

Wardopoly: Game-based Experiential Learning in Nurse Education

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Introduction:

Developing leadership qualities in undergraduate nurse programmes is firmly embedded within the NMC Standards and Code for Pre-registration Nursing (NMC, 2010, NMC, 2015). The Francis report (2013) on patient mortality at the Mid-Staffordshire NHS Foundation Trust called for strong leadership at all levels of the nursing hierarchy. This led to the need to develop leadership skills within pre-qualification nursing education. The qualities and role of a leader are set out by the NHS Leadership Framework (NILD, 2016). Embracing the initiative, this chapter outlines the development and introduction of Wardopoly, a practice-based board-game that aims to increase the engagement and understanding of leadership in a BSC (Hons) nursing programme. Board-games present an informal, and competitive interactional context in which reasoning and understanding are achieved through expression and playful, collective problem solving (Berland and Lee, 2012).

Learning through play is well-established as an educational tool within early years education (Whitebread et al., 2012) and increasingly, adult education (Tanis, 2012). Playful pedagogies reduce passivity and dependency on 'being taught' and create an environment, encouraging experimentation, spontaneity, collaboration and evaluative states of mind (Mainemelis and Ronson, 2006, Duncum, 2009). Further, playfulness is viewed as a desirable personal and social relationship characteristic, linked to the formation of sustainable positive attachments, intimacy, trust building, and collaborative problem-solving whilst reducing tension or conflict

(Proyer, 2014). It also promotes greater tolerance, collegiality and self-reflection (Rudolph et al., 2014), qualities necessary for interdisciplinary professional clinical practice (NMC, 2017).

Wardopoly represented a shift towards a more facilitative approach, creating opportunities for meaningful dialogue and understanding of leadership styles, as well as opportunities for reflecting on staff and students' relative roles in the classroom. Using a playful game-based method as a deliberate pedagogic strategy understandings of leadership and deep learning are distributed and episodic rather than tutor dominated. Serious learning and serious play are deliberate and active processes. Preparing, facilitating and evaluating Wardopoly sessions were as rigorous as more 'traditional' teaching sessions, but due to its novelty it was seen to require more justification for its value in adult learning.

The Game

Wardopoly (Figure 1) is a clinical simulation board game which aims to facilitate explicit knowledge and critical reflection of factors affecting leadership and hospital patient flow. Based on experiential, constructivist and reflective learning philosophies associated with adult learning (Knowles, 1970) Wardopoly emphasises the value of play and participation in the social learning process, transforming students from passive consumers of information to active problem solvers, decision makers, and managers.



Figure 1: Wardopoly: Hospital Patient Flow Game

Rooted in practice, the game narrative focuses on managing patient admissions and patient flow through designated territories (patient bed spaces) while dealing with unexpected chance events that threaten patient safety and team-working. Patients and Chance events are represented by two sets of cards, introducing mini-quests and drama to the game narrative, which must be resolved before the next player's turn. Patient Cards represent individual patient profiles with information on gender, age, clinical diagnosis, condition and need for intervention. Players use this information to make decisions about the most appropriate place of care (hospital board, community, elsewhere). Players form teams and select a specific area of the ward they will control in terms of patient flow, making decisions about admission of new and the discharging of existing patients. As the game progresses, more patient cards are brought into play and as bed spaces fill up patient reassessment is required to ensure bed space capacity is not exceeded, while maintaining quality care and patient safety.

Chance Cards present different sorts of challenges that nurses are faced with in practice.

Each chance card summarises an individual clinical event requiring management using one of

six leadership approaches (see Figure 2), reinforcing leadership style awareness, and bringing about differing views, constructive challenges and discussion of impact and the various dimensions of leadership.

Wardopoly Large Dice Key	
Dice Roll	Complete the CHANCE card activity adopting the style associated with the number rolled
1	Transactional
2	Appreciative
3	Consult all players
4	Resolve within a 30 second time limit
5	Laissez-faire
6	Transformational

Figure 2: Wardopoly leadership style role play key

In Wardopoly, once teams and territories are established players select a counter, and place it at the start position. With each turn, players roll a die and follow the pathway around the bed spaces, responding to instructions on the board space on which players end their turn. Turn-taking provides cyclical opportunities to lead, contribute, or simply observe. The board spaces provide four possible outcomes: Patient and Chance mini-quests, and either promotions (forward 3 places) or demotions to the counter’s position (back 3 places) as shown in Figure 3.

