

12-2007

Developing the Competency of Serious Play

Mark D. Hylton
Buffalo State College

To learn more about the International Center for Studies in Creativity and its educational programs, research, and resources, go to <http://creativity.buffalostate.edu/>.

Recommended Citation

Hylton, Mark D., "Developing the Competency of Serious Play" (2007). *Creative Studies Graduate Student Master's Projects*. Paper 97.

Follow this and additional works at: <http://digitalcommons.buffalostate.edu/creativeprojects>



Part of the [Social and Behavioral Sciences Commons](#)

Developing the Competency of Serious Play
by

Mark D. Hylton

An Abstract of a Project
in
Creative Studies

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science

December, 2007

Buffalo State College
State University of New York
Department of Creative Studies

ABSTRACT OF PROJECT

Developing the Competency of Serious Play

This project explored the development of serious play as a personal competency of creative leadership and as a dimension of a creative organizational climate. Skill development was undertaken through acquiring certification as a LEGO® Serious Play™ facilitator and three workshops were subsequently delivered to a range of clients. The principles of play and Papert's theory of constructionism were used to develop a series of creative products as prototypes tried out with clients in the form of team based games.

The outcomes of this project are ideas on how to bring play into the workplace, creating a climate for creativity and innovation.

Your Signature

Date

Buffalo State College
State University of New York
Department of Creative Studies

Developing the Competency of Serious Play

A Project in
Creative Studies

by

Mark D. Hylton

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science

December, 2007

Buffalo State College
State University of New York
International Centre for Studies in Creativity

Developing the Competency of Serious Play

A Project in
Creative Studies

by

Mark D. Hylton

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Science
December, 2007

Dates of Approval:

Dr Mary Murdock, Advisor
International Centre for Studies in Creativity

Mark D Hylton
Candidate

Acknowledgements

I have a large number of people to thank for their time, support and friendship on the journey up to and through this project.

To my Buffalo cohort, the 'class in the grass': Helene Cahen, Deborah Clifford, Marysia Czarski, Cindy Hedge, Basar Kurtbayram, Anne Manning, ,Markus Redvall, ,Aryna Ryan, Penne Standen, Mette Vilsoe, Shari Walczak and John Yeo, it has been wonderful spending time with you. I am especially grateful for the diversity and inspiration you brought me in all your different ways.

I would also like to thank Susan Morrell and EPSRC for their support and LJMU for picking up when I changed jobs. I am very grateful to my co-player, Gareth Price at The Automatic for his humour, imagination and commitment when we were both learning about Lego Serious Play, designing and delivering the workshops.

To Mary Murdock, my project advisor, I would like to say a very big thank you for your insights and direction through the whole of Creative Studies Program.

Finally to my wife, Lizzy, thank you for your love, your words of wisdom, encouragement and honest feedback. I think you know me better than I know myself.

Table of Contents

Section 1: Background to the Project	1
Purpose	1
Rationale for selection	1
Creative Contributions	2
The Automatic	4
Section 2: Pertinent Literature	6
Introduction.....	6
Constructivism and Constructionism	7
Creativity, Knowledge and Constructionism	9
Creativity, Organisations and Play.....	11
Play as transcendence	14
Lego Serious Play	15
Section 3: Process Plan	20
Introduction.....	20
Rubrics to assess the Competency of Serious Play	21
Process Plan	23
Section 4: Outcomes	26
Overview of Products	26
Lego Serious Play Sessions	26
Putting Play at the core of The Automatic philosophy	28
Nintendo Wii: Putting Play into the ‘Press’	29
Mobile Phone Team Challenge Quiz	30

Danger of Dracula Team Game.....	33
Creative Problem Solving Training Course.....	33
Review of Competency of Serious Play.....	35
Chapter 5: Key Learnings	42
Introduction.....	42
Content.....	42
Process	46
Chapter 6: Conclusion	48
Introduction.....	48
Next steps.....	49
References	51

List of Figures & Tables

<i>Figure 1: Lego Serious Play Certification Process.....</i>	21
<i>Figure 2: Real Time Strategy for the Team with external clients</i>	27
<i>Figure 3: Internal CIS Team Lego Serious Play Session at The Automatic.....</i>	28
<i>Figure 4: 'Play' slide from The Automatic introductory presentation</i>	29
<i>Figure 5: Nintendo Wii games system in use at The Automatic.....</i>	30
<i>Figure 6: The Automatic mobile phone system.....</i>	31
<i>Figure 7: Example of answer display from the Mobile Phone Team Challenge Quiz Game</i>	32
<i>Figure 8: Participants playing the Danger of Dracula Game and their whiteboard 'strategy' with the physical game icons.</i>	34
Table 1: Palus & Horth's (2002) competencies of Serious Play.....	22
Table 2: Project Process Plan	24

Appendices

Appendix A: Project Concept Paper

Appendix B: LJMU News Article about Lego Serious Play Session

Appendix C: Mobile Phone Team Challenge Quiz Game

Appendix D: PowerPoint Slides for Client Presentations at The Automatic

Appendix E: Materials for Danger of Dracula Team Game

Appendix F: LJMU News Update on Automatic Showcase Session

Appendix G: Lego Serious Play Training, Enfield, CT, USA

Appendix H: Project Presentation

Section 1: Background to the Project

Purpose

This project was about learning how to use play in my facilitation practice and as a creative leader. It was about developing my facilitation skills to bring more curiosity, exuberance, spontaneity, improvisation and uninhibited thought into my practice. In turn, it was also about unearthing my own natural ability to play and enhancing my creative leadership skills. I think that part of being a success includes the ability to enjoy all of life's activities on the way to the end results. We spend much more time working toward our goals than we do in actually achieving them; if we aren't happy on the way to getting what we want, we probably won't be happy when we obtain the goals either. The opportunity to play and have fun while we work can provide the safe environment needed to expand these self-imposed limits. A playful spirit addresses all of the above barriers by making it acceptable to experiment and not have to have all the answers. Play can also be a vehicle for self-discovery, making it possible for me to safely go beyond my perceived boundaries to learn new ways of unleashing my skills. I also view taking time to play as a way of renewing my energy for work and creative leadership.

Rationale for selection

Leadership competencies are expensive and time-consuming to develop and often difficult to access. Trying to develop these competencies through time-

consuming readings and exercises can take a lot of time and money. Most of us were playful and creative as children, yet the adult work pressures of demanding schedules, budget constraints, endless lists of deliverables and family and community pressures have forced most of us to bury our creative impulses to keep pace with the endless treadmill of our commitments.

Over eight years, Palus & Horth (2002), researchers at the Centre for Creative Leadership and co-authors of *The Leaders Edge, Six Creative Competencies for Navigating Complex Challenges* observed several hundred individual leaders. The authors found six interrelated creative competencies that helped these leaders to make good decisions in turbulent times:

1. Paying attention: using multiple modes of perception;
2. Personalising: tapping into others unique life experiences;
3. Imaging: using all kinds of images, such as pictures, stories and metaphors;
4. Serious Play: generating knowledge through exploration, improvisation, experimentation;
5. Co-inquiry: dialogue within and across community boundaries; and
6. Crafting: synthesizing issues, objects, events into meaningful wholes.

(Palus & Horth, 2002, p. 3)

Creative Contributions

I am interested in how play helps creativity, curiosity and exploration and more specifically how play can help exploit tacit knowledge in complex

organisational situations. Much of my facilitation work involves helping groups develop as a team to deal with their shared aims and objectives. Statler, Roos & Victor (2002) say that play is a mode of activity that involves imaging new forms of individual and collective identity. Within the special frame of play, people develop emotionally, socially and cognitively, building skills and establishing ethical principles to guide actions. In turn, the skills and principles that emerge through the play activity can have adaptive or transformative effects on people and organizations. In the context of organizations play can be seen as much more than a superficial gimmick that organizations can sanction within clearly defined parameters in order to ease interpersonal tensions and thereby increase productivity. Instead play might serve an integral role in determining the purposes of work itself. Unfortunately, play has been relegated to being the frivolous opposite of work, something that children do and certainly not adults, especially adults at work (Linder, Roos & Victor, 2001). From this perspective, play is associated with mindless and unproductive activities distinct from work only serving the purpose to have fun, relax from work, and being with friends in your free time. It is not surprising then that play has been disregarded as a serious concept in organizational studies for so long (Kellaway, 2001).

(Linder, Roos & Victor, 2001) proposed the concept of “serious play” for both describing critical organizational processes and ultimately actively enhancing managerial effectiveness in 21st century organizations. This project gave me a new perspective on creativity that I could bring to my practice, bringing integrity and validity to play as an important aspect of people’s lives and work. Play is also

a fundamental element in the philosophy of The Automatic (www.ljmu.ac.uk/automatic) and this project brings a deeper understanding of play to my work.

The Automatic

This project took place in The Automatic (www.ljmu.ac.uk/automatic) which is a creative facilitation environment, or 'innovation lab' designed, built and run by Liverpool John Moores University in Liverpool, UK. The concept of innovation spaces as dedicated facilities for encouraging creative behaviours and supporting innovative projects is a relatively recent area of research with initial studies by Haner (2005) and Lewis and Moultrie (2005) on the spaces themselves, while Moultrie, Nilsson, Dissel, Haner, Janssen & Van der Lugt (2007) focused on the effects of the physical environment on organizational innovation.

During this project I was the Operational Manager and Creative Facilitator at The Automatic, working with a team of two other Creative Facilitators, a programmer, alongside a Creative Director and a sales team from the University Business Development Centre. Part of the project aim was to develop the philosophy of The Automatic to include play as an underpinning process, to bring a deeper understanding of play to my own facilitation work, and perhaps look at how the environment can physically reinforce Ekvall's (1996) dimension of dynamism and playfulness (Lewis & Moultrie, 2005).

Indeed Lewis & Moultrie (2005, p91) specifically state in their future

recommendations that “facilitation remains arguably the most important element of even the most high-tech laboratory” , and surprisingly this was the area where their research revealed the least well-developed set of heuristics for determining good and bad practice in different applications. While the physical environment is not a major part of this project it does discuss good and bad practices of serious play.

Section 2: Pertinent Literature

Introduction

Although there exists a very large body of research and literature around the role of play in child development and learning, this is not the focus of this project. I decided to restrict my research to the use of play in professional life in the context of work and specifically in the use of Constructionism (Harel & Papert, 1991) as a way of interacting with the world and constructing knowledge.

This review takes a journey starting from theories of learning and knowledge which are then connected to creativity and why both play and creativity are important for both society and organizations. The review then moves onto look at play as a transcendent activity in the sense of Csikszentmihalyi's (1990) concept of flow. The elements of play, constructionism, flow and organizational innovation are then brought together in the theoretical underpinnings of a methodology called LEGO® Serious Play™.

Initially for the purposes of this review, it makes some sense to take a very brief look at the connections between human development, learning theories and play. This is important for my project because in past centuries constructivist ideas were not widely valued due to the perception that children's play was seen as aimless and of little importance, an attitude that still extends to contemporary view on adult play. Schiller, a German philosopher believed that play had no real purpose other than to use up excess energy. He said "...play is the aimless expenditure of exuberant energy....children and young animals, not concerned

with self preservation, have surplus energy which they expended through play." (Schiller,1875, p.112).

