

ISSN: 1876-8830
URL: <http://www.journalsi.org>
Publisher: Igitur publishing, in cooperation with
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Received: 11 July 2014

Accepted: 18 August 2014

Category: Research

TRANSFORMING YOUTH CARE THROUGH ONLINE SIMULATION GAMING. ALIGNING THE POSITIONS OF PRACTITIONERS AND OBSERVERS

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ABSTRACT

Transforming youth care through online simulation gaming. Aligning the positions of practitioners and observers

The youth care service in the Netherlands is currently undergoing a major transition from national and regional finance and control to localized regulation and responsibility. The aim is to initiate a transformation towards greater intervention value and to support greater self-reliance in social networks. Effective youth care depends largely on the quality of the network exchange. If

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efficiency is our concern, we should look into the methods and techniques of network exchange. When it comes to solving hard problems, the significance of situational knowledge construction and network coordination must not be underrated. Professional deliberation is directed toward understanding, acting and analysis. We need smart and flexible ways to direct systems information from practice to network reflection, and to guide results from network consultation to practice. This article presents a proposal for a case study, as a follow-up to a recent dissertation about online simulation gaming for a youth care network exchange (Van Haaster, 2014). The results of that research show that it is a valuable exercise to model intricate issues from practice using simulation game design and that youth care professionals appreciate the relevance, usability and usefulness of this new tool. The question in this paper is how to develop a practicable approach using online simulation gaming to improve patterns of action and reflection on dilemmas and hard-to-solve problems in youth care practice. Child-rearing conditions and family behaviour are usually enhanced through sequences of exploration, experimentation and evaluation. Step-by-step progressions are characterized by balancing acting and thinking. The author elaborates this observation through a model that alternates acting in practice with retrospect and prospect reflection in online game sessions.

Keywords

Youth care transformation, network exchange, social problem solving, role-play simulation gaming, knowledge construction, network exchange

SAMENVATTING

Online simulatiegames voor de ondersteuning van de transformatie van Jeugdzorg. Het nauwkeurig afstemmen van praktijkuitvoering en reflectie.

Een belangrijk doel van de huidige transformatie van de jeugdzorg in Nederland is om werkprocessen zodanig te verbeteren, dat zij zowel tegemoet komen aan de toenemende hulpvraag als aan de politieke ambitie van het vergroten van de zelfredzaamheid en verantwoordelijkheid voor zorgtaken van families en sociale netwerken. Daarvoor zijn nieuwe methoden en hulpmiddelen nodig. Dit artikel beschrijft een casestudy-voorstel voor online simulatie gaming als vorm van kennisuitwisseling over complexe vraagstukken binnen de jeugdhulp. Er wordt doorgesproken op eerder onderzoek (Van Haaster, 2014), dat aantoonde dat het mogelijk is ingewikkelde kwesties uit te werken in geschikte game modellen. In dat onderzoek geven jeugdzorgprofessionals aan dat de betreffende methode relevant, bruikbaar en nuttig is voor

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de uitwisseling van kennis over vooral complexe vraagstukken. Dit artikel werkt een casestudy-strategie uit voor implementatie, experimentatie en empirisch onderzoek, waarin posities van uitvoering en reflectie op elkaar worden afgestemd. Het handelen in de praktijk is input voor reflectie in online simulatie sessies. De uitkomsten uit sessies zijn input voor nieuwe stappen op weg naar verbetering. Actie en reflectie wisselen elkaar af, tot het gewenste resultaat is bereikt.

Trefwoorden

online simulatie games, game design, jeugdzorg, kennisuitwisseling, kennisontwikkeling, netwerkuitwisseling, kennis en handelen

INTRODUCTION

The prospects for online simulation gaming

Youth care in the Netherlands is in need of flexible, interactive and attractive tools and methods for knowledge exchange so that timely, effective and sustainable help can be provided for complex and problematic parenting situations. Social media, virtuality, simulation and gaming are becoming ever more important ways for people to share information, learn and organize themselves. However, it seems that knowledge-intensive practices in youth care have not, as yet, adopted these techniques to any great extent. A recent research and development project showed that youth care practice can benefit from online simulation gaming as a new tool and method for network exchange and knowledge construction (Van Haaster, 2014).¹ To illustrate the starting points for this paper, we now quote a prioritized set of results from the research that we refer to.

