. This text does not compare or recommend specific pedagogical methods for specific learning objectives. Instead, this text demonstrates that without instructor buy-in, the traditional and doctrinally supported military pedagogy of using wargames is likely to become underutilised notwithstanding merits and possible institutional support. The term instructor buy-in explained in this text offers the reader an understanding that many military instructors hesitate to use wargaming.

The core issue of instructor buy-in

In this text, the term instructor buy-in is defined as when an instructor has overcome perceptions of deficiencies in comfort, control and credibility when it comes to managing a specific wargame. The instructor has the responsibility to make sure that the game does not become a failure. Consequently, an instructor needs skills, knowledge and authority to run a game.¹⁶ This is particularly so because the instructor faces a challenge in what role to take during the game. Novice instructors may experience fear of losing control of the game.¹⁷ However, one alternative view is that an instructor cannot have control over a game since it is student-driven. This view emphasises that the instructor must have the courage 'to let the simulation flow' and instead focuses on skilful leading and comprehensive debriefing

after the experience-generated game. The need for a debriefing for learning, however, makes the instructor's role a combination of manager/organiser, facilitator and learner. Accordingly, such a role is 'a very difficult one to assume'.[18]

Notably, both alternative views acknowledge that the instructors must exercise control, albeit in different phases of the game. Hence, an educational game design needs to allow a degree of instructor control while incorporating various design specifics, such as challenges to increase participants' motivation.[19]

A wargame instructor is an inclusive designation. Specifically, in this text, a wargame instructor is a person who utilises wargaming as an educational method for his teaching. One clear example is a teacher using a wargame in his classroom. Conversely, persons involved with a wargame (design, directives etc.) but never present during the activity are not included as wargame instructors. In a military educational context, a wargame instructor may participate in a wargame activity that includes several rooms, involves large numbers of military students, spans over an extended period of time and places more emphasis on proficiency-based learning. In such an environment, a military wargame instructor is not limited to the role of game director. However, the instructor needs to be linked to the actual direction of the wargame in order to be categorised as a wargame instructor.

One risk of employing game-based learning is that instructors become 'detached'. Instructors simply do not know what they should do. One reason is the absence of integration between the game and the learning process.[20] One solution is to apply tools that allow the instructor to control the game. However, the instructor also needs to be 'confident' in how to use a game to enhance learning. Time, resources as well as relevant information, are necessary for instructors to assess a game in order to become comfortable with it.[21]

Arguably, the best way to make an assessment about a game is to play it. However, the instructor needs at least some belief in the usefulness of educational games in order to take that first step. In one study in Singapore, the majority of schoolteachers seemed interested in the use of educational games. However, only 16 percent of the schoolteachers surveyed had a firm belief in games, i.e. 'a positive gaming mind-set'.[22] Most schoolteachers seemed affected by the negative connotation of the word 'game', or, that 'games' are difficult to define. For example, more schoolteachers become interested in employing game-based learning when the term 'interactive simulation' is used rather than 'game'.[23]

Comparatively few schoolteachers run games in schools and they usually do so on their own initiative. Hence, the challenge is to convince the majority of schoolteachers.[24] This is difficult since games are perceived as being difficult to control since it is impossible to predict everything that may happen in a game, including the debriefing. For example, some participants may get upset.[25] Consequently, to overcome unwillingness to use games, and increase the ability and willingness to utilise frictions that occurs during a game, there is a need for the civilian schoolteacher, and the military instructor, to achieve instructor buy-in.

The term instructor buy-in concerns each individual instructor and each specific wargame. For that reason, when a new instructor appears, it does not matter if game-based learning is already promoted and formalised in the curriculum at an educational establishment. New instructors also need to achieve instructor buy-in. If not, data

indicates that the game is likely to become discredited.[26] Accordingly, one conclusion is that 'if the teacher is not convinced (…) [the game] will not get used.'[27]

The role of the instructor is not the only decisive element regarding educational wargames. There are arguably three different forms of buy-in regarding wargames. Each connects to different entities: instructor (teacher), learner (user/player) and institution. Of these three, learner buy-in is arguably a basic and important element in the use of wargaming. However, instructors are arguably more important as they can rely on their personal credibility and possibly increase learner buy-in.[28] In short, the expertise role of the instructor achieves user learning.[29] Conversely, if the instructor himself does not achieve instructor buy-in then the instructor's negativity will impede learner buy-in. This is because the importance of learners' perception of the instructor's credibility by far surpasses the actual use itself of games regarding effectiveness of learning.[30]