Constructivism and Constructionism

The Swiss psychologist Jean Piaget (1896-1980) did not agree with these traditional views. He saw play as an important and necessary part of the human cognitive development and provided scientific evidence for his views (Piaget, 1962). Piaget argued that intelligence grows from the interaction of the mind with the world. In one interview Piaget declared that the word 'constructivism' encompassed all of his work. He explains constructivism in the following way:

Knowledge is neither a copy of the object nor taking consciousness of a priori forms pre-determined in the subject; it's a perpetual construction made by exchanges between the organism and the environment, from the biological point of view, and between thought and its object, from the cognitive point of view...The major problem in knowledge, since it isn't a copy of reality, a copy of objects, is the way it reconstructs reality. In other words, reality must be known of course by recreating it through deduction and endogenous construction. (Binguier, 1980, pp. 110-111).

Today, constructivist theories are influential throughout much of the so-called informal learning sector. One example is the "Investigate Centre" at the Natural History Museum, London (<http://www.nhm.ac.uk/education/activities/school-activities/Investigate>). Here visitors can engage in open ended investigations of real natural history specimens reaching towards self selected goals.

Knowledge, Piaget tells us, expands and plateaus from within, and according to complex laws of self-organization. To summarise, for a child, or an adult, to abandon a current working theory, or belief system, requires more than being exposed to a better theory. Adult serious play requires "learning to hold

your deepest beliefs lightly for a moment, rather than squeezing more tightly when they are challenged” (Palus & Horth, 2002, p.107).

Conceptual changes in children, like theory changes in scientists, emerge as a result of their action-in-the-world, or experience, in conjunction with a host of ‘hidden’ processes at play to equilibrate, or compensate, for surface perturbations (Carey, 1987; Kuhn, 1970). The implications of such a view for learning are threefold:

1. Learning is always indirect. Children and adults don’t just take in what’s being said. Instead, they interpret what they hear in the light of their own knowledge and experience. They transform the input.

2. The transmission model, or conduit metaphor, of human communication is not sufficient. To Piaget, knowledge is not information to be delivered at one end, and encoded, memorized, retrieved, and applied at the other end. Instead, knowledge is experience that is acquired through interaction with the world, people and things.

3. A theory of learning that ignores resistances to learning misses the point. Piaget shows that indeed people have good reasons not to abandon their views in the light of external perturbations. Conceptual change has almost a life of its own.

While capturing what is common in children's thinking at different developmental stages—and describing how this commonality evolves over time, Piaget’s theory tends to overlook the role of context, uses, and media, as well as the importance of individual preferences or styles, in human learning and

development. This is where Papert's "constructionism" comes in handy.

Seymour Papert of Massachusetts Institute of Technologies worked with Piaget in Geneva in the late 1950's and early 1960's and developed a theory of learning based upon Piaget's constructivism. In his own words:

Constructionism—the N word as opposed to the V word— shares constructivism's view of learning as "building knowledge structures" through progressive internalization of actions... It then adds the idea that this happens especially felicitously in a context where the learner is consciously engaged in constructing a public entity, whether it's a sand castle on the beach or a theory of the universe (Papert & Harel, 1991, ¶ 2)

To Papert, projecting out our inner feelings and ideas is a key to learning. Expressing ideas makes them tangible and shareable which, in turn, informs, shapes and sharpens these ideas, and helps us communicate with others through our expressions. The cycle of self-directed learning is an iterative process by which learners invent for themselves the tools and mediations that best support the exploration of what they most care about.

Constructionism simply says that learning and the construction of knowledge arises through an interaction with the outside world. Play, in its simplest form, is about interacting with the world outside of your mind, usually through your hands, or as Papert would say 'learning through making' (Papert & Harel, 1991, ¶ 1).

Creativity, Knowledge and Constructionism

The concept of learning through making implies creation or construction of new knowledge for the individual which implies a degree of personal creativity when playing. Freud (1959) made a definite link between creativity and childhood

play:

Should we not look for the first traces of imaginative activity as early as in childhood? The child's best-loved and most intense occupation is with his play or games. Might we not say that every child at play behaves like a creative writer, in that he creates a world of his own, or, rather, re-arranges the things of his world in a new way which pleases him? It would be wrong to think he does not take that world very seriously; on the contrary, he takes his play very seriously. pp. 143-144.

This re-arranging of things lies at the heart of all work-based discovery and innovation. Before a scientist can move a theory forward, he or she must imagine knowledge looking different to the way it currently does, a designer must imagine a combination not yet tried, in the same way that a writer imagines a scene in a novel, or a child imagines himself scoring a penalty to win the World Cup for England. As Freud noted, this is serious play, because this is where we find that inner freedom to learn essential truths about our world and ourselves that in turn allow us to recognize possibilities for change.

This apparently contradictory notion of 'serious play' takes us to the heart of creativity. Because we can identify two distinct stages to any creative process – first the divergent initial inner freedom where we untie ourselves from rules and expectations, where we leave behind what's already known and imagine what might be – this is the time and place where disparate things might meet and combine in unusual ways, and is often almost pre-verbal; with ideas flooding the mind in the form of visual images.

Then, there's the convergent second stage of stepping back, of casting a critical eye over the ideas we've had, of bringing the purpose back into focus.

This is the writer's editing process; the scientist's testing of data; the designer's

consideration of implications for practical application. This is often the stage where we become more aware of language and of forming those visual images into coherent thought for communication to others. Ideas are worth nothing if they are not communicated and acted upon and as communication implies other people as the receivers and interpreters, organizations and hence society have a large influence on attitudes to creativity and play.

Creativity, Organisations and Play

Arguing from a historical perspective Huizinga (1949) suggested that the origins of society rely on play, implying that an imaginary situation is the basis of culture at large, through the numerous rituals invented by humans being of "agonistic" (competitive nature) or religious (cooperative) nature. His 1949 thesis, *Homo Ludens* (man the player) was completely new and reversed the disrespect in which play was held until then. Huizinga defined play as a voluntary activity or occupation within fixed limits of time and place, according to the rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness. Huizinga (1949) goes on to say that "the play element in culture has been on the wane ever since the 18th Century, when it was in full flower. Civilization today is no longer played and even where it still seems to play it is false play" p. 206.

Bridges (2004) proposed that modern societies are the first in history where people have been rewarded for keeping the level of societal change high. Most other times and places have rewarded and honoured people for protecting

the society's continuities; but modern society rewards change in the name of "innovation". Modern western or developed economies depend upon it, and if the innovation ceased, these economies as a whole - and of course many individual careers - would fall apart. So we've got a change-dependent culture and that culture that increasingly celebrates creativity and innovation (Florida, 2005). Now it is the intrinsically human ability to create new ideas, new technologies, new business models, new cultural forms and whole new industries that really matters. This is what Florida (2005) calls Creative Capital. For an economy to grow and prosper, all types of organisations – individuals, firms, cities, states, and even nations – must nurture, harness, mobilize and invest in creativity across the board.

Charles Handy (1994) commented that we are moving into the “Three i Economy” (information, ideas and intelligence). All of these are in the heads of people who typically don't go out of their way to share them unless they share the same visions. This need for a more creative life and to share creative work brings its own challenges. Jung (1964) wrote “without playing with fantasy, no creative work has ever yet come to birth . The debt we owe to the play of imagination is incalculable” p.82. Ekvall (1996) describes playfulness as one of his dimensions of a creative climate:

The spontaneity and ease that is displayed. A relaxed atmosphere with jokes and laughter characterises the organisation which is high in this dimension. This opposite climate is characterised by gravity and seriousness. The atmosphere is stiff, gloomy, and cumbrous. Jokes and laughter are regarded as improper. p.108.

However few organizations today are noted for their playfulness; in fact many

organizations have become prisons for the human spirit and anchors for depression. (Berg, 1995).

Dr. Deanna Berg, an international business consultant, speaker and coach in the areas of change, creativity, team-building and learning organizations, is adamant that fun is a necessary ingredient for a work environment to heighten morale and hence productivity. She stresses that too many organizations have become places that oppress the human spirit. And when work isn't fun, staff will only do the minimum required for the job until they can leave and enjoy themselves outside work. But companies are coming to realize that playfulness and meaningful work can go hand-in-hand to make creative organizations which obtain superior results (Dahle, 1999; Kelley, 2001; Palus & Horth, 2001).

Companies like IDEO (Kelley, 2001) and many authors (Schrage & Peters, 1999; Berg, 1995; Mauzy & Harriman, 2003) argue that companies need ongoing innovation in order to survive and succeed and that finding fresh ways to create customer loyalty is a must. Berg (1995) suggests that enjoying a playful attitude helps pinpoint new ways to enthrall customers. In contrast, the conventional focus on getting down to business and producing results can stifle creativity and potentially great ideas. Organized play in companies can provide a way of stretching boundaries. This "playground" for creative ideas gives a safe environment to take risks with new notions. Dr. Berg pointed out that the neuron connections in our brains work poorly in conditions of threat and fear, so for best results we should create time to play. Dahle (1999) asks where is it written that important assignments must be carried out with an air of grim determination?

That breakthrough ideas can only emerge in a business-as-usual environment?

That work must always feel like, well, work? At PLAY, a marketing agency in

Virginia, there is a belief that:

When you turn work into a place that encourages people to be themselves, have fun, and take risks, you fuel and unleash their creativity. The best ideas come from playful minds. And the way to tap into that playfulness is to play – together (Dahle, 1999, ¶5).

Play as transcendence

From a psychiatric point of view Torr (1999) defined play as “activity aimed at having fun”. When we play, we sense no limitations. In fact when we are playing, we are usually unaware of ourselves. Self-observation goes out the window. We forget all those past lessons of life, forget our potential foolishness, forget ourselves. We immerse ourselves in the act of play. And we become free.

Huizinga (1949) summarises the characteristics of play as:

an activity which proceeds within certain limits of time and space, in a visible order, according to rules freely accepted, and outside the sphere of necessity or material utility. The play-mood is one of rapture and enthusiasm, and is sacred or festive in accordance with the occasion. A feeling of exaltation and tension accompanies the action. p.132

Play provides us with the possibility to measure the level of challenge involved. In choosing our level of risk and uncertainty according to our motivation and skills, we optimize the challenge or the situation, avoiding boredom or anxiety. When the level of challenge is too high we focus on our own behaviour in order to match the challenge. In these circumstances, our play leads us to an altered state of consciousness, where there is so much involvement in the activity that nothing else seems to matter (Csikszentmihalyi, 1990). There is a lasting feeling

of empowerment; irrational behaviour becomes safe because we feel total control of our senses. At the same time there is a feeling of being transported to new realities, new discoveries, a push to higher levels of performance, and or a lead to unexpected states of consciousness. The unfolding of the situation takes us beyond the expected: “the ordinary becoming the extraordinary”. This situation is similar to the descriptions of “flow” or “deep play” by Csikszentmihalyi (1990) and Geertz (1973) respectively.

Play is naturally conducive to flow because it comprises most of these characteristics: the optimization of challenge, strongly focused attention, having clear and realistic goals, providing clear feedback as to whether one is reaching the goals, having a feeling of control, being so involved in the activity that self consciousness disappears, that worries and frustrations temporarily disappear, that time is transformed during the activity (Csikszentmihalyi, 1990).

When people feel phenomenally valued and respected, their creative passion and energy can erupt all over. That energy is infectious. It's wonderful to watch clients play ball and do other 'silly' things. And before you know it, you've got 22 ideas that are 10 times better than anything you could have come up with if you hadn't approached the project that way. The simpler you get, the more open and the more creative you become. (Dahle, 1999, ¶ 7)

Lego Serious Play

LEGO® Serious Play™, an official product of the Lego Group, is a form of business consultancy fostering creative thinking, in which team members build metaphors of their organisational identities and experiences using Lego bricks. Participants work through imaginary scenarios using visual three-dimensional

Lego constructions, imaginatively exploring possibilities in a 'serious' form of 'play'.