1. Practice workers endorse the idea that online simulation gaming can be an effective, additional tool with which to advance really difficult multi-problem, multi-actor and multi-reality situations;²
2. It is possible to model youth care problem issues using game design, following the criteria and conditions that apply to the working conditions of the youth care network exchange. The elaboration of artefacts requires close cooperation with experts from the field of application;
3. The intended users (youth care professionals) claim that the tool, the environment and the method are appropriate for unravelling difficult issues from practice and jointly reflect on choices in strategy and intervention;
4. Youth care workers affirm the following advantages of online simulation gaming:

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TRANSFORMING YOUTH CARE THROUGH ONLINE SIMULATION GAMING

- a. Role-play and anonymous participation encourage changes in perspective and the shift of ideas concerning situations, problems and possibilities;
 - b. The time-, pace- and place-independent sharing of expertise, information and knowledge among actors in online sessions³ affords them time to reflect properly on interactions and contributions;
 - c. The method includes careful analysis and deep collaborative reflection about session performance in the light of progress in practice situations;
 - d. The results of the sessions, both experiential and factual, provide solid ground on which to build reflective dialogues about the transfer of knowledge to practice.
5. The research and development project yielded a tentative set of design requirements and an implementation method suitable for youth care practice;
 6. Online simulation gaming can be a method of concerted practice research to study complexity in problem situations and of scrutinizing network strategies. Joint evaluations of processes and performances in practice and game sessions are key elements in the proposed approach;
 7. The research and development of network exchange is unique in the fields of youth care intervention and game theory. The singularity of contexts and actors is taken as the frame of reference for learning, change and development, in a cross-over between game design and behavioural sciences;
 8. The tool and method need further tailoring to correspond to the practical needs of youth care practice;
 9. The theory of online simulation gaming in youth care practice asks for advancement through the implementation and analysis of results, in accordance with the standards, needs and aspirations of youth care services.

Some critical considerations

The individualized approaches that are possible using computer-mediated communication help to understand network exchange and to assess learning. What we know is that simulation gaming corresponds to learning theories such as experiential learning, situated learning, transactional learning (De Caluwé, Geurts & Stoppelenburg, 2012; Gee, 2003; Maharg & Nicol, 2009; Maharg, 2004). The cyclic iteration of experience, reflection and conceptualization (Kolb, 1984) parallels the functions of informing, reflecting and decision-making, which are fundamental to youth care network deliberation. Despite the promising predictions, online simulation gaming cannot provide a solution for problem solving in all contexts.

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Not all youth care workers favour computer-mediated communication. In fact, technology is probably not the first thing that springs to mind when we think of social problem solving. We still lack practice-based evidence for online simulation gaming in social work contexts. In many publications, researchers admit that it is difficult to indicate the 'active substances' of the successes of simulation gaming (Hofstede, De Caluwé, & Peters, 2010; Mayer & Mastik, 2007). The complex interdependence of context, methods and tools can vary in each situation and for each problem, which makes it hard to make valid statements about cause-effect correlations. Assessment studies require a joint approach that relates youth care knowledge and effect research to specific game design theories. Although this interdisciplinary approach to research practice may be commonplace in the fields of learning, management and policy, in youth care and social intervention this type of research has not yet been tackled.

Probably the most important counterargument is that it can be hard to find the right strategy to guide implementation to success. We need to combine expertise from gaming and solving social problems in a consistent way. Youth care practices are dynamic and capricious. Is it really possible to generate the characteristically unstable conditions that characterize youth care problems in simulation games? Another point is that youth care workers may find it difficult to work with this tool and method. Is it possible to stay close to prevailing professional standards and methods and to build experience, confidence and trust in this new method of exchange? And last but not least, there is the problem of finding the time and energy to experiment using ongoing practices. How can we integrate online simulation gaming into daily work routines, in a way that saves time and helps provide quicker and better help?