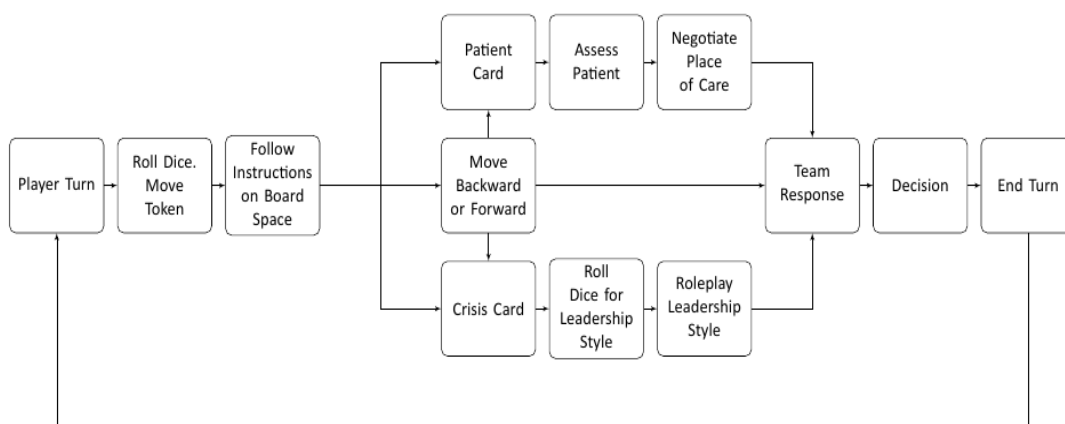


Figure 3: Game turn mechanic

Victory is based on luck of the die where the team that manages to land a counter on the ‘Thumbs-Up’ Friends and Family Test Space wins by denoting quality care and patient satisfaction. With multiple Wardopoly boards in play at any one time, the team that achieves victory first becomes the overall winners in the activity and play stops across all teams.

Once the game is completed, the board teams are expected to complete a debriefing tool.

Players develop their own reflective narrative of the experience through discussing the value and application of findings (Figure 4). In this way, debriefing has encouraged further levels of collaboration and evaluation, helping players make meaning of their experience (Ng and Ruppel, 2016).

What was enjoyed	What could be done differently?
<ul style="list-style-type: none"> • It was fun! And a different way of learning • Fun way to learn about delegation and a day on the ward • It was fantastic to work closely with the ‘team’ and resolve decisions • Learn more about different conditions • Working as a team to reach the best decisions for the ward patients and staff • Good debates • Putting theory into practice • Effectiveness in the workplace • Deep thinking • Awareness of subconscious actions/decisions • Making decisions in a safe environment enhanced learning 	<ul style="list-style-type: none"> • Written instructions • Guidance and direction • More time <p>Game ideas</p> <ul style="list-style-type: none"> • Making decision immediately • Time frame to discharge patients • Timer for patient in clinic • Have a ‘matron’ in the room to move players around room if short staffed • Information about patients to be more detailed • Plaster room box • Other clinics that patients needed sending to • Maybe a telephone box and pretend to do a handover.
How will the lessons be taken forward?	
<ul style="list-style-type: none"> • Know your patient more • Learn how to work as registered nurses • Not to jump to conclusions 	<ul style="list-style-type: none"> • To negotiate and delegate. • Think of the bigger picture. • Compromise

Figure 4: An example of a debriefing Report

Wardopoly is positioned at week 11 on a 15-week leadership and management module of study and is preceded by a flipped learning exercise where students complete a survey to find their dominant leadership style. Before Wardopoly is played, class has analysed and compared dominant leadership styles, exploring leadership styles in context and as a continuum.