The Lego Serious Play website (www.seriousplay.com) describes the method as "a passionate and practical process for building confidence, commitment and insight". The approach is based on research suggesting that hands-on, "minds-on" learning produces a deeper, more meaningful understanding of the world and its possibilities. It is claimed that participants come away with skills to communicate more effectively, to engage their imaginations more readily, and to approach their work with increased confidence, commitment and insight.

A booklet entitled *The Science of Lego Serious Play* (2006) sets out some of the basic research on which the approach is based. This research can be divided into three themes:

Play - Play is defined as a limited, structured and voluntary activity that involves the imaginary. That is, it is an activity limited in time and space, structured by rules, conventions or agreements among the players, uncoerced by authority figures, and drawing on elements of fantasy and creative imagination.

Constructionism - Based on the ideas of Seymour Papert (Papert & Harel, 1991), which built in turn on the Constructivist theories of Papert's colleague Jean Piaget (1962). Papert argued that learning happens especially well when people are engaged in constructing a product, something external to themselves such as a sand castle, a machine, a computer program or a book.

Imagination - Throughout history, the term "imagination" has been given many

different cultural and linguistic connotations. While all share the basic idea that humans have a unique ability to "form images" or to "imagine" something, the variety of uses of the term "imagination" implies not one, but at least three meanings: to describe something, to create something, to challenge something. From the point of view of Lego Serious Play, it is the interplay between these three kinds of imagination that make up strategic imagination – the source of original strategies in companies.

This is obviously not quite the same as play, as practiced by children, which usually has no particular goals beyond those contained in the exercise itself. This is acknowledged in the booklet, which goes onto say:

Adult play is not precisely the same as a child's play. When adults play they play with their sense of identity. Their play is often, though not always, competitive. Adult play is often undertaken with a specific goal in mind, whereas in children the purposes of their play are less conscious. We have identified four purposes of adult play that are especially relevant to our discussion of Lego Serious Play: 1) social bonding, 2) emotional expression, 3) cognitive development, and 4) constructive competition. (*The Science of Lego Serious Play*, 2006, p.4).

As it is based around a process in which individuals build metaphorical models, share their 'stories', and listen and work with each other, Lego Serious Play is unlike other consultancy interventions where an external 'expert' identifies problems and proposes solutions. Instead Lego Serious Play begins with the notion that the 'answers' are already in the room. Every participant gets an equal opportunity to express their feelings or ideas, and the collaborative process means that – as long as the session is facilitated properly – individual contributions will be embraced within the broader overall vision which emerges during the consultancy process. Lego Serious Play is based around a broad set

of core ideas: constructionism (and being in flow); play; and metaphor. It makes use of the 'hands-on, minds-on learning' proposed by Papert (Harel & Papert 1991), and the state of flow outlined by Csikszentmihalyi (1990), in a free-thinking, playful process.

All Lego Serious Play sessions begin with "skills building", during which participants become familiar (or reacquainted) with using Lego bricks, and are introduced to some of the key features of the process, including the hand-mind connection and building in metaphors. This set of exercises then lead onto one or more of the Lego Serious Play applications themselves:

Real Time Strategy for the Enterprise

A sequence of activities in which participants build metaphorical models representing their organization, and then combine these into a shared identity model of the enterprise; then build 'agents' (any possible external entity which the organization may have to connect or deal with) and place these on a landscape in relation to their main model; then build the different kinds of connections; then consider future scenarios; and ultimately arrive at 'Simple Guiding Principles' which emerge from the activity and help to make future decisions.

Real Time Strategy for the Team – a version more oriented towards team-building, in which participants begin by constructing models representing what they bring to the organization; then create a part of a colleague's perceived identity which they have not included themselves; then are asked to review what has been built so far and to build a model representing the 'feel of the

team'; and then to build connections showing how the parts of the team relate; then to reflect on past ways of dealing with events to ultimately arrive at 'Simple Guiding Principles' for the team.

Real Time Identity for You – a simpler process in which individuals build a metaphorical model of their identity at work, then change it to show how they think they are perceived, and then again to represent an aspirational version, 'what you could be at your best', and to reflect upon the differences.

Every stage of these activities involves building with Lego bricks, using the 'hand-mind connection'; there's never a point where participants merely sit back and write down, or chat about, the issues without *building* their response first.

Therefore everything that is discussed comes from *out of* the building process, where hand and mind engage to give visual, metaphorical shape to meaningful things, emotions and relationships.

Section 3: Process Plan

Introduction

The concept of play has many different connotations and perceptions, some positive and some negative. One of my first actions was to explore and define my own perception of play through adult play and serious play. The project then developed two main aims to run in parallel. One aim was to gain training and certification in some aspect of play, to develop and use a methodology to introduce play to my work and to the work I do with others. The second was to record and assess my own attitude towards serious play. The plan to achieve these aims was to develop a set of rubrics from Palus & Horth's (2002) creative competencies of leadership and then keep a journal of instances when I thought I had displayed evidence against that rubric. I also contacted the Lego Serious Play organization and applied to become a registered facilitator of their methodology. The Lego Serious Play program (www.seriousplay.com) is delivered by an international community of consultancies (the Partners), who have been trained (as Facilitators) to deliver the methodology and who have signed a license agreement with the Lego Group (Figure 1). Lego Serious Play is both the name of the tool and methodology that the Partners bring to clients — and the name of a specialized division of the Lego Group.

For the training it is a prerequisite to already have extensive facilitation and/or coaching skills when joining Lego Serious Play. This level of thorough

basic training is not covered in the training, but it is essential to deliver high quality facilitation. The focus in Lego Serious Play is on the participants and their insights and it is essential to have a highly developed ability to truly listen.

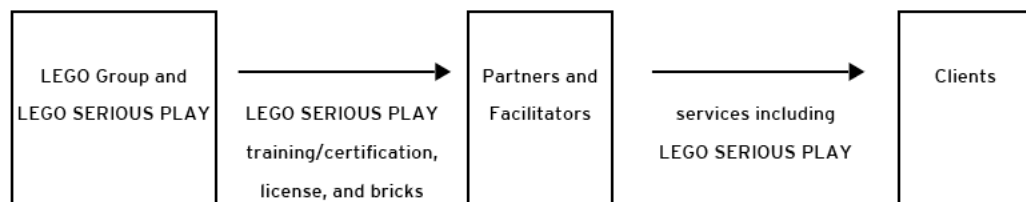


Figure 1. Lego Serious Play Certification Process

To become a certified Lego Serious Play facilitator, I had to complete a week of intensive training. I did this in early October 2007 at the Lego Site in Enfield, Connecticut, USA. The week of training is necessary so that practitioners can become familiar with the carefully thought out methods and ethos of Lego Serious Play. The process is learned about by *doing* it, as well as hearing about and discussing it. Appendix G shows some of the outcomes for the week, including our own set of Simple Guiding Principles. The training week followed a detailed roadmap and provided me with sufficient information and experiences to prepare and carry out Lego Serious Play workshops with clients.

Rubrics to assess the Competency of Serious Play

The second aim of this project was to develop my own competency of serious play. The process to do this involved deliberately raising my appreciation

of play within my work and life, using Palus & Horth's (2002) set of competencies as an aide memoir over the course of the project.

Table 1: Palus & Horth's (2002) competencies of Serious Play

1. Developing Individual Competence

Dig up my natural ability to play from where it had been buried and take on the attitude of irreverent student.

2. Realize you already know how to Play

Integrate the Artists Way and also do something for joy rather than competition or compulsion. Then transfer some of that attitude to work.

3. Become a student who questions conventional wisdom

This also means don't take myself and my job too seriously.

4. Temporarily suspend your formal agenda or schedule

Create time and space for something unexpected to happen. Play within that unexpected moment in order to understand and appreciate it.

5. Developing Community Competence

Bring play into the culture of the-Automatic

6. Networking thrives on improvised relationships

How can I cut across hierarchy or functional boundaries to create work-social networks. What forums can I adapt or create?

7. Invite others to play

How to bring others along on our journey, to see the value in serious play?

8. Take an excursion into adventure learning

How to bring adrenaline and guts into my work and learning.

9. Play with models, simulations and prototypes

Prototype a new product for the-Automatic, play with it, see if it breaks and learn from the experience

10. Harvest the learning from play

Ask my team what have we learned from our improvisations and experiments? What powerful questions should we retain from this? Where do we go from here? How has this added to our knowledge base?

Process Plan

Table 2 illustrates the actual path I took to realize the aims, objectives and outcomes of this project. Explicitly this plan involved the concrete design and delivery of four client sessions and the development of new facilitation processes for those sessions. Implicitly, this process plan was underpinned by conceptual developments of a philosophy of play for myself and The Automatic.

Table 2: Project Process Plan

Date	Hours	Activities
Week of September 16	10hrs	Locating and reviewing literature around Adult Play and Serious Play. Defining rubrics from Palus & Horth. Accepted onto the Lego Serious Play Facilitator Training Course
Week of September 23	3hrs 2hrs	Developed new 'Danger of Dracula' team-based game for The Automatic. Preliminary reading on Lego Serious Play
Week of September 30	36hrs	LEGO® Serious Play™ Training Course in Enfield, CT. 1 st -4 th October. Ordered Nintendo Wii game for The Automatic
Week of October 7	4 hrs	Certified as Lego Serious Play Facilitator. Practising Lego Serious Play applications, becoming familiar with how the activities work. Planning process for upcoming client sessions. Installed Wii console in The Automatic
Week of October 14	8hrs 8hrs	S1) Delivered one-day team building workshop to an external client, with 8 participants, using Lego Serious Play, October 15 th S2) Delivered Creative Problem Solving Training Course to 15 participants, using CPS plus Lego games, October 16 th
Week of October 21	2hrs	Partner license agreed and signed with Lego Serious Play Develop idea for Team Challenge Mobile-Phone Quiz Game Planning for next set of client sessions
Week of October 28	8hrs 2hrs	S3) Nov 1 st – Delivered team building workshop to 17 university employees using Lego Serious Play and new Quiz Team Challenge. Planning for next set of client sessions
Week of November 4	-	One week in Shanghai, facilitating a Sino-UK research collaboration workshop.

Week of November 11	2 hrs 8hrs	Continue Project Write-up S4) Deliver one day team building session for external clients, using Lego Serious Play Place 'play' at the heart of The Automatic philosophy
Week of November 18	8 hrs	Evaluation and write-up of report chapters. Rewriting The Automatic PowerPoint slides to include Play.
Week of November 25	36 hrs	Writing up body of report and collating evidence for the outcomes of the project Final Conclusions and final draft of report.
Week of December 2	2 hrs	Arrange for copying and binding and mailing of all copies to Buffalo

Note: Sessions delivered to clients are identified by S1, S2, S3, S4.

Section 4: Outcomes

Overview of Products

Over the course of this project I reviewed literature discussing theoretical viewpoints and approaches to childhood play, adult play and serious play. However I did not find as many useful resources on how to actually deliver play, or practical ways to bring play into the workplace. Consequently the outcomes of my project comprise a set of activities and products that I created and experimented with, including developing my own skills through Lego Serious Play Training, to apply the theory. The second set of outcomes arose from reviewing my personal attitude and competency against the Palus & Horth's (2002) rubrics.

Lego Serious Play Sessions

As a result of becoming a certified facilitator of Lego Serious Play, I was able to deliver Serious Play workshops to two external and one internal client. In all three cases the application used was 'Real Time Strategy for the Team' with the aim of developing insights, actions points and simple guiding principles for how the team would make decisions in the future. The first session was a team building session for an external corporate client with a group of line and team managers for a computer games company (Figure 2). Their first activity was the 'Danger of Dracula' team game.