Towards a practicable strategy

The aim of this paper is to provide a practical implementation proposition, in which we bridge thinking and acting from the position of practitioners to discussing effects and further steps from the position of observers.⁴ The question is: *how can we find a feasible strategy for the implementation of online simulation gaming to support network exchange about complex practical cases with a view to in view of timely and sustainable intervention?* The article builds on the findings of earlier research (Van Haaster, 2014), and more specifically, on the importance of collaborative reflection on situational knowledge, discourse participation and choices of intervention. We shall explain the premise that designing the game model, effecting this through game sessions and transferring the results to practice must be all done in close cooperation with content experts. In order to provide an elementary understanding of the game environment,

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we shall describe the principle functions of the application used. Additionally, we shall specify some relevant aspects of the method that has been elaborated in the earlier research mentioned previously. After that, we shall reach the point of alternating the positions of practitioner and observer for the transfer between the worlds of practice, reflection and future change. Finally, we shall summarize the main arguments for this approach in terms of the advancement of both complex problem situations in youth care practice and of the constituting theory.⁵

THE SERIOUS GAME OF YOUTH CARE NETWORK EXCHANGE

Many researchers have written about the positive learning effects of simulation gaming, mostly in the contexts of education and training and of strategic management. The most important consideration is that simulation gaming is the natural choice for relating practice to thinking and theory to action (Bekebrede et al., 2007; Hofstede et al., 2010; Lukosch, Van Bussel, & Meijer, 2013). We favour the idea that simulation gaming could also be effective in enhancing expertise and skills in youth care network practices. Additionally, the tool and method can support the study of individual and network proficiency, with a view to the progression of practice theory. Game sessions can be studied as micro-worlds, and they can be manipulated according to scientific rules. Patterns of game interaction can be analysed and interpreted with a view to organizational development (Boonstra & De Caluwé, 2006; De Caluwé & Geurts, 2012). Simulation gaming enables the organization of reflexive feedback on performance in the context of systems relations and action.

Mobilizing knowledge and feedback in a playful manner

Online simulation gaming invites participants to look back on their professional performance from a meta-perspective or from a different point of view, and helps to increase individual awareness of the implicit knowledge and routines of both people and networks. Suppose we want to know more about how team members or network partners adapt to changing situations in order to improve their effectiveness. Could practising and observing role-play interaction help us to achieve that insight? By looking at problems from different and shifting perspectives, actors can train their capacity to adjust their professional style and skills to changing circumstances and varying interests. De Caluwé, Hofstede, and Peters (2008) argue that the effects of simulation gaming can be assessed with criteria that depend partly on the iteration of 'decisive moments', when players are required to act, and partly on how players are guided through the course of game events. This requires good insight into working procedures and requirements, in terms of both the design and

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moderation of games. How can we mobilize the required knowledge to define those performance criteria and use them to design and create games? Immediate performance feedback is an important feature of gaming, but how essential is immediate performance feedback for knowledge development when it comes to complex problem situations in youth care? A constant flow of peer feedback on action and interaction motivates the players to improve on their achievements and encourages the designer to advance the game model. Using simulation games to consult the right people at the right moment may counterbalance the often-felt lack of inter-professional support at critical, decisive moments in real-life practice (Van Haaster, 2014).

Complexity, performance and the quality of interaction

Effective game design aims to equalize systems complexity and provide feedback on performance. In the relatively open design of simulation games, there is room for the circular and reciprocal influence of performance and the manipulation of systems. Actor behaviour is as important to success as the quality of model design. The complexity of a game is inversely related to the performance quality of the interaction of the player. The change of problem situations in youth care toward more preferable conditions and opportunities can only be achieved through high standards of reflection-in-action and reflection-on-action. What could online simulation gaming do for the processes and effects of collaborative thinking on problems and their solutions? The proposition of this article is that network exchange relating to complex youth care problems becomes more effective and efficient when reflection-in-action is alternated with joint reflection-on-action⁶ in online simulation games. Knowledge construction by actors is the added value and the sense-making claim of simulation gaming in professional youth care networks (Van Haaster, 2014).

Process-driven game design

In accordance with the findings of the research referred to above, we propose to use principles-based, actor-oriented and process-driven games, as opposed to rules-based games (Klabbers, 2009). Most games are end-state driven: the players are supposed to strategically follow more or less strict rules in order to attain predefined goals. Principles-based games enable free-form play and aim to help narratives and scenarios to unfold, and to promote the elicitation and sharing of situational knowledge and expertise. Role-play in a game-like environment allows ideas and strategies to be tested that can help break through deadlock situations. Network inter-thinking, sociocultural discourse analysis, strategic speculation and scenario development are key activities

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in network exchange and can be carried over into the safe and secluded environment of online simulation gaming.