The role of the instructor vis-a-vis the role of players is significant in military educational wargaming. Military players seem particularly open to questioning a wargame's internal and external validity. In one study, military players were the most inclined to want immediate results and win (instant gratitude). They therefore immediately questioned the credibility of the game when frictions occurred.[31] This awareness of winning or losing is one of the prerequisites of a general phenomenon in game-based learning. In *gamer mode*, a concept developed and explained by Anders Frank, players play the wargame primarily to win rather than to learn.[32] The key of overcoming *gamer mode* – i.e. achieving learner buy-in – is the role of the military instructor. By providing logical explanations for outcomes in the wargame, the instructor can facilitate the learning by keeping the learners' engagement in the wargame and thus avoid, or at least diminish, the phenomenon of gamer mode.[33]

Institutional buy-in constitutes a significant counterargument to instructor buy-in. For example, if the curriculum of a military educational institution promotes a particular form of wargaming; will not the instructors then have to utilise this form of wargaming? This is a powerful argument. Institutional promotion, based on either organisational coercion or cultural constructs, are to some extent supported by recent data, in particular regarding conformism in military education in Germany and Japan. However, this data also indicates that instructors even in those milieus sometimes choose not to conduct wargame because of 'lack of time', or, alternatively, individually push for certain wargame variations such as, for example, changing the adjudication from computerised to manual.[34] Institutional buy-in cannot explain the prevalence of individual instructors who, on the own initiative, introduce and/or modify certain wargaming forms. Accordingly, institutional buy-in does not offer a complete explanation of what is going on in military educational wargaming.

Instructor buy-in offers an explanation for why military educational wargaming is susceptible to continuous change. This involves instigation, continuation or termination of wargaming forms. For example, when an instructor leaves his or her position, data indicates that it is likely that the form of the wargame will also change.[35] For this reason, instructor buy-in is a core category that explains what is going on in the field of military educational wargaming. This core category has supporting explanative categories.[36] For example, instructors are not always comfortable with the wargaming form.[37] Some prefer computer games while others prefer manual games. The ability to

exercise control over a wargame is another category.[38]

In general, instructors are likely to find 'comfort with controlled teaching techniques.'[39] However, the categories of control and comfort are not sufficient when explaining lack of instructor buy-in alone. A wargame also puts the instructor's credibility at risk. This is especially the case when the instructor finds it difficult to either explain, or accept, results in the wargame. In addition, few military instructors are willing to use wargames in the form of a board game. Some see it as (too) abstract while others are discouraged because of a multitude of details. Many see board games as frivolous.[40] Such complaints by instructors indicate their perceived deficiencies in comfort, control and credibility.

Achieving instructor buy-in for military educational wargames

There are three different strategies for instructors to achieve instructor buy-in. The strategies are simple standardising, innovative gamifying and control & veiling. First, the strategy of simple standardising entails every officer being able to utilise the specific wargaming form. The way to achieve this is to go for simplicity. For example, an ordinary map, some rudimentary game pieces and very few formal rules constitute the wargame. The game pieces can consist of whatever is in the instructor's pocket, such as coins or pencils. Free adjudication – the instructor himself makes the decisions and does not adhere to rigid (written) rules – is utilised. The instructor exercises control and will facilitate those combat results that he himself believes are credible. Since this form of wargaming is akin to an instructor-led seminar, the risk of discomfort in conducting

the wargame is arguably less when compared to possible frictions inherent in adherence to rigid rules and/or technical support such as computers.[41] Furthermore, this strategy is in agreement with practical considerations, such as limited time and/or resources.