The second session was for a large internal group of 16 people from Liverpool John Moores University Computing and Information Systems

Department, who provide the IT services to the university. This session used the new mobile phone team challenge quiz for the first time as a post lunch energizer activity. We ran this day with two teams of eight participants doing the Lego Serious Play 'Real Time Strategy for The Team' process (Figure 3).



Figure 2: Real Time Strategy for the Team with external clients

This session was also reported in the University News Update and provided a nice case study for The Automatic (Appendix B).

The third session was another team building day for an external client who was merging two HR teams across two companies which had recently merged. This was the first time that many of the participants had met. This session started off with the Mobile Phone Team Quiz Challenge and then moved into the Lego Serious Play application.



Figure 3: Internal CIS Team Lego Serious Play Session at The Automatic

Putting Play at the core of The Automatic philosophy

Another major outcome of this project was to place play as a core underpinning value in the philosophy of The Automatic (Figure 4). The product in this case was the creation of an introductory presentation to deliver to visitors and potential clients of The Automatic. I have given this presentation to several visitors and it represents a focus and evolution in the identity of The Automatic, the further differentiates our approach to that of other consultancies. Appendix D contains a full copy of the PowerPoint slides from my introductory presentation, which is often combined with an Automatic ‘taster’ session where clients are given a brief hands-on, minds-on experience of our processes, including an introduction to the principles of Lego Serious Play. This also brings a constructionist approach to our sales processes by encouraging our potential

clients to construct their own ideas and knowledge about how they could work with us. The presentation also discussed the Lego Serious Play methodology and gave some examples of how we have used the applications with clients.

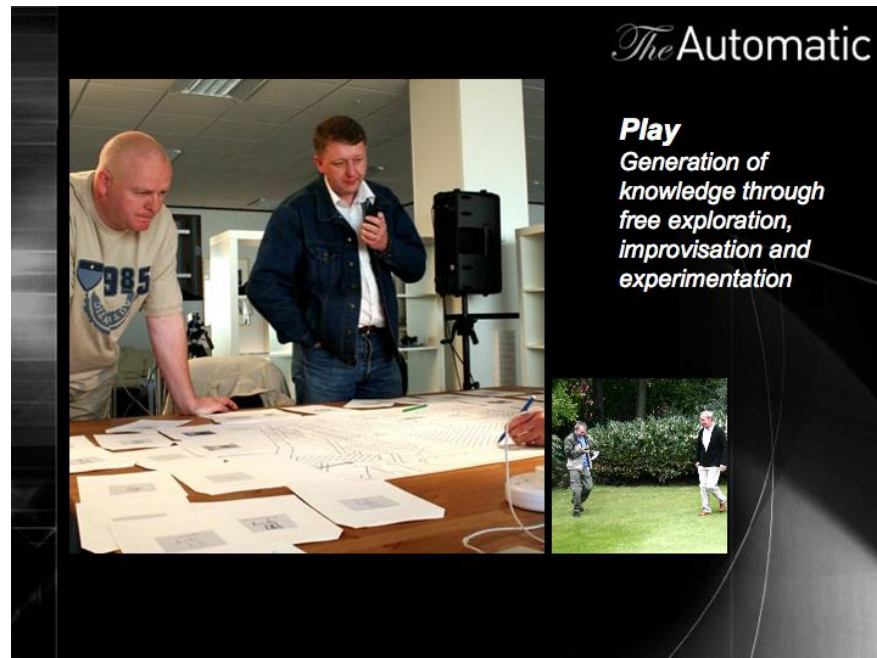


Figure 4: 'Play' slide from The Automatic introductory presentation

Nintendo Wii: Putting Play into the 'Press'

I wanted to take the play-principle even further into the core of The Automatic and decided that we needed a computer games console available in our space. The Nintendo Wii system offered a novel way of interacting with electronic games. This design allowed users to control the game using physical gestures as well as traditional button presses, through the Wii remote. This way of interacting seemed to me to be consistent with a constructionist approach to learning, with a more hands-on, minds-on experience. Figure 5 shows the system set up in the workspace of The Automatic. An interesting point to

consider here was how the creative press or climate of an organization could make the use of a computer game system during the workday acceptable. I cannot imagine many companies or organizations where the staff are allowed or even encouraged to take a few minutes out to go and play a game of bowling or golf on a computer.



Figure 5: Nintendo Wii games system in use at The Automatic

However in The Automatic this was accepted practice and it became a shared experience. I have also found that when participants arrive for a session, the presence of the Wii and the permission to play with it while waiting for the session to start, communicates that play is acceptable or even expected within the context of The Automatic.

Mobile Phone Team Challenge Quiz

This product arose out of the need to develop an indoor team game that could be used either as an introduction to the session or as an energizer during the day. I also wanted to use the technology that was developed within The Automatic to offer something unique based on the principles of serious play involving social bonding, emotional expression, cognitive development and

constructive competition. My specific learning goal for this game was also for the participants to assess and make a choice about their views on collaboration versus competition. In terms of the technology, The Automatic has a suite of Nokia mobile phones (Figure 6) that have software developed by The Automatic that communicates between our own central database server and our Distiller multi-screen display system.



Figure 6: The Automatic mobile phone system

In brief, we can send a series of questions or tasks to each phone, which participants can answer via SMS text message or MMS photo messages. All the responses are stored in our server database to be retrieved and displayed at the end of the game.



Figure 7: Example of answer display from the Mobile Phone Team Challenge Quiz Game

The game that I developed required participants to compete in three to four small teams of three to four people. Each team had a mobile phone to receive the questions and to send their answers back again. They also had a set of instructions (Appendix C), a card with a red word and a card with a green word. Some of the questions were general knowledge, others required some creativity to set up a 'scene' to photograph (e.g. recreate a scene from Star Wars with your group members) while others required negotiation and cooperation with other teams in order to answer the question. Figure 7 illustrates answers to one of the game questions.

The key to the game was that two of the questions could not be answered without working with the other teams and the interesting part was how the

participants dealt with that situation. When all the teams had completed the tasks, the answers were reviewed and discussed and the game was debriefed as to how they approached the tasks, who did what in each team, how did they feel, how would they do things differently and then translating this learning into their work lives. Appendix C gives a list of the quiz questions.

Danger of Dracula Team Game

This product was a second team-based game that had a different approach and focused on John Adair's task, team and individual Action Centered Leadership model (Adair, 1989). The original game was adapted from Johnson & Johnson (1997, pp.21-23) and slightly simplified. Its aim was to prevent a group of media archaeologists from releasing Count Dracula from his crypt by developing a plan to protect themselves from Dracula by exploiting his weaknesses and reducing his strengths. I adapted Johnson & Johnson's (1997) game play through creating a PowerPoint presentation (Appendix E) and a set of laminated game play items with which the teams could play to plan and prioritise (Figure 8). I also modified Johnson & Johnson's (1997, p.21) review and learning session to include a discussion around team dynamics and the importance of a balance between achieving the task, building moral and developing the team and productivity.

Creative Problem Solving Training Course

Another outcome of the project was that I designed and ran a one day Creative Problem Solving (CPS) training course for a group of 16 managers from

a biotech company, who were responsible for everything from HR to product quality and process engineering. I really wanted to bring some play and imagination into this session, alongside the theory and practice of the CPS model so I incorporated some of Lego Serious Play exercises into the day. One activity was focused on different types of imagination where the participants have a supply of Lego pieces each and they all work as designers for a snowmobile company



Figure 8: Participants playing the Danger of Dracula Game and their whiteboard ‘strategy’ with the physical game icons.

Their first task was to use the Lego to build the next new exciting model of snowmobile and give a short marketing presentation about it. Their second task

involved a change in strategy for the company who has decided to get out of the snowmobile market but keep in the snow leisure business. The participants had to think up and build a new product that had something to do with snow, and again give a short selling story. The third and final element was that because of a lack of snow (climate change!) the company needed to develop any new exciting projects that the team could think of. So the participants got the opportunity to build anything they wanted with a marketing story behind it. The concept behind this game was to look at different kinds of imagination. Descriptive imagination enables us to see what is going on out in front of us, to make sense of it, but also to see new possibilities and opportunities. Creative imagination allows us to see what isn't there. It evokes truly new possibilities from the combination, recombination or transformation of things or concepts. Challenging imagination overturns all the rules and wipes that slate clean, it can include deconstruction and sarcasm, or even re-engineering which is about throwing it all away and starting over rather than improving things. Strategic imagination is a process that emerges from the complex interplay among these three kinds of imagination (*The Science of Lego Serious Play*, 2006, pp. 14-17).

Review of Competency of Serious Play

The second part of the outcomes of this project was to review the rubrics suggested by Palus & Horth (2002) to assess how my development of the competency of serious play has progressed through this project. I have noted evidence against my original objectives (in italics) against each of the ten rubrics.

1. Developing individual competence

Dig up my natural ability to play from where it had been buried and take on the attitude of irreverent student.

The very act of undertaking this project allowed me to rediscover the importance of play to my life and work. Working with Lego led to some very interesting conversations with potential clients, friends and colleagues who are amused and intrigued by the use of a 'toy' in serious work. Interestingly this project has been through periods of irreverence and seriousness over the last 20 weeks; however it has always reminded me to look for play when the going has been tough. The idea is to take time out long enough to let something new happen. I hope that the outcomes of this project show that a lot of new things have developed!

2. Realize you already know how to play

Integrate the Artists Way and also do something for joy rather than competition or compulsion. Then transfer some of that attitude to work.

I had certainly forgotten how to play and definitely had forgotten the importance of play to life, at least for the last year or so when work and study had eaten into my time for play. At least at work I was finding some time to play, explore and improvise. However doing something purely for joy was a rare event. Artist's dates (Cameron, 1997) were one way to find some joy in an activity, whether it was visiting an art gallery, a new city or getting out mountain biking,

these moments reminded me what true play is about. In some ways it was easier to bring play into The Automatic, as work, rather than in my own time, perhaps this has to do with the differences in press (Rhodes, 1961; Ekvall, 1996) between the two aspects of my life.

3. Become a student who questions conventional wisdom

This also means don't take my job and myself too seriously.

Conventional wisdom does not say that you and your team should take time during the working day to play computer games. However I have found that playing is a good way to enhance creativity, develop a good team spirit or just relax for a few minutes. Playing with the Wii was a surprisingly communal activity that attracted others to join in and try their skills out. Very little we do at The Automatic could be considered 'conventional' and we don't take ourselves too seriously, even when working to meet income targets and selling sessions to clients. Does conventional wisdom say you should get clients to form teams around the task of killing Dracula or recreating scenes from films? Selling play as a major influence could be considered risky. However, we think it works.

4. Temporarily suspend your formal agenda or schedule

Create time and space for something unexpected to happen. Play within that unexpected moment in order to understand and appreciate it.

As one example of suspending my formal agenda, was to take my team out to the Tate Art Gallery at Liverpool Docks for one afternoon. We were looking for new ideas for The Automatic so I set up our mobile phone system to ask a series of questions during the visit. Some of the tasks were quite tricky because they required us to take secret photos in the art gallery (which isn't normally allowed).

5. Developing Community Competence

Bring play into the culture of the-Automatic

Another aspect of the outcomes of this project has been to place play right at the core of what The Automatic is about. It's now part of our philosophy and we have to practice what we preach. Many visitors comment that their initial impression of our space is of a play school or kindergarten. Through our work we aim to instill the values of play into our clients who will then hopefully take it back to their workplace with them.

6. Networking thrives on improvised relationships

How can I cut across hierarchy or functional boundaries to create work-social networks? What forums can I adapt or create?