To replicate the prevailing conditions in youth care practice accurately, the design and implementation process for online simulation gaming benefits greatly when all stakeholders are closely involved.⁷ This process includes the construction of game artefacts and the definition of game models, as well as choosing methods and effectuation (Figure 1). We propose to view construction and application as interdependent, although different levels of online simulation gaming. Construction relates to choices made in model development, while application concerns normative reflection and strategic operation. Alternating the positions of practitioners and observers serves design and implementation, links systems information from practice to artefact design, it bridges normative reflection to strategic operation. We believe that this approach builds confidence and commitment to change. The dimensions of model development (*system-artefact*) and model appreciation (*reflection-operation*) help to evaluate and analyse both the design of a game model and its functionality to serve programme objectives of network exchange.

The argument for aligning the positions of practitioners and observers is rooted in the above model. The structuring idea is adopted from a model by March and Smith (1995), which contains the above four inter-related outputs of construct, model, method and instantiation (realization). The knowledge-dependent character of problem-solving in youth care requires the integration of results from intervention (practitioning) in the analysis of processes and performance (observing).

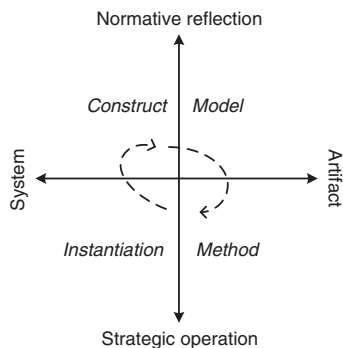


Figure 1: Design (system-artefact) and implementation (reflection-operation)

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Obviously, actors may assume both positions alternately. Online simulation gaming, in our view, builds around the twin axes of designing systems information in game models and analysing user-experience through sessions. Its logical consistency is derived from the collective iteration of constructing, modelling, methodizing and realization. Constructs define the vocabulary of the problem issue and its situational details (Schön, 1983). Models are abstract representations of real-world problems. Herbert Simon (1969) speaks of the design problem and its solution space to indicate the relationship between the problem situation and the game design. Constructs and models help us to understand the interrelatedness of problems and solutions, which is essential when it comes to developing theories of normative reflection. Method design needs practice codes and process prescriptions, as constructs applied in models. Instantiation concerns prototyping and testing in sessions and includes briefing and debriefing. The accuracy of these steps is vital to knowledge construction in network exchange about tricky youth care problems. High levels of accuracy can be achieved by applying the above ideas through a practical approach to simulation gaming for youth care network exchange.

THE VIRTUAL CITY OF CYBERDAM

Before proceeding with a practicable method, a short introduction to Cyberdam⁸ might be useful. Cyberdam⁹ is an application that allows users to build and control games for online role-play simulations. The application is simple to use and supports easy access to allow youth care professionals to develop their own personal games. There are two components: a city map showing clickable objects, which leads to a repository of websites and a game engine that enables the design and re-use of simulation games. The city map and directory of websites, which includes information about persons, households, organizations, firms and events, are accompanied by an e-learning suite that enables the design and use of simulation games for training, change and education. Games are created in the web-based application and involve asynchronous, workflow-based interaction between players, or groups of players, who engage in role-play activities. In Cyberdam, anyone can build a game to explore a predefined problem case, in an arrangement of self-selected network actors. This can be done by using ready-made templates or by adapting proven models to new situations. Network interaction in simulation sessions resembles real-life work procedures and communication as much as possible. The distinctive features are role-play, game elements and multimedia communication (text, sound, images, video, e-mail and chat). Role-play can create empathy with different actors in problem situations, it encourages experimentation, and it can help actors to focus on specific role tasks, perspectives, strategies and disciplinary knowledge.

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It might be difficult to get a complete picture of the functions of the application and to understand the dynamics of a game, outside the sphere of playing.¹⁰ Nevertheless, we intend to provide a brief impression by describing the main features. Figure 2 gives a glimpse of the game environment.¹¹

Easy access, co-construction and sharing

The central idea is that any person must be able to make a simulation game for his or her own purposes. Designing a game can start with a persistent issue or dilemma from practice. By following a number of steps in a template, which is available in the application, it is possible to develop all the necessary game artefacts. A game model will include a limited number of roles, relevant to the issue and the situation, and an activity grid that structures the course of the game across levels, stages and activities. The game developer can decide who to recruit