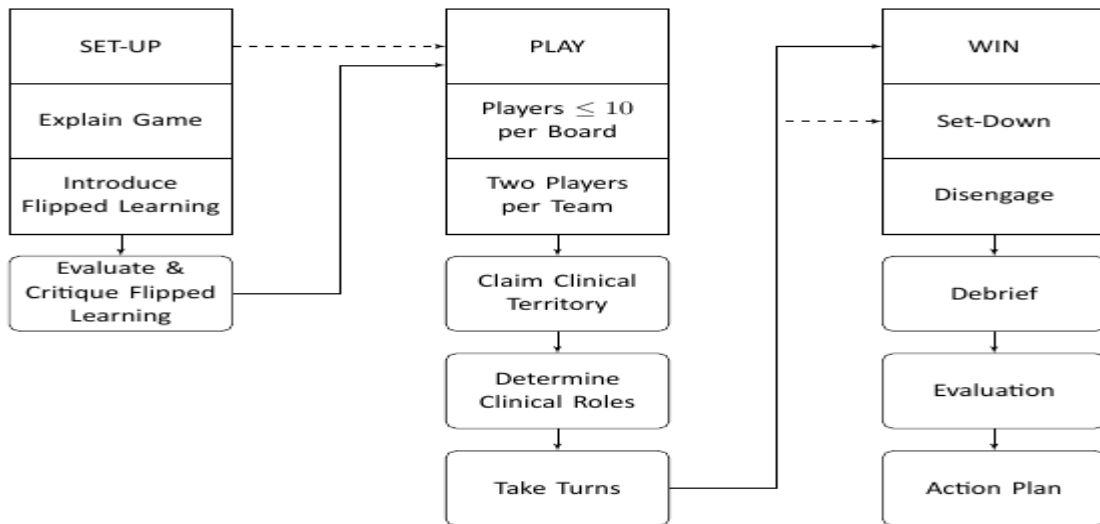


Figure 5: Wardopoly session structure

Discussion and information from the debriefing tool demonstrated the power of Wardopoly to transform a well-ordered, dull learning space to one of apparent chaos, noise, joviality and camaraderie. Yet those conditions also underpin self-awareness, self-determination and supporting psychological well-being, self-esteem, self-regulation and positive perseverance to face challenge and adversity (Whitebread et al., 2012, Barnett, 2011). Indeed, the experience of pleasure and positive emotions are associated with a playful mindset where psychological well-being, creativity and academic achievement contribute to a positive outlook and increasing personal and relationship satisfaction (Yue et al., 2016, Yu et al., 2007), voluntary contribution and engagement (Mainemelis and Ronson, 2006).

Wardopoly Development



Figure 6: Wardopoly play (permissions granted)

Wardopoly was played by successive undergraduate cohorts in their 2nd and 3rd year of study, with varied class sizes: 8 to 110 students per session. To date, approximately 600 students have participated. Each cohort's debriefing has led to continuous modifications to the game dynamics and Patient and Chance quests (Figure 7).