The Automatic works with a wide team of people, from the University Business Development Managers to Associates, external trainers and facilitators. In order to develop those networks we ran several half-day sessions at The

Automatic to get to know these people better help them to gain a better understanding of us and how we work. Essentially we invited them to play with us. Appendix F gives a report of one of these sessions, written by one of participants.

7. Invite others to play

How to bring others along on our journey, to see the value in serious play?

The Automatic is definitely about inviting people to play, through computer games, through team games, through experimenting with ideas to just getting a new perspective on old ways of doing things. We are also developing a collaboration with a Liverpool based company called 'Laughology' a group who 'are serious about humour in the workplace (www.laughology.co.uk).

8. Take an excursion into adventure learning

How to bring adrenaline and guts into my work and learning.

Palus & Horth (2002) talked about creating physical spaces that invite play (p.124) and this is fundamentally what The Automatic was designed to do. I think this aspect was the one that I explored or experienced the least during this project. I'm not sure how much adrenaline and guts I brought into my sessions and in fact found that Lego Serious Play sessions can be quite hard work at times. This is definitely an area for improvement.

9. Play with models, simulations and prototypes

Prototype a new product for the-Automatic, play with it, see if it breaks and learn from the experience

I have been taking this approach a lot recently. The mobile phone team challenge quiz was developed through prototyping an idea, trying it out and then improving it. We are also experimenting with some other ideas, like using the Wii remote controls for a novel way of interacting with our big screen display system. Another idea for getting to know groups of people arose when the University network went down and our mobile phone system wouldn't work so we used our large screen display 'mind mapping system' to record photos and information about each of a group of guests as they introduced themselves. This 'game' requires everyone else to listen and type in information about the speaker that they find interesting and there are often some more amusing anonymous comments. The end result was a really useful record of who all the people were and what they did, that one would normally forget. As a result of this play with an idea, we improved the game and it became a regular tool.

10. Harvest the learning from play

Ask my team what have we learned from our improvisations and experiments? What powerful questions should we retain from this? Where do we go from here? How has this added to our knowledge base?

We learnt a lot during the Lego Serious Play training course and even more when we came to design and deliver sessions ourselves. It's always fascinating to see how different groups react to our sessions and the games and we learn something new every time about how creative people can be in interpreting instructions. We also learn about what things don't work so well. There are always individuals who will not participate in games and we have to learn how to allow them to participate on their own terms.

Chapter 5: Key Learnings

Introduction

Throughout this project I have continually learnt new domain-relevant skills in the field of play and also about the process of playing. The main skills learnt were through training as a facilitator of Lego Serious Play. However this also leads to learning about the underlying psychological theories that the methodology was based upon. In turn this new knowledge lead me to think about the processes that I use in my work. I have also gained some new insights about the influence that climate has on both play and therefore creativity in the workplace.

In terms of process I learnt how to take theories from psychology and business management, translate them into practice and see how the participants react to them. For me, this is the process of bringing ideas into reality.

Content

I have found that play is a difficult and potentially damaging activity if it is not treated or received in the right way. The right organisational climate is needed (in the sense of Ekvall, 1996) before play can effectively be introduced and be taken seriously as work. I think one of the reasons that the presence of a Wii computer game in my workplace is not seen as unwork-like is because the climate of The Automatic is designed around play. Palus & Horth (2002) caution that “serious play is for serious challenges, not for comic diversion” p. 126 and

they caution that childish play – unlike childlike play – is a step backwards. The point they make is to work towards serious goals and make sure others understand the point of the play.

Play and creativity share more than one characteristic for research and practice, and in my view the biggest commonality is the difficulty in defining what is meant by that term. The literature provides a whole range of definitions in both cases, depending on what you are looking for. I started this project with a very defined view of adult serious play as being play with a specific outcome and that it was a specific process and many authors agree with this view (see Stephenson, 1988; Gee, 2004; Kane 2005). One of the simplest definitions of play is just that “Play is self-expression for its own sake” (Sapora & Mitchell, 1961, p.114). Interestingly Callois (1961) proposed two styles of play at opposite ends of a continuum. The first is *paidia* or free and spontaneous play. The second is *ludus* or rule-governed activity. When both the freedom and the order of play are recognized, then play becomes a more complex phenomenon than the simple ‘expression for its own sake’ suggests. Or perhaps there is a paradox because in play we are “free to create a shadow world in which to act out our imagined place in the real world. It is then, no wonder that the freedom of play may in many instances lead to order, familiarity and the self-transcendence of flow” (Kelly, 1982, p. 31). Play is certainly an important part of creativity. Rogers (1954) suggested that the ability to play in a spontaneous manner with ideas, relationships and the environment was an important condition of constructive creativity. Rogers stated that “It is from this spontaneous toying and exploration

that there arises the hunch, the creative seeing of life in a new and significant way” p.255. Building on Rogers’ theory, Peavy (1974) proposed that:

Playfulness means being able to express the ridiculous, to be amazed, to see something from unbelievable angles. The creative personality toys with possibilities, is willing to try out and to “waste” time and effort. By playing around, the creativity personality lets go; he permits his imagination and the world of practicality to test each other. By playing, the creative person frees himself from conventions, habits and conditioning. Thus he is able to let the New emerge. p.170.

After an extensive review, Lauer (1994) noted that discussions of playfulness and its role in organizations were scarce in the field of management and organizational studies. Fortunately, this topic has received more attention in the subsequent 13 years, especially with the development of the Serious Play methodology developed by Lego. Through the Lego Serious Play training and researching this project, I have gained a new understanding of play and the theory of constructionism that I can use in a number of different ways to inform the design of our sessions in The Automatic. The Lego Serious Play applications have also given me a new perspective on how to bring play and creativity into my work with commercial clients and especially on how to convince them that play is serious work. Roos & Victor (1999) employed the notion of play to describe the social dynamics of the three critical elements of strategy-making: (1) the construction of the knowledge gathered from analysis and experience; (2) the sharing of meaning emerging from that knowledge, and (3) the transformation of identity assimilating the new knowledge. They interpret these three phases of strategy-making as play where the human imagination is employed to generate ideas, a conversation is created to communicate meaning, and socialization is engaged to develop commitment. Like play, strategy-making is a temporary and

intentional period of make-believe. Puccio, Murdock & Mance, (2007) and Russ (1993) both comment that a key affective skill that complements ideational thinking in creative problem solving is playfulness. By playfulness Puccio, Murdock & Mance (2007) mean “freely toying with ideas...A playful attitude releases inhibitions and allows you the freedom to explore new or different ideas or angles” p. 57. Their list of key affective skills includes curiosity, dreaming, sensing gaps, avoiding premature closure, sensitivity to the environment and tolerance for risks. It seems to me that perhaps play is a common element in all of these skills and could be used to enhance those skills? This project was not originally about creative problem solving, and with hindsight it could have been focused slightly more on that aspect.

I originally set out to learn something about leadership. After all, Palus & Horth's (2002) competencies are about developing creative and successful leadership. However, I am not sure that leadership really arose as a learning point during this project. Or perhaps it has in terms of making sense of the identity of The Automatic. Palus & Horth (2002) comment that:

To make effective sense of a complex challenge we must have a grasp of the whole of the situation, including its variables, unknowns and mysterious forces. We must examine more than just the surface. This requires skills beyond everyday analysis. Although they are not easily managed, we need to attend to those valuable professional resources we call *heart* and *guts*. We grasp events through intuition and personal passions as well as through mission statements and standard operating procedures. We use our imaginations to figure things out. Because these ways of making sense tap unique resources and reveal additional information, they are highly useful when we are trying to make sense of complex challenges in a way that leads to effective action. p.5.

Making sense of what you may never have seen before requires play with a serious intent: experimentation, improvisation and imaginative exploration. To

improve this project I might have put more emphasis or focus onto the leadership aspects.

An aspect of this project that worked very well was the decision to gain training and experience in Lego Serious Play. However, it was a challenge to find clients to use the methodology with. I had intended to use the processes at a weeklong workshop in Shanghai, to help develop Sino-UK collaborative research projects. Unfortunately the Lego brick kits became stuck in Chinese customs for a week and eventually arrived too late for the workshop.

Process

The process of doing this project required two main creative skills. The first was to find a way of assimilating the new knowledge and skills, or in other words to find an effective mode of learning. There was also the issue of clarifying the problem, or in other words defining what play was about and how it related to my life and work. The second was the creative ability to develop new products for my work.

Probably the most interesting insight I found was a more personal one. Much of this project was focused on 'serious play' or play with a purpose, play for work. However as a result of reading Lenore Terr's (1999) book on *Beyond Love and Work: Why adults need to play*, I realized that play is a much more fundamental and critical aspect of life in general. Terr comments that "people who make a personal game of what they do seem more successful at what they

do. And they appear happier. Then, too, they demonstrate heightened and pleasurable concentration – a mental state long associated with play” p. 221.

The process of developing the products followed an interesting path, navigated using play. The tangible products described in Section 4 were created through necessity using prototyping and improvisation. There had to be a driving need and a context, or a purpose for these products else there would have been little point in creating them. This need also allowed for experimentation and improvement of the products by trying them out for real.

Schrage & Peters (1999) proposed a very constructionist point of view when saying that “the most important raw material of innovation has always been the interplay between individuals and the expression of their ideas...The mind gets far more credit than it deserves...Mental models become tangible and actionable only in the prototypes that management champions...Prototypes engage the organizations thinking in the explicit. They externalize thought and spark conversation” pp.13-14.

Creativity requires the externalization of thoughts and it occurred to me that something like Lego also helps deal with the issue of tacit knowledge in a team or organization.

Chapter 6: Conclusion

Introduction

Fundamentally play (and serious play) is about making sense: Making sense of the world, making sense of learning, making sense about decisions in a complex landscape. Children play to make sense of their world, to experiment, to try things out. Adults need to play to make sense of their work environments, their organizations or their lives. Play is also about learning and making sense of learning, constructing learning into knowledge for the individual.

I found that play was an important element of creativity and that the ability to play was a key skill for leaders in developing a vision. Play might also be a useful tool for the emergence of creativity. The most important factor for play is setting up the right environment for play to be acceptable, whether it is serious play or childlike play. The climate also needs to be happy with risk taking because for some people play means stepping outside their normal boundaries or comfort zones especially when connected with the workplace. I think that people need permission to play and that permission can come from themselves or from the organizational environment that they work in. I say environment, or climate, because one person saying “yes, let’s play” does not really work, even if that person is senior. An interesting factor is that prototyping can take the risk out of experimentation with new things, or even change. Why not experiment with

change first before committing to any particular course of action? After all isn't that exactly what play is all about?

Next steps

This project was about developing the competency of serious play as one of Palus & Horth's (2002) six interrelated creative leadership competencies:

1. Paying attention: using multiple modes of perception;
2. Personalising: tapping into others unique life experiences;
3. Imaging: using all kinds of images, such as pictures, stories and metaphors;
4. Serious Play: generating knowledge through exploration, improvisation, experimentation;
5. Co-inquiry: dialogue within and across community boundaries; and
6. Crafting: synthesizing issues, objects, events into meaningful wholes.

Obviously there are another five competencies that I could aim to develop and use in my leadership practice.

Another insight that this project lead to was that there was a lack of useful literature or practice available on using play in the workplace. Lego Serious Play is one of the only true methodologies I found. There is also the issue of dealing with the negative perception of play in the workplace.

Puccio, Murdock & Mance (2005; 2007) presented initial views around the role of affective skills in creative problem solving and further study on play

(serious or otherwise) could well contribute to the development of their Thinking Skills Model, or the development of key affective skills.