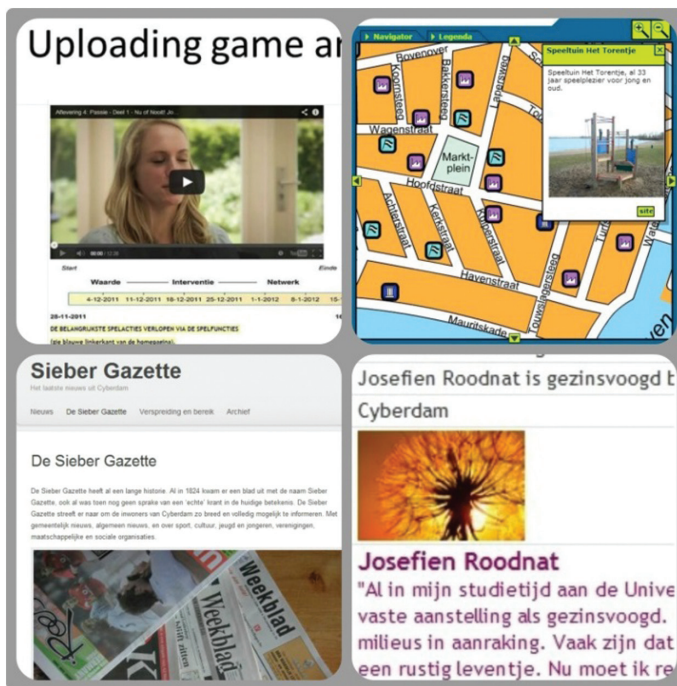


Figure 2: A glimpse of the simulation environment

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for participation. A tested game may be presented to a number of experts, who will respond from their adopted role perspectives. Once constructed, a game model can remain hidden from others, to protect confidential content for instance, or be made available for public use in other contexts.

Notwithstanding the high level of accessibility, designing games can be a complicated procedure that requires training and expert guidance.¹² The challenge lies more in understanding the intricacy of problems from practice, and not so much in the construction of the game itself. Online simulation gaming is not an end in itself. The ultimate goal is problem-solving. The use of online simulation gaming requires one to rethink and re-organize the processes of informing, reflecting and decision-making. The application has been subject to scientific evaluations of usability, usefulness and effects, and the results show that the main benefits relate to enhancing personal time management, work organization and the development of interpersonal networking skills for strategic negotiation (Bekebrede et al., 2007; Mayer, Bekebrede, & Stegers-Jager, 2007; Van Haaster, 2014; Warmelink & Mayer, 2009).

Playgrounds, game models and sessions

The Cyberdam application consists of *playgrounds* (see Figure 3) with *game artefacts*, which can be looked up in a *game directory* of websites and files. These resources can be explored without logging in. The other part consists of *game models* with tools for preparing and effect *game sessions*, which can only be accessed by authorized persons. Game developers have access to models, administration and the registration of session members. Players and (authorized) non-participating observers have access to game sessions. A playground, such as a city map, is the starting point for game sessions and represents a context that is relevant to a particular field of application. A directory containing role and object descriptions, websites, documents and other artefacts, provides all the information necessary to participate in a session. Artefacts are designed for a particular game, but can be re-used in other models.

A game model implies a template that specifies roles, phases, activities and variables. Users may work with models and artefacts developed earlier for their own purposes. The application encourages co-construction, collaborative learning and the sharing of expertise. Session administration permits the developer to connect a certain game model to playgrounds, players and sessions. A session role can be assigned to a single player or to a team. Briefings and debriefings, in which instruction, evaluation, learning and transfer take place, support the game process.

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Figure 3: Cyberdam city map with clickable objects

The game master, who is the facilitator and moderator, starts and ends the game. The game master could restrict his or her activity to the functional guidance of players or could be more comprehensive, including arbitration and active intervention. Each player has a personal homepage with all the tools and data needed to carry out the tasks. The homepage serves as a hub for interaction with other players in a session (Figure 4).

Systems overview of Cyberdam

Figure 5 shows a systems overview of the main functions of the Cyberdam application. All of the above features can be accommodated in the six boxes with systems functions. The upper boxes relate to game development and moderation strategy design. The lower boxes refer to session effectuation (Figure 5).