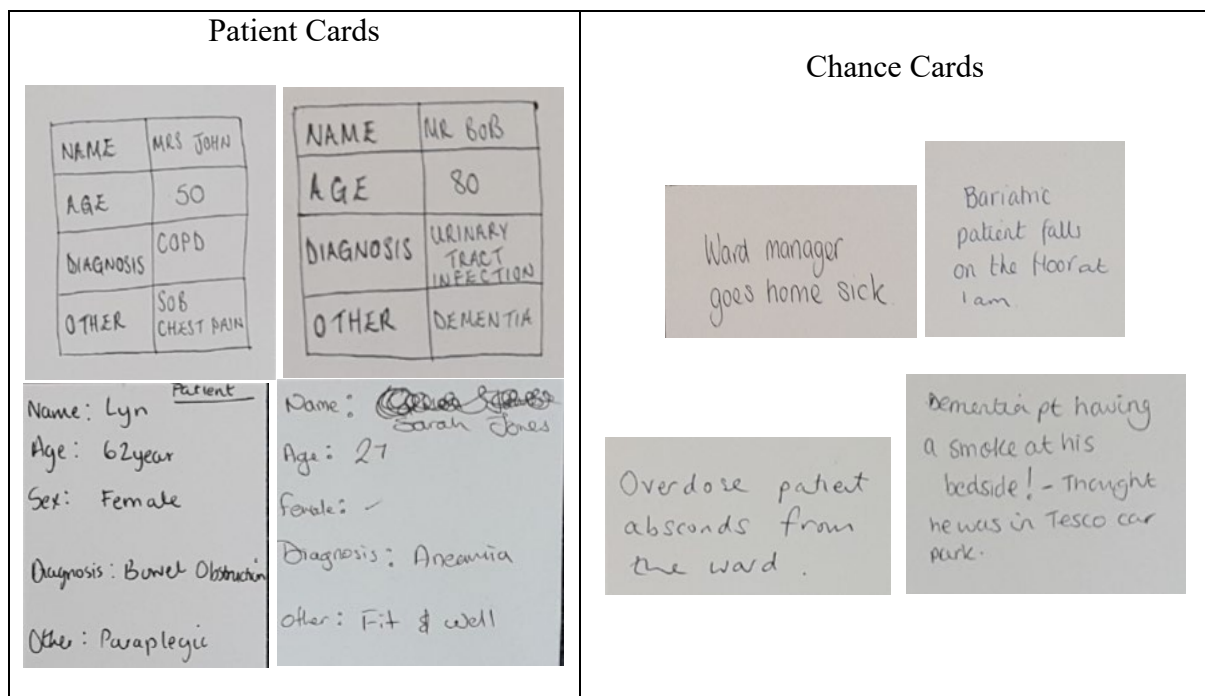


Figure 7: Illustrations of student-generated Patient and Chance Cards

As playing cohorts included mental health, and paramedic undergraduate students, that led to the design of new boards and card scenarios (see Figures 8, & 9).



Figure 8: Paramedic ED Board



Figure 9: Mental Health Nurse Board

Discussion

In establishing a culture of play, we facilitated students' independence directly and positively giving students a deeper appreciation of leadership. Unlike lectures, splitting a large class into 'player-teams' and 'turn-taking' reversed expectations of individual engagement, creating more opportunities for educators to speak to individual students than previously achieved. Game-playing provided players the opportunity to shape their own game and feel the dynamic interplay between leadership styles, team work and management of patient scenarios. In turn, players gained agency through advocacy. Protecting ward bed-space territory generated open discussions where dependence on the facilitator shifted from information provider to knowledge explorer. The level of immersion, negotiation, laughter and observed discussions suggested that players were both entertained and informed. Motivated and intrigued by the different approaches to studying leadership styles, students merged personal aspirations with patient management while demonstrating professional values in a ward-based situated-learning opportunity rarely available in a traditional lecture. The authors had used play and game-based learning techniques before, however Wardopoly was a design based first on teaching experience, creative thinking and a reflective approach to

working with students. An appreciation of play and game dynamics emerged during successive evaluation phases resulting in key insights:

1. The game worked because it was relatively simple and familiar as well as attractive. Authenticity of this simulation was achieved through the level of fidelity shared with practice experience. The simulation itself was important as it increased meaningfulness and the “willingness to engage based on perception of realism” (Rudolph et al., 2014, p.342). Minimal set of rules and a deliberate attempt to keep the patient card information to a minimum, encouraging the curiosity to ask questions upon which decisions could be made (Pluck and Johnson, 2011) and discuss how ‘best’ to resolve any queries they had.
2. The importance of narratives and their congruence to winning. The Patient and Chance quests presented strong, transparent mini-narratives and both types of quests were separate to the winning state. The separation enabled observations of two types of player: players who were more concerned with the discussion and the relevant insights, and the pragmatic players who focused on winning, and were willing to curtail discussion.
3. In giving freedom to evolve internal resource management rules, while supporting the process we passed the responsibility of decision making to the teams. We supported the merger of external (learning objectives) and internal (the way I want to go) goals by being creative in reinforcing the clinical learning objective, discovery cycles, creativity and experimentation (Kangas, 2010). For example, when bed spaces were full, rather than review priorities and discharge, patients were placed in any other possible space. At times we (the staff) played the role of ‘agent provocateur’ as safety inspectors, quality reviewers, patient advocates and bed-managers, surprising the

players and prompting new ways of thinking about patient flow and decision making. (see Figure 10).