References

- Adair, J. E. (1989). *The action centered leader*. London: Industrial Society.
- Berg, D. H. (1995). The power of a playful spirit at work. *Journal for Quality and Participation*, (July-Aug.), 32-38.
- Bridges. W. (2004). *Transitions: making sense of life's changes*. Cambridge, Mass: Da Capo Books.
- Bringuier, J. C. (1980). *Conversations with Jean Piaget*. Chicago: University of Chicago Press.
- Callois, R. (1961). *Man, play, and games*. London: Thames and Hudson.
- Cameron, J. (1997). *The Artists Way: a spiritual path to higher creativity*. New York: J. P. Tarcher.
- Carey, S. (1987). *Conceptual change in childhood*. Cambridge, MA: MIT Press.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: NY: Harper and Row.
- Dahle, C. (1999). Mind Games. *Fast Company*, 31, p. 169. Retrieved 11th Nov 2007 from <http://www.fastcompany.com/online/31/play.html>
- Ekvall, G. (1996). Organizational climate for creativity and innovation. *European Journal of Work and Organisational Psychology*, 5, 105-123.
- Florida, R. (2005). *The flight of the creative class: the global competition for talent*. New York: Harper Collins.
- Freud, S. (1959). Creative writers and daydreaming. In Strachey, J. (Ed. & Trans), *The standard edition of the complete psychological works of*

- Sigmund Freud* (Vol. 9, pp. 143-153). London: Hogarth Press. (Original work published 1908).
- Gee, J. P. (2004). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan.
- Geertz, C. 1973. *The Interpretation of cultures*. New York, Basic Books.
- Handy, C. (1994). *The age of paradox*. Boston: Harvard Business School Press.
- Haner, U. (2005). Spaces for Creativity and Innovation in Two Established Organizations, *Creativity and Innovation Management*, 14(3), 288-298.
- Harel, I. & Papert, S. (1991). *Constructionism*. Norwood, NJ: Ablex Publishing Corporation.
- Huizinga, J. (1949). *Homo Ludens : a study of the play-element in culture* (F. F. C. Hull, Trans). London: Routledge & Kegan Paul.
- Johnson, D. W., & Johnson, F. P. (1997). *Joining together: Group theory & group skills*. Boston, Mass: Allyn & Bacon.
- Jung, C. G. (1964). *Psychological types; or, the psychology of individuation*. New York: Pantheon Books.
- Kane, P. (2005). *The play ethic: A manifesto for a different way of living*. London: Pan.
- Kelly, J. R. (1982). *Leisure*. New Jersey: Prentice Hall.
- Kelley, T. (2001). *The art of innovation: Success through innovation the IDEO way*. New York: Currency/Doubleday.
- Kellaway, L. (2001, March 5). From toys to men: If Lego is to be used in management seminars then what about Action Man or Barbie? Or should we just take a lesson in cynicism?. *The Financial Times*. Retrieved

November 10, 2007 from Academic OneFile. Gale. College at Buffalo - SUNY.

Kuhn, T. (1970). The structure of scientific revolutions, Second Edition Enlarged. In Neurath, O., Carnap, R. & Morris, C. (Eds.), *International Encyclopedia of Unified Science*, v.2, no.2, pp. 53-274.

Lauer, K. (1994). *The assessment of a creative climate: An investigation of Ekvall's creative climate questionnaire*. Unpublished Masters Thesis, Centre for Studies in Creativity, Buffalo State College, Buffalo, NY.

Retrieved Nov 25 2007 from

<http://www.buffalostate.edu/orgs/cbir/readingroom/theses.asp>

Lewis, M. and Moultrie, J. (2005). The Organizational Innovation Laboratory, *Creativity and Innovation Management*, 14(1), 73–83.

Linder, M., Roos, J., & Victor, B. (2001). Play in organizations. *Working Paper 2*, Imagination Lab Foundation. Retrieved Nov 10 from

http://www.imagilab.org/research_workingpapers.htm#70

Mauzy, J. & Harriman, R. A. (2003). *Creativity inc.: Building an inventive organization*. Boston, Mass: Harvard Business School Press.

Moultrie, J., Nilsson, M., Dissel, M., Haner, U.-E., Janssen, S. and Van der Lugt, R. (2007) Innovation Spaces: Towards a Framework for Understanding the Role of the Physical Environment in Innovation, *Creativity and Innovation Management*, 16(1), 53-65.

Palus, C. J. & Horth, D. M. (2002). *The leader's edge: six creative competencies for navigating complex challenges*. San Francisco, CA: Jossey-Bass.

- Palus, C. J. & Horth, D. M. (1998). Leading creatively. *Leadership in Action*, 18(2), 1-8.
- Papert, S. & Harel, I. (1991). Situating constructionism. In Harel, I. & Papert, S. , *Constructionism*. Norwood: Ablex Publishing. Retrieved November 20, 2007 from <http://www.papert.org/articles/SituatingConstructionism.html>
- Peavy, R. V. (1974). Creative helping. *Journal of Creative Behavior*, 8(3), 166-176.
- Piaget, J. (1962). *Play, dreams, and imitation in childhood*. New York: Norton.
- Puccio, G. J., Murdock, M. C. & Mance, M. (2005). Current developments in Creative Problem Solving for organisations: A focus on thinking skills and styles. *The Korean Journal of Thinking & Problem Solving*, 15(2), 43-76.
- Puccio, G., Murdock, M. C. & Mance, M. (2007). *Creative leadership: skills that drive change*. USA: Sage Publications Inc.
- Rhodes, M. (1961). An analysis of creativity, *Phi Delta Kappan*, 42, 305-310.
- Rogers, C. R. (1954). Towards a theory of creativity. *ETC: A Review of General Semantics*, 11, 249-260.
- Roos, J, & Victor, B. (1999). Towards a new model of strategy-making as serious play. *European Management Journal*, 17(4), 348-355.
- Russ, S. W. (1993). *Affect and creativity: The role of affect and play in the creative process*. Hillsdale, NJ: Erlbaum Associates.
- Sapora, A. V. & Mitchell, E. (1961). *The theory of play and recreation*. New York: Ronald Press.

- Schrage, M. & Peters, T. (1999). *Serious play: How the world's best companies simulate to innovate*. Boston, MA: Harvard Business School Press.
- Schiller, F. (1875) *Essays aesthetical & philosophical*. London: Bell & Sons.
- Statler, M., Roos, J., & Victor, B. (2002). Ain't misbehavin': Taking play seriously in organisations. Working Paper 17, Imagination Lab. Retrieved Nov 10, 2007, from http://www.imagilab.org/research_workingpapers.htm#70
- Stephenson, W. (1988). *The play theory of mass communication*. New Brunswick, NJ: Transaction Books.
- Terr, L. (1999). *Beyond love and work: why adults need to play*. New York: Scribner.
- The Science of Lego Serious Play*. (2006). Retrieved September 1, 2007 from <http://www.rasmussen-and-associates.com/images/expertise/legoseriousplay.html>

Appendix A: Concept Paper – Developing the Competency of Serious Play

Developing the Competency of Serious Play

Name: Mark Hylton

Date Submitted: 23rd Sept 2007

Project Type: DEVELOP A SKILL

What Is This Project About?

This project is about learning how to use play in my facilitation practice and as a creative leader. It's about developing my facilitation skills to bring more curiosity, exuberance, spontaneity, improvisation and uninhibited thought into my practice. In turn, it is also about unearthing my own natural ability to play and enhancing my creative leadership skills.

Background

This project integrates three areas of theory into a single practice: serious play, creative leadership and facilitation. Palus & Horth (2002) quote serious play as a key to creative leadership as one of their six Complex Challenge Competencies: paying attention; personalizing; imaging; serious play; co-inquiry & crafting. As a small group facilitator, play introduces a light touch of curiosity and a selective relaxation of constraints that can transform serious work. Palus & Horth (2002) call this type of play serious play. It is the generation of knowledge through free exploration, improvisation, experimentation and levity. The term serious play has recently entered social science vocabulary from several different directions and is also noted in the leadership literature. Social psychologist Kenneth Gergen (1991) uses the term to describe a way in which people can communicate in spite of entrenched differences. I aim to develop my competency through becoming a certified facilitator of the LEGO® Serious Play™ methodology.

Defining Play

Underpinning the concept of serious play is the fundamental belief that adults can benefit from engaging in play. Although play is normally associated with children there is a growing body of literature in both academic journals and popular paperbacks, which argues that behaving in 'play' mode offers creative possibilities, because it emphasizes freedom and plays down responsibility, self-consciousness and shame. The non-judgmental environment it is claimed is more likely to foster surprising and innovative ideas (see Stephenson, 1988; Terr, 2000; Gee, 2004; Kane 2005).

The booklet 'The Science of Lego Serious Play', outlines their use of the concept as follows:

We define play as a limited, structured, and voluntary activity that involves the imaginary. That is, it is an activity limited in time and space, structured by rules, conventions or agreements among the players, uncoerced by authority figures, and drawing on elements of fantast and creative imagination.

(Lego Serious Play, 2006: 4)

Gauntlett (2007) suggests that adult play is not precisely the same as a child's play. When adults play, they play with their sense of identity. Their play is often, though not always, competitive. Adult play is often undertaken with a specific goal in mind, whereas in children the purposes of their play are less conscious. Gauntlett (2007, p.134) identifies four purposes of adult play that are especially relevant to Lego Serious Play: 1) social bonding, 2) emotional expression, 3) cognitive development, and 4) constructive competition.

Rationale for Choice

I have chosen to develop this skill for a number of reasons. While play is gaining ground in contemporary theories of leadership, it is also the original way in which children learn how the world works however there are difference that need to be taken account of when looking at adult play. Under pressures of work and study, I feel I have neglected the gift of play and believe that it's an effective tool for learning in the midst of an ever-changing world, as well as being a core competency for a facilitator or leader. Facilitation and leadership are two roles that I currently could do well to develop further.

Project Outcomes

This project has two main outcomes: certification and competence in using serious play in my facilitation practice as a skill. Firstly Through the LEGO® Serious Play™ training program I will become a member of an international community of consultancies (the Partners), who have been trained (as Facilitators) to deliver the methodology and who have signed a license agreement with the LEGO Group. Currently there are 40+ Partners worldwide, most with core competencies in strategic planning and organizational development. The methodology is used with a wide range of corporate, government, education and non-profit clients. Secondly I will have developed my skills and competency through reviewing my work against certain indicators or rubrics as defined by Palus & Horth (2002).

What Criteria Will You Use To Measure The Effectiveness Of Your Achievement?

- Achieving certification as a LEGO® Serious Play™ facilitator

- Delivery of 3 LEGO® Serious Play™ sessions to clients of the-Automatic
- Evaluation of skill competency against the 10 rubrics based on Palus & Horth, 2002 competencies for serious play.

Who Will Be Involved or Influenced; What Will Your Role Be?

I have a team of two full-time facilitators. My role has been to find the financial resources to fund the training and the trip to the US. I also have to attract the clients who are going to pay for sessions using the methodology. The clients will be the people paying for the LEGO® Serious Play™ sessions to be designed and delivered. My role is to convince them to pay to use our facility, to conduct a needs analysis with them and then design and deliver their session.

When Will This Project Take Place?

The finite stages of the project will take place between September 2007 and early December 2007. This project is about developing one of Palus & Horth's (2002) six creative leadership competencies. My longer term goals, beyond this project, include looking at their five other Complex Challenge Competencies: paying attention; personalizing; imaging; co-inquiry & crafting.

Where Will This Project Occur?