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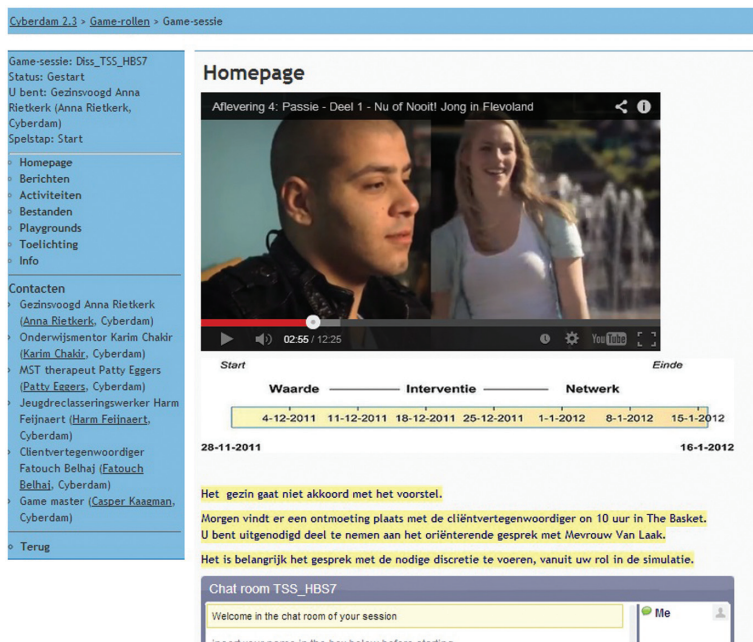


Figure 4: Illustration of a player's homepage in a session

Some practicalities

Sessions can be played in a relative short sessions lasting 2 or 3 hours, or they can be spread out over several weeks with several log-ins. The investment of time depends on the problem case, the tasks and on the planning agreed. Sessions of the same game can be repeated with different groups of actors. Participants can be recruited from among care professionals or from social networks of context and content experts. It is easy to work together across disciplines and sectors, or to mix actors from practice with students or researchers. The application allows optimum flexibility. It is easy to change the parameters, even while a session is running, in order to test the efficacy of the model or to evoke particular interaction or behaviour. All session information in the database can be made available for analysis and to improve proficiency. Even though it may seem obvious to make better use of contemporary media and methods for network exchange, in most youth care practices the digitalization of work procedures may be problematic. Innovative concepts and methods require time, energy and structural commitment. Simulation gaming requires tutor

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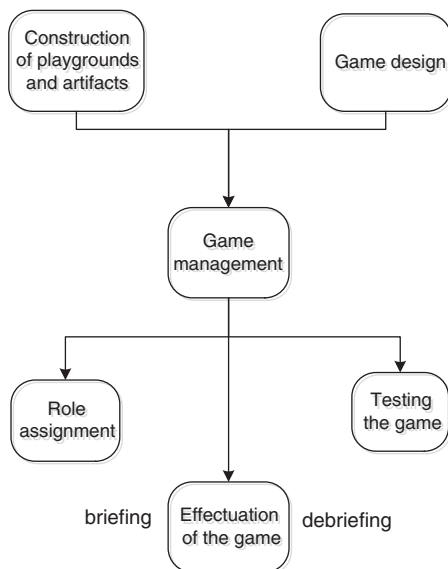


Figure 5: Systems overview Cyberdam

capabilities that anticipate and react to the fast and interactive behaviour of participants. The necessary skills may not yet be available in youth care organizations.

REFLECTION-IN-ACTION AND REFLECTION-ON-ACTION

We propose using the three-stage approach for the implementation of online simulation gaming in youth care practices (Van Haaster, 2014). The method covers the co-construction of artefacts, the definition of the game concept and the effectuation of game sessions, with briefings and debriefings. The analysis of the problem situation (the life world) and the collaborative reflection (the game world) is essential to reach an adequate level of practicality in the transfer of outcomes (the future world). The functionalities of reflection-in-action and reflection-on-action, with a view to changing problem states into more desirable ones, have been discussed extensively in literature. Many theorists in the fields of gaming simulation, workplace learning and intervention argue that the analysis of patterns of action-to-knowledge and knowledge-to-action is an essential aspect of organizational change and problem-solving (Argyris, 2002; Boonstra & De Caluwé, 2006; Crookall and Thorngate, 2009; Hortulanus, 2011; Klabbers, 2009; Parton & Marshall, 1998; Schön, 1983;

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Van Yperen & Van Woudenberg, 2011). Despite the ambiguity and elusiveness of the concept of knowledge, we may agree to the fact that thinking about action ('reflection-on-action') is the key to understanding problems and solutions.