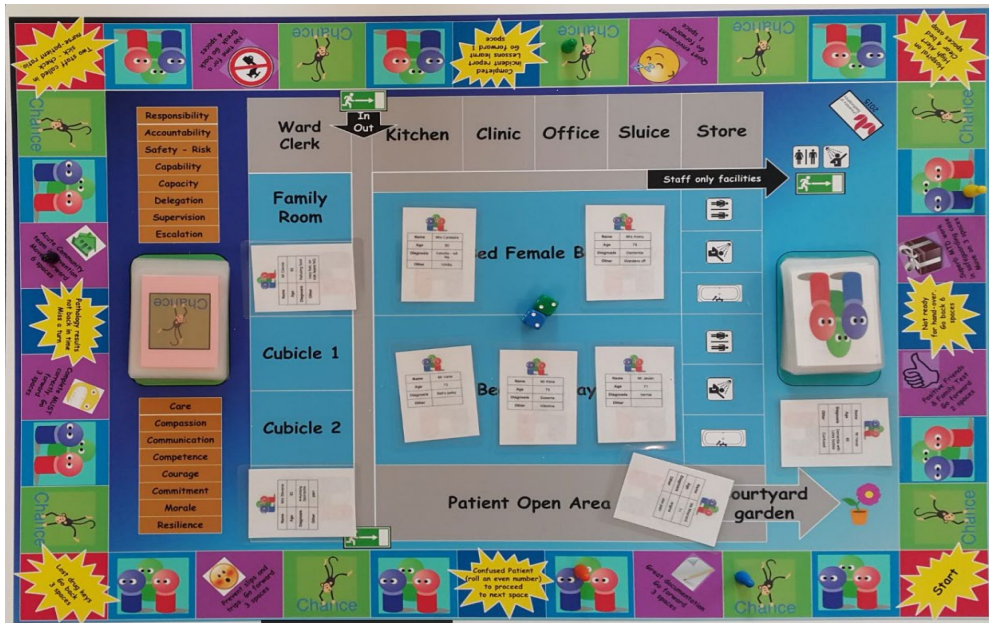


Figure 10: Patient placement

4. The extent of student immersion in the game and submission to the role-play condition surprised us. Students built on tactic knowledge of game play, took control of the game, ensured equity in opportunity, and sought to balance bed space territory with patient advocacy. We did not anticipate how much noise would be generated as players engaged in discussion, banter, socially acceptable challenges, laughter and negotiation (Schenk and Cruickshank, 2015) and it brought to the foreground the importance of managing the physical space during such interventions to allow for this social engagement. The size of the board and seating all use far more space than is usually accounted for in the classroom size rubric. Thus when we were working with multiple boards we often needed to spill-out into adjacent public areas which by necessity had an impact on the level of social interactions.
5. Perhaps the most rewarding outcome was how Wardopolis enhanced the relationship between ourselves and students. We felt that we got to know individuals more

holistically, and could be more empathic in empowering the learning community.

Game facilitation as anticipated from the literature demonstrated a common purpose and nurtured a trusting relationship between us which endured beyond the session (Spralls et al., 2010). This became part of a holistic teaching and learning experience.

6. The game was cost effective and value for money. Educational resources are usually expensive, even when produced in-house, but the durability and adaptability of Wardopoly proved it was a very cost-effective and engaging pedagogic tool compared to market solutions.

Conclusion

The particular exploration looked at game-based learning and the creation of Wardopolis a board game that enhanced students' learning of leadership concepts in a hospital context. So far it appears to have been a very positive and engaging experience and there were numerous students whose perceptions of play moved from negative to positive via this experience. We observed slight differences and variations in cohort culture affecting attendance and player team size. Even though students were given autonomy to decide team composition and size, i.e. they were seen as adults it was soon apparent that support is required, especially when it came to forming teams. Expectancy theory (Smith and Lazarus, 1990) suggests sensitive pre-briefing is needed to explain the congruence between learning objective, game narrative and mode of play. Further, inclusion of peers is imperative if students are to be convinced engagement will be of value (Hainey et al., 2013). Thus, the staff role changed from a lecturer, to a facilitator and agent provocateur whose role was to ask challenging questions and open the minds of the players to various possibilities.

Wardopoly was dedicated to the process of understanding and social interaction reinforcing learning through enjoyment (Cessario, 1987). One thing we did not fully appreciate was the

importance some students placed on 'winning,' not their disappointment when flow was interrupted when another team would win. While the game session is scheduled to last 90 minutes (including briefing and debriefing), having closure 'robbed' by a competing team meant that some groups express the desire to play longer. That longing to continue we saw as evidence of the success of the play intervention.

Positive feedback from game-strategy savvy students also pushed us towards evolving the complexity and mastery criteria for winning. In retrospect, we should have anticipated the escalation and engagement brought about by engaged players, our naïve game developer errors counting on students not to game the game, where we observed a number of pragmatists who aimed to win the game rather than reflect on the process. Thus the design of Wardopolis is still evolving and will continue to evolve as we attempt on the one hand to enhance the benefits brought about by this game-based intervention while we tone down on the over-focus on winning.

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