The LEGO® Serious Play™ facilitator certification training course take place at the Lego facility in Enfield, Connecticut, USA. While the majority of the project will occur in the-Automatic (www.the-automatic.co.uk) which is a creative facilitation space (or innovation lab) within Liverpool John Moores University, in Liverpool, UK I will also be working at Tongji University in Shanghai, China for one week during this project.

Why Is It Important to Do This?

External validation and development of my facilitation skills are important elements of this project and for my expertise to be externally recognized. Already I have had some success as we had to pass interviews with the LEGO® Serious Play™ trainers before my team was invited onto the training course. I have also had to develop a business case and return on the investment for the costs of the training course and the time away from the-Automatic. Developing my competency in serious play is an integral part of the unique proposition of the-Automatic. Although the-Automatic is located within a University, it is a commercial venture that has to support itself through its own income. We also operate in a busy marketplace. This project has the potential to develop a unique selling point for us to attract clients, thereby ensuring that my team continues to

be employed. Play is a basic premise of the-Automatic where we use games to help groups achieve their aims. This is harder than it sounds as an invitation to 'play' can be perceived a patronizing by clients. A better understanding of the theory behind serious play, coupled with the skill of a validated methodology would go a long way to improving that situation. Finally this project will simply bring more fun into my life and work.

Personal Learning Goals

- Development of my skill in play
- Lego Serious Play Certification
- Developing new facilitation expertise
- Bringing the theory and practice of serious play into my work and leadership
- Improve one aspect of my creative leadership ability

How Do You Plan to Achieve Your Goals and Outcomes?

“Play subverts boundaries and open us, sometimes painfully and against our will, to a wider field of experience and phenomena” Palus & Horth (2002)

There are three main activities that will help me achieve my goals and outcomes: training, development through practice (experiential learning) and journaling & reviewing. Firstly, in order to gain the skills I will participate in a Lego Serious Play Training Course, 1st-4th October 2007 to gain Certification in the methodology. The second integrated activity involves developing my competency in serious play through practice. Palus & Horth (2002) make 10 suggestions that will help achieve my goal of integrating serious play into my life and practice. My interpretations and goals are underneath in italics which pose some questions and challenges for me during the project, these will be further developed into rubrics. Rubrics in this project will be used to answer the questions of what does mastery, and varying degrees of mastery, look like? They will have three essential features: evaluative criteria, quality definitions, and a scoring strategy.

- Developing Individual Competence
 - *Dig up my natural ability to play from where it had been buried and take on the attitude of irreverent student*
- Realize you already know how to Play
 - *Integrate the Artists Way and also do something for joy rather than competition or compulsion. Then transfer some of that attitude to work.*
- Become a student who questions conventional wisdom
 - *This also means don't take myself and my job too seriously.*

- Temporarily suspend your formal agenda or schedule
 - *Create time and space for something unexpected to happen. Play within that unexpected moment in order to understand and appreciate it.*
- Developing Community Competence
 - *Bring play into the culture of the-Automatic*
- Networking thrives on improvised relationships
 - *How can I cut across hierarchy or functional boundaries to create work-social networks. What forums can I adapt or create?*
- Invite others to play
 - *How to bring others along on our journey, to see the value in serious play?*
- Take an excursion into adventure learning
 - *How to bring adrenaline and guts into my work and learning.*
- Play with models, simulations and prototypes
 - *Prototype a new product for the-Automatic, play with it, see if it breaks and learn from the experience*
- Harvest the learning from play
 - *Ask my team what have we learned from our improvisations and experiments? What powerful questions should we retain from this? Where do we go from here? How has this added to our knowledge base?*

I will use a reflective journal to record my thoughts and reactions to the skill development activities during this project. In order to practice my skills and gain experience in how to use the competency of play, I will facilitate three sessions with clients. One of these sessions will be in China during a facilitation assignment to help a group of UK and Chinese researchers develop a series of collaborative research projects arising out of the development of Dongtan, the world's first eco-city being built at the mouth of the Yangtze River.

Evaluation

The success of this project will hinge on the assessment of the level of competency that I achieve over the course of this project. I will use two kinds of evaluation: external validation and self-evaluation. The first form of evaluation will be through satisfying the LEGO® Serious Play™ trainers that I am able to deliver the methodology in an appropriate manner. The validation will come through receiving a facilitator certificate. Self-evaluation will involve assessing whether I had integrated the principles of serious play and specifically LEGO® Serious Play™ into my practice alongside how far I had addressed the ten competencies

suggested by Palus & Horth (2002) and the evidence I can offer against the rubrics I have developed.

Project Timeline

Dates	Time	Outcomes	Processes
September 16th – 22nd	8 hrs	Draft concept paper Logistics & travel for LEGO® Serious Play™ training course arranged.	Literature Search online and Buffalo library sources Collect sources Read literature Ask cohort for feedback
September 23rd – 29th	24 hrs	Concept Plan approved Detailed Process plan written Final CP submitted Set of Rubrics Draft of final literature review Expanded knowledge of theoretical background	Skype call with Instructor Journalling Check in with SBP Rubrics developed from Palus & Horth (2002) Read Russ (1994), Gauntlett (2007)
September 30th - Oct 6th	8 hrs	Certification as LEGO® Serious Play™ facilitator. Strengths & areas of development identified. Expanded knowledge of theoretical background	LEGO® Serious Play™ Training Course in Enfield, CT. 1 st -4 th October. Journalling. Reviewing against rubrics incl feedback from SBP Read Gergen (1991).
October 7th – 13th	8 hrs	Strengthen development areas Prepare ideas for sessions	Journalling. Reviewing against rubrics Include development areas in session planning & work
October 14th - 20th	8 hrs	Deliver session	Journalling. Reviewing against rubrics
October 21st – 27th	16 hrs	Planning for serious play session in Shanghai.	Journalling. Reviewing against rubrics
October 28th – November 3rd	16 hrs	Plan for including serious play in session in Shanghai. Travel to Shanghai. Initial draft of report sections	Journalling. Reviewing against rubrics
November 4th – 10th	8 hrs	Experience gained in integrating serious play into facilitation and leadership. Progress against rubrics identified.	Run 5 day research project development workshop in Shanghai, using LEGO® Serious Play™.

		Drafts of Sections 1-3 submitted on the 5th	Journalling Review & collect evidence against rubrics.
November 11th - 17th	8 hrs	Draft sections 4-6 of final write-up	Review journals so far and reflect on development.
November 18th – 24th	8 hrs	Evaluation of project Logistics planned for printing & binding Submit Draft Sections 4-6 on 19 th Draft Presentation	Evaluate progress against rubrics. Locate printers/binders Work on 15-minute presentation; due on Wednesday, November 28
November 25 – December 1st	32 hrs	Presentation Final Conclusions and final draft of report.	Deliver presentation Report Writing
December 2 – 8th	8 hrs	Work on final version of Project Write-up no later than Wednesday, December 5.	Mail hard copy and CD of final project, presentation and Concept Paper on December 6. Deliver final version to binders
December 9th – 14th		Complete Project	Post final bound versions to Buffalo for Jan 10 th

Pertinent Literature or Resources

Berg, D. H. (1995). The Power of a Playful Spirit at Work. *Journal for Quality and Participation*, (July-Aug.), 32-38.

Buchel, B. & Moss, I. (2007). *Facilitating groups to drive change*. Basingstoke, UK: Palgrave MacMillan.

Ekvall, G. (1996). Organizational climate for creativity and innovation. *European Journal of Work and Organisational Psychology*, 5, 105-123.

Fein G. (1987). Pretend Play: Creativity and Consciousness in G. Gorlitz, D. & J.F. Wohlwill. (eds.) *Curiosity Imagination and Play*. Hillsdale, N.J: Lawrence Erlbaum.

Gauntlett, D. (2007). *Creative Explorations: New approaches to identities and audiences*. Routledge: UK.

Gauntlett, D. & Holzwarth, P. (2006). Creative and visual methods for exploring identities. *Visual Studies*, (1), 82-91.

- Gee, J. P. (2004). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan.
- Gergen, K. J. (1991). *The Saturated Self: Dilemmas of identity in Comptemporary Life*. New York: Basic Books.
- Kane, P. (2005). *The play ethic: a manifesto for a different way of living*. London: Pan.
- Lego Serious Play. (2006). *The Science of Serious Play*. Billund: Lego.
- Palus, C. J. & Horth, D. M. (2002). *The leader's edge: six creative competencies for navigating complex challenges*. San Francisco, CA: Jossey-Bass.
- Palus, C. J. & Horth, D. M. (1998). Leading creatively. *Leadership in Action*, 18(2), 1-8.
- Puccio, G. J., Murdock, M. C., & Mance, M. (2005). Current developments in creative problem solving for organizations: A focus on thinking skills and styles. *The Korean Journal of Thinking & Problem Solving*, 15, 43-76.
- Russ, S. W. (1993). *Affect and creativity: The role of affect and play in the creative process*. Hillsdale, NJ: Erlbaum Associates.
- Schrage, M. & Peters, T. (1999). *Serious play: How the world's best companies simulate to innovate*. Boston, MA: Harvard Business School Press.
- Schwartz, R. (2002). *The Skilled Facilitator: Practical Wisdom for Developing Effective Groups* (2nd ed.). San Francisco, CA: Jossey-Bass Publishers.
- Stephenson, W. (1988). *The play theory of mass communication*. New Brunswick, NJ: Transaction Books.
- Terr, L. (2000). *Beyond love and work: why adults need to play*. New York: Touchstone.

Appendix B: LJMU News Article about Lego Serious Play Session at The Automatic

CIS do 'Serious Play'

09 November 2007



Team building at The Automatic

A team from CIS has been the first to experience LEGO Serious Play at The Automatic. A group of seventeen CIS staff undertook a one day team building day at LJMU's unique training and facilitation environment where, in addition to benefiting from the stimulating surroundings and creative facilitation methods that have become synonymous with The Automatic, they played...seriously!

LEGO Serious Play is the first application from LEGO for the world of adults at work. Based on extensive research, LEGO Serious Play is a quick, practical and effective process that helps participants to communicate more effectively, engage their imaginations and approach their work with more confidence and insight.

LEGO Serious Play helps teams to explore:

The core identity of individual team members

The shared identity of the team

Factors - or 'Agents' - that impact on the team and its work

How these Agents are connected to each other and the team

The 'Simple Guiding Principles' (or core values) of the team

The CIS team worked through a number of exercises, constructing LEGO representations, sharing the 'story' of their models and thereby addressing complex issues in an engaging way.

John Townsend, Deputy Director of CIS, said: "The venue was innovative but welcoming, the facilitators were flexible and attentive, the content was challenging but fun. Overall, our session was energising and refreshing with some serious outcomes to take away and digest later".

To find out more about how The Automatic could improve your team's effectiveness, call the Business Development Centre on: 0500 876 543.

Appendix C: Mobile Phone Team Challenge Quiz Game

Knowledge, imagination, negotiation, cooperation & organisation

Set up for 4 teams, one phone and set of instructions per team.

Instructions: This is a competition, to get as many points for your team as possible. Your team has some valuable resources in the form of secret words. Beware, other teams will want to get these words from you. Each question will appear on your phone, from 1 to 10. Answers can be submitted via SMS text or via the camera on the phone.

Press the PROBE button to get started and follow the instructions on screen.

Green word Cards (1 per team)

Royal
Liverpool
Philharmonic
Orchestra

Red word Cards: 2 teams have the same word

Looking
Listening

Team Quiz Questions

Your team name needs to be added to the start of each text, and included in your photo's in some way.