Simple standardising is also about the fact that military instructors have to do wargaming since it is doctrinally expected to do so in the planning and/or decision-making process. For this reason, the product from the wargame – the outcome feedback – is paradoxically considered more important than the wargaming process – the cognitive feedback. It is usually the other way around in game-based learning.[42] Since the product and not the process is important, oversimplification occurs in order to increase the level of control to produce requested products on time. Combined, the properties of simplicity and doctrinal adherence require that a wargaming method needs to work in the field and produce time sensitive outcomes. The resulting wargaming form is up to individual instructors to master. For this reason, wargames that adhere to simple standardising often take the form of a free adjudicated manual map game and are primarily learned from fellow military instructors. As a result, the wargame form becomes intra-professionalised. It is therefore a challenge for non-military instructors to conduct wargames that adhere to simple standardising.[43]

While the strategy of simple standardising is inherently close to the officer profession, the second strategy of innovative gamifying is linked to specific individuals, some of whom belong to the officer profession. What is important in this context is the presence of an individual who has either designed the specific wargaming form, or modified an already existing wargame. This is an indicator of individual innovativeness, which

becomes apparent when considering that the form of a wargame – number of player sides, degree of hidden information, adjudication arrangement and the physical format – tends to change when an individual instructor appears/relocates. The links between a specific instructor and a specific form of wargame are observable concerning innovative gamifying. The explicit assertiveness from such enthusiastic instructors typically promotes a notion that no one (else) understands wargaming.[44] A well-known individual in this category was probably Lieutenant von Reisswitz, the innovative designer and instructor of Kriegsspiel in 1824.

The presence of an individual instructor with his own game design/modification is a vital indicator of innovative gamifying. Besides the understanding of game design, the individual's belief in wargaming as a good educational method is augmented by the individual's belief in game-based learning. One key word in this form of learning is gamification. Frequently, gamification refers to a technique (design) of making tedious tasks fun in order to increase motivation and achieve educational effectiveness. This concerns problem-solving, higher motivation and better learning.[45] One important aspect in gamification is the issue of competition.[46] Although not every wargame is organised with two adversarial sides similarly staffed and with roughly equal chances of success, akin to a traditional Kriegsspiel, a core design feature of wargames in this strategy is the opportunity for competitive play.[47] On the other hand, cognitive feedback is considered more important than outcome feedback (i.e. winning or losing).[48] The learning process is thus more important than playing to the end. This emphasis on process differs from the strategy of simple standardising and its focus on product.[49]

The implementation of gamification is a conspicuous indicator of innovative gamifying. However, the reliance on competition, and the concept of fun, is not a desirable strategy to use in order to achieve instructor buy-in for many military instructors. In fact, most military instructors seem negative to utilising games since '[they] did not join the army to play games.'[50] This is neither a new nor a recent opinion.[51] One of the reasons why Kriegsspiel led to Free Kriegsspiel in the mid-19th Century was to move away from game-based elements such as the use of dice.[52] Specifically, unanticipated combat results may lessen the instructor's credibility. In addition, some wargaming forms are clearly outside the individual instructor's comfort zone. For example, many instructors have issues with board games while others have issues with computer wargames. This lack of acceptance about 'playing games' provides an additional explanation as to why military education does not utilise wargaming to a larger degree.[53] This limited usage can be contrasted to the general eagerness of introducing game-based learning in civilian education since the 1970s.[54]

The third strategy for achieving instructor buy-in is control & veiling, which is in many ways the opposite of the use of gamification. Utilising this strategy, wargames are not referred to as games but rather as, for example, simulation-based exercises. In addition, a major difference to the other two strategies is that physical attributes of the game, such as a map with a hexagon-overlay and abstracted unit symbols, are hidden from the players' view. The players may have access to their own regular situational maps but only receive information from rapporteurs and/or communication systems. Hence, since the players themselves cannot physically interact with the simulation system, especially the adjudication, the players

are considered safeguarded from potential concerns of unrealism, such as overly simplified, too complicated, or questionable, combat models. Nor do the players have to learn how to operate the game and learn the rules. Instead, operators do this. The military instructor – often referred to as the director – decides when to halt and restart the wargame if something goes wrong or if a combat result affects the game in an unanticipated manner. While this aspect of control is explicit, it is conducted in a separate room away from the players' view.[55]

The strategy of control & veiling transforms the issue of just playing a game to a perception of participating in a professional simulation-based exercise. One aspect is that completely free play is not allowed in this strategy. This is because learning objectives need to be met within a limited period. In order for the players to achieve those objectives, the instructor must continuously control the wargame. This control is conducted in a separate room, i.e. important elements of the wargame are veiled from the players. This firm control does not, however, always mean that the opposing force is completely

non-dynamic, such as, for example, with a scripted pre-planned response list or plan. A fully scripted opposing force would transform the wargame to something else, for example, a rehearsal or a staff training exercise. By keeping the activity as a wargame with contingent interaction – albeit within a framework of veiled control – learning is accomplished in the post-game discussion of player actions. The instructor conducts this discussion with the players after, and sometimes during, the wargame in order to achieve the players' specified learning objectives.[56]