The three stages of configuration, implementation and evaluation

To create an alternation between acting and thinking, we follow the three-stage approach of configuration, implementation and evaluation.¹³ The main elements and relationships are displayed in Figure 6.

The method combines narratives and dialogues throughout the whole process of design, execution and sense-making. Narratives on events, experiences, and future plans receive more attention in the first half of the process. Dialogues gain more importance during session effectuation and when the results are being evaluated. The phases of configuration, implementation and evaluation offer many opportunities to construct bridges between the positions of practitioners and observers. The concerted analysis of problem states and session performance helps to justify strategies of intervention vis-à-vis the preferred development. The method can be used to find a way through deadlocks and explore the potential of situations and networks, and to prepare for the best possible interventions. The database with session results allows snapshots to be made of the social dynamics and the variability of interaction to study network performance and to make suggestions for enhancement.

Complexity and simplicity

In systems theory, complexity and simplicity are closely related. Simple systems can generate complex forms and we want to know whether complexity can be brought back to simplicity. This may also apply to solving social problems. The complexity of youth care problems tends to increase

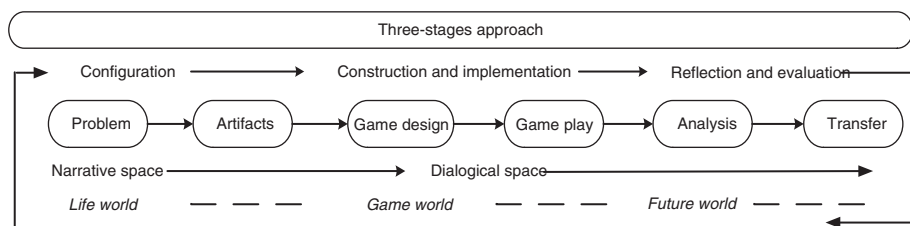


Figure 6: Three-stage approach to youth care simulation gaming

It is vital to consider the equivalence of action and reflection and to bear in mind the substantial differences between reflection-in-action and reflection-on-action. We may study action and reflection as simple *input*, *throughput* and *output* models, discerning situational cognition (input) from action and interaction (throughput), and from effects (output). This model helps to establish the connectedness of action and reflection in sequences of occurrence, in order to navigate toward positive change in complex youth care situations, and to gain insight into network proficiency (Figure 7).



Output from practice (action) can be regarded as input for reflection. Conversely, output from sessions (reflection) can serve as input for the next steps of action. Input concerns all sorts of situational and network information and depends on the quality of exploration. Throughput refers to action and interaction in response to input. Throughput is contingent on the constructs and models used, and on the constellation of actors, their capabilities, personal styles, behaviour and skills, and their commitment to change. Output is the result of evaluating processes and performances, both in practice and in the sessions. The quality of output is determined by systems analysis, preferably through methods of dialogue. The objective of this approach is to examine and develop the double strands of action and reflection, in order to understand the “DNA” of a problem situation and its potential growth and development. The abilities of exploration (input), acting and thinking (throughput), and effects and evaluation (output) are the foundation of the progression in problem situations and in online sessions involving role-play simulation games.

Applying this method can have a threefold effect on social problem solving. The three levels concern situational cognition, network participation and accountability of intervention.¹⁴ The first level concerns investigating problems and the broadening and transparency of situational cognition. The second level involves strengthening network capacities, capabilities and discourses. The third level relates to justifying choices in intervention and strategy, and addresses visions of future change, the evocation of responsiveness, and aspects of management and accountability.

TRANSFORMING YOUTH CARE NETWORK EXCHANGE

Transforming Dutch youth care systems seeks to make help and local support more efficient and to bring about better cooperation and coordination in networks. Current levels of underperformance are alarming, not only in view of the implied risks for children and families, but also with respect to societal confidence in professional youth care services. We need inspiring ideas about what can and must be done to improve performance and how we can support local teams of social care and help. The transfer of finance and control to local municipalities presents a challenge in terms of reinventing youth care services. We have to find new, fresher and leaner alliances of cooperation and coordination and better methods and tools for effective local support and intervention. We need to strengthen the problem-solving capacities in networks and professional chain cooperation, in particular with regard to intricate multi-problem situations. One of the problems is the lack of time to thoroughly explore developmental opportunities and options for intervention in complex situations (Van Haaster, 2014). Professionals need more opportunities to reflect jointly on values and accountability in intervention. Sometimes the locally available

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sources of expertise and situational cognition fall short in finding a breakthrough. In other situations, it is crucial to shake up fixed positions by freeing the imagination and helping clients to build positive future scenarios. How can teams and networks become more proficient at sharing information, at engaging the right persons in decision making and reflection, and at designing feasible future change?