A model of Instructor Buy-In

The three strategies for achieving instructor buy-in constitute a substantive field, modelled below as a triangular area. Data indicate that a military educational wargame is likely to lean towards one strategy. Accordingly, the location of a wargame in the model is expected to be closer to one of the three corners of the triangle. Characteristically, wargames near the corner of simple standardising tend to be uncomplicated and fully visible manual wargames. For example, a COA (Course of

Figure 1: A model of instructor buy-in.[57]
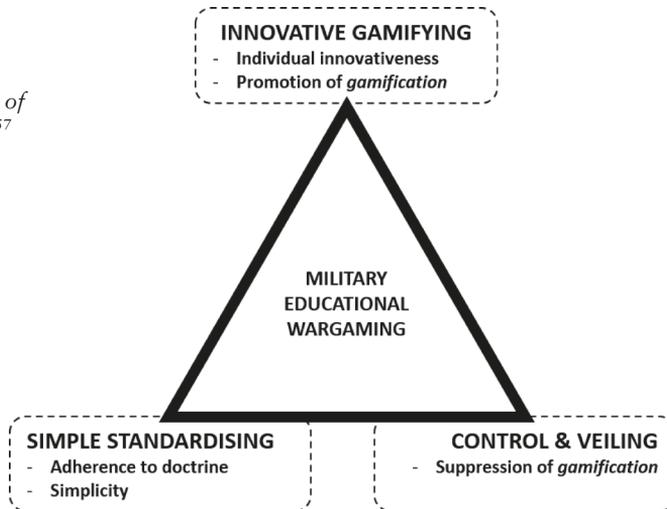
Action) wargame, which typically involves the use of an ordinary map with players gathered around while the instructor conducts adjudication. Conversely, wargames positioned closer to control & veiling tend to be computer-based simulations with multiple workstations in various and separated physical spaces. In a few exceptional cases, such activities may take the form of a veiled manual wargame. Most manual wargames, however, especially board games with rigid adjudication such as the original Kriegsspiel, are positioned near innovative gamifying since the players are interacting by explicitly playing the game. In addition to board games, many computer games are found near this corner, or find some support from this strategy.[58]

Two observations can be made regarding this model and the collected data. First, few wargames achieve a clear-cut position in one corner. It is rather common to balance a wargame by utilising two, or even elements from all three, strategies. For example, a simple map wargame can be made more engaging by dividing the students into two competing teams and thus utilising elements from innovative gamifying. Second, data indicate that most military instructors tend to steer away from gamification and, as a consequence, the strategy of innovative gamifying. Most examples of instructor buy-in tend to be closer to either simple standardising or control & veiling. There is a good reason for this. As previously noted, most military instructors seem negative towards utilising 'games'.[59]

The triangular model illustrates how instructors' concerns of achieving instructor buy-in drive the continuous development of wargaming forms. Since most military instructors tend to move away from innovative gamifying in their striving to achieve instructor buy-in, wargames are likely to move downwards in the triangle, away from innovative gamifying and towards either simple standardising or control & veiling. Such a trend may result in less wargaming in general. For example, in simple standardising, simplicity may become a goal in itself, which in turn may cause the activity to move outside the triangle area and become more of a brainstorming or rehearsal session rather than a dynamic interaction between adversarial sides. Likewise, a wargame that adheres to control & veiling may transform into a scripted staff exercise. Conversely, exclusive adherence to innovative gamifying may transform the wargame into a frivolous 'game'. Military instructors are likely to consider gamification a credibility risk if adherence to innovative gamifying may cause the wargame to be perceived as a non-serious activity. Some instructors, on the other hand, are positive to gamification as a way of increasing educational effectiveness. However, the former group outnumbers this latter group of instructors by a large margin.[60]

The instructors' striving to alleviate their concerns and achieve instructor buy-in, makes it likely that the wargame becomes another form of wargaming or an alternative pedagogical method, which may well be a positive development, or, in the worst case, transforms into a less optimal non-wargaming or frivolous activity. Therefore, instructors could be well served by creatively considering and applying aspects of all three strategies.

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