In view of contemporary societal changes and demands on youth care services, it is tempting to advance online simulation gaming for the exploration of situational cognition and practical know-how. As for the envisaged increase in self-organizing capacities in social networks and the improvement of network cooperation, the method offers attractive ways of engaging all stakeholders and to enhance participation, even by experts who are outside the actual practice situation. The method helps to explore and tap explicit and tacit knowledge and to uncover unexpected expertise among the participants. The simulation game is an environment in which participation can be strengthened and involvement can be expanded. It is hardly necessary to point out the value of joint scenario development for the engagement and commitment of all parties, including clients. In situations that require a shake-up of cooperation in networks, online simulation gaming can speed up network knowledge acquisition and introduce more positive forms of interaction.

CONCLUSION AND DISCUSSION

Although the response and results may be unpredictable, there are good reasons to believe that game session interaction has a positive influence on network quality and intervention. Group decision-making on social problems aims to reduce the weight of perception on individual risks, while maximizing the perceived collective social benefits. There are strong indications that simulation gaming can accelerate, intensify and compress the processes that are relevant to decision-making on complex youth care issues. Resolving conflicts through dialogues on positions and perspectives in session interaction seems beneficial to social problem-solving. Simulation sessions can provide rich material and strong involvement in reflective dialogues for transfer to practice.

In this article, a practicable approach involving online simulation gaming for youth care network exchange has been elaborated as the method of alternating between action and reflection. The ultimate goal is to construct situational knowledge collectively and to encourage localized content-driven, authoritative cooperation. Online simulation gaming can create sustainable trust

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between the actors involved in complex problem-solving. The advantages are clear, although there are also some obvious concerns. Designing the right game model for a certain problem context requires expert help. The guidance of players through effectuation and careful evaluation and the transfer of results needs to be learned. Smart cooperation as part of the triad of practice, design, research and education may be a practical response to these serious constraints. There are many unresolved questions. To find answers, we will need to undertake experimental and empirical research. If we are committed to transforming youth care services and making them more effective, we may ask ourselves whether we care to game, and find out how we can apply games to care.

NOTEN

- 1 In order to get a fuller picture of the methodology and the theoretical and empirical framework, it is recommendable to read the full publication about the research at www.uvh.nl/english/research/publications
- 2 Multi-problem cases go beyond practice-as-usual situations. These cases are wicked and tricky because of the disagreement among the parties involved about norms and values, and the presence of diverging loyalties and perspectives.
- 3 A game session is the actual effectuation of a game.
- 4 The alternation of the positions of practitioner and observer is described in the work of Klabbers (2009)
- 5 Please see part 7.2 of the research publication referred to above to read more about this constituting theory.
- 6 The significance of sequences of reflection-in-action and reflection-on-action is explained in detail in Kolb (1984) and Argyris (2002). Reflection-in-action refers to thinking as a more or less subconscious process of acting, while responding refers to triggers, information, patterns and confirmations within the frame of action itself. By 'reflection-on-action', we mean retrospective and prospective thinking about processes of intervention. In real life it can be hard to discern the dividing line between reflection-in-action and reflection-on-action.
- 7 Care workers, clients and social and professional networks around families.
- 8 Cyberdam is a virtual learning environment as well as a virtual city for online role-playing games in the context of a 2D virtual city, or any other graphical representation.
- 9 Cyberdam has been developed through cooperative partnerships involving institutions of higher education in order to develop simulation gaming for training and problem solving. The environment is based upon open source software.

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- 10 This is true for all types of game and play. Just showing the chessboard and pieces and explaining
- the rules may not be enough to fully understand the possibilities and potentials of chess.
- 11 For more details, please visit games.cyberdam.nl (the playground environment) and the
- support site www.cyberdam.nl (examples of game model design). Please note that non-
- authorized persons cannot see actual games and sessions.
- 12 Training sessions and expert help can be provided by the community of game developers (see
- www.cyberdam.nl).
- 13 For a complete apprehension of the method, we refer to the empirical framework (chapter 6.4)
- in the above-mentioned research publication.
- 14 These levels of performance have been extensively elaborated in Van Haaster, 2014.

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