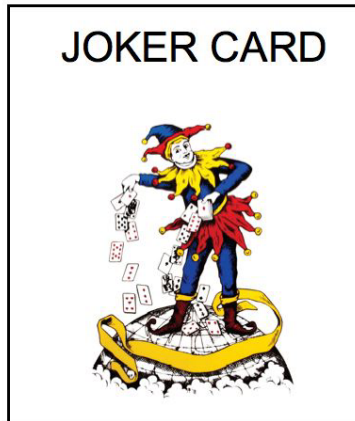
- 1) What is your team name? [TEXT]
- 2) What year did the first website go online at CERN? **6th August 1991**
[TEXT]
- 3) Find at least three objects around the room and take a photo that symbolises your view of "Artificial Intelligence". Points awarded for creativity & imagination. [PHOTO]
- 4) These very old iconic symbols were responsible for what modern system?
- the Moon, the Sun, the planet Saturn, and the Anglo-Saxon gods: Thor, Tiw, Woden, and his wife Frig. **The days of the week** [TEXT]
- 5) With your team, recreate a scene from the film Gladiator (starring Russell Crowe). Points will be awarded for creativity & authenticity! Take a photo of it. [PHOTO]
- 6) All teams have a green word, negotiate to find out all the words and put them together in a sentence. **Royal Liverpool Philharmonic Orchestra**
[TEXT] – Additional points for whoever gets the answer first!
- 7) Take a photo of a scene that has your whole team plus a member of one of the others teams in it. [PHOTO]

- 8) What do the words ALMOST and BIOPSY have in common? **Their letters are in alphabetical order** [TEXT]
- 9) Find another team that has the same RED word as you, without saying it, or showing it, then take a combined photo that represents that word [Photo] **Listening or Looking**
- 10) What icon of 20th century design was the Chapman Root Glass Company of Indiana responsible for introducing in 1915? **The Coca-Cola bottle** [TEXT]

JOKER CARD

A team can choose a question to play their joker on, for triple points.

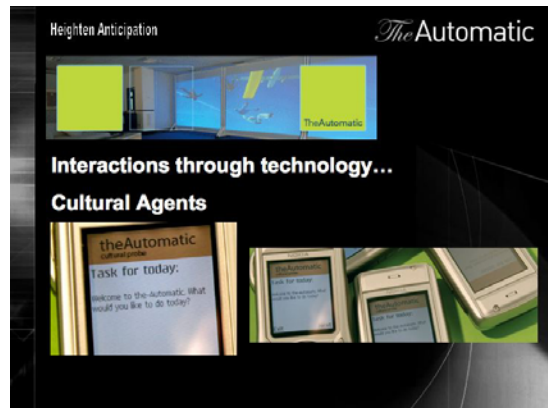
Add Joker to a text answer, or Joker written on paper in a photo answer



Debrief, Review & Learning Questions

- How did your team organise itself?
- Did any leadership appear?
- Did everyone feel like they contributed and participated?
- Were certain people better at certain styles of questions than others?
- How did you deal with negotiations with other teams?
- Was competition or mutual benefit from collaboration more important to your team?
- How did you decide on how to answer the questions?
- Did you use anyone's particular strengths in this game?

Appendix D: PowerPoint Slides for Client Presentations at The Automatic



The Automatic

"real issues, real solutions, in real time"

Lego Serious Play
For the Team
For the Organisation
For the Individual

Dig Deeper

The Automatic

"a dynamic & multi-functional environment"

Dig Deeper

The Automatic

"rethinking strategies, problems and work place dynamics"

Dig Deeper

The Automatic

Make it stick!

Make it stick!

The Automatic

now june july august september

one months time

the early beasts

- 1. the pool
- 4. annual leave
- 2. stress management
- 3. the pool
- 1. insurance up
- 1. sickness policy and practice
- 1. lack of trust
- 1. supervisors
- 2. internet

"our events are specifically created for each client"

The Automatic

Future Perspectives for June / July / August / September 2007

<p>Publicity</p> <p>Wish to be present at</p> <p>Address report</p> <p>Feedback on their day</p> <p>Clear ID for school</p> <p>Develop their own site</p> <p>Take resources</p> <p>Open discussion</p> <p>Green-School for adults</p> <p>Light to turn off in classrooms</p>	<p>June</p> <p>Enough staff to deliver quality teaching</p> <p>Timeline for development</p> <p>Home to provide for future for W200</p> <p>Light to turn on in room found</p> <p>Big, 3000 sign on building</p> <p>London LCOY School to office</p> <p>CAPE</p> <p>Development of student events</p>	<p>July</p> <p>Light to turn on in room found</p> <p>Light to turn on in room found</p> <p>Light to turn on in room found</p>	<p>August</p> <p>Light to turn on in room found</p> <p>Light to turn on in room found</p> <p>Light to turn on in room found</p>	<p>September</p> <p>Light to turn on in room found</p> <p>Light to turn on in room found</p> <p>Light to turn on in room found</p>
--	---	---	---	--

Issues Highlighted

"tailor made sessions to meet your requirements"

Dig Deeper



The Automatic

- Dealing with the complexities of work, business & organisations
- Play, creativity, leadership, management & facilitation theory in practice
- Redefining the notion of the 'workplace'

The Automatic



Appendix E: Materials for Danger of Dracula Team Game



- The Danger of Dracula*
- Vlad III, Prince of Wallachia (1431-1476)
 - Also known as Vlad the Impaler
 - Supposedly killed in battle by the Turks in 1476
 - Imprisoned in his grave by English scientists & Adventurers in late 1800's
 - Now archaeologists have uncovered Count Dracula's crypt and coffin and plan to open it, looking for media publicity!

Your task is to save the world from Count Dracula

Vampire Slaying Teams of 3-4

Pooling your resources you have 12 relevant items



- Questions**
- What was the group's goal?
 - What were the patterns of communication among the group members?
 - Did any leadership emerge in the group?
 - What determined how influential each member was in the group?
 - What method of decision making was used and how effective was it?
 - Why, or why not did members challenge each other's conclusions?
 - What conflicts arose among group members and how were they managed?

The Danger of Dracula

In teams, your four tasks are:

1. Pooling the resources of your team, you have 12 relevant items (you have 10 mins for this)

Your first task is to agree a team rank of those items according to their importance to your quest to prevent a reign of terror by Count Dracula. Start with 1 for the most important and end with 12 for the least important item.

2. Identify Dracula's Strengths & Weaknesses

On the whiteboard produce a list of Dracula's strengths & weaknesses, from the knowledge in your team.

3. List the procedures you will use to kill Dracula

4. List the procedures you will use to protect yourself from Dracula

(20 mins for all this)

Choose someone to present your plans back to the group!

Review Questions

What was the group's goal?

What were the patterns of communication among the group members?

Did any leadership emerge in the group?

What determined how influential each member was in the group?

What method of decision making was used and how effective was it?

Why, or why not did members challenge each other's conclusions?

What conflicts arose among group members and how were they managed?

Appendix F: LJMU News Update on The Automatic Showcase

19 October 2007

News Update

The Automatic's showcase



The Automatic, Liverpool John Moores University's dynamic training and facilitation environment, recently hosted colleagues from across the University's Faculties and Service teams, providing them with an opportunity to meet the Creative Facilitators, trial the technology and get a flavour for the tools and techniques used in this unique space.

By experiencing some of the high-tech and creative facilitation techniques at first hand and by talking to the team, participants began to appreciate the extent and value of the commercial and internal applications of the facility.

Mark Hylton, Operation Manager and Creative Facilitator, began by asking participants to use specially adapted mobile phones to provide anonymous feedback on their initial impressions of The Automatic and what they wanted to achieve from their session. This technique, amongst others, is typically used a

week or two before sessions to raise anticipation for the event and provide useful insights into the views of clients and the culture of their team or workplace.

Participants then moved to The Distiller, the unique brainstorming technology which allows people to use their own keyboard to anonymously record their thoughts on to a huge multimedia screen. These thoughts can then be listed, grouped or ranked, creating a visual, team mind-map which can provide the starting point for positive action planning.

The final activity in this brief 'taster' session involved participants building LEGO models to represent positive or negative aspects of their respective work teams.

Gareth Price, Creative Facilitator at The Automatic, explained that Creative Play of this sort has a long and successful track record in training around team dynamics and team functioning. He added: "Models act as valuable starting points for discussion, which de-personalise issues and allow participants the freedom to articulate their thoughts with greater clarity and honesty."

Time constraints prevented further exploration of the range of approaches and tools used at The Automatic, including the team's unique methods for helping lessons learned in sessions to 'stick' back in the workplace, such as video, PDF documents, photographs and giant framed mind maps.

In just a few hours, it was clear, however, that The Automatic had made a massive impression on participants. Philip Williamson, Senior Lecturer in Events Management, Centre for Tourism, Consumer and Food Studies (Faculty of Education, Community and Leisure) said: "My mind is still buzzing! The Automatic allows you to address issues from different perspectives. The fast paced, fun and ever changing environment is supported by friendly, knowledgeable facilitators who enable you to drill down to the issues confronting your team or organisation. I can certainly see how it could positively change my thinking, communication and work relationships."

Amanda St John, Enterprise Administrator, Faculty of Business and Law, also found her time in The Automatic stimulating: "I didn't know what to expect when I walked in because it looks so different from a normal training room. The Distiller was great for brainstorming and I enjoyed the session with LEGO as it drew out some interesting issues from colleagues. The Automatic team were highly qualified, focused, patient and good humoured. It was very enjoyable and I would love to return."

And they are not the only ones - The Automatic has already received positive feedback from internal customers, including the School of Engineering and members of the Security team, as well as a range of national and multi-national companies, such as Rolls-Royce, Sony and Trinity Mirror.

The forward order book is proof that the benefits generated by The Automatic are viewed by commercial clients as well worth the investment. LJMU customers can reap the same benefits at heavily subsidised rates.

As the word spreads, The Automatic looks set to build on its growing reputation for achieving tangible results for the commercial workplace with an equally strong reputation for securing positive outcomes for internal clients.

If you would like to book a session in The Automatic for a team within your Faculty, contact your Business Development Manager or call the Business Development Centre on 0500 876 543.

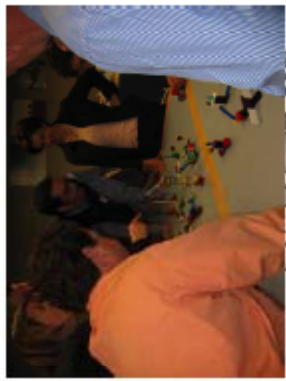
Appendix G: Lego Serious Play Training, Enfield, CT, USA



Enfield October 2007

The free Play Agreement Team

- Denise Meyerson
- Linda Bulmer
- Mark Hyton
- Maria Stukoff
- Alvaro Delgado-Aparicio
- Gareth Price
- Charmaine Sullivan
- Kristian Ostergaard
- Bill Engler
- Michael Jacobsen



Our Simple Guiding Principles

1. Turn challenges into opportunities
2. Stay focused on sales
3. Use the network
4. Leverage connections
5. Remember old bones can still fly
6. Live professional play
7. Allow space to grow

Appendix H: Project Presentation

Buffalo State
Declare yourself.


JMU



ideas on how to bring play into your workplace

creative studies masters project presentation by mark hylton

december 2007



social bonding

creativity, innovation, leadership health

we build knowledge structures based on our experiences in the world

play can drive home abstract concepts and complex issues that may otherwise be difficult to comprehend

why is play important to adults and work?

the sense-making loop



complexity & chaos

paying attention

crafting

shared understanding & sensible action

co-inquiry

personalising

imaging

serious play

the leaders edge: six creative competencies for navigating complex challenges

charles j. paulus & david m. horth (2004) of the centre for creative leadership

- 1 develop individual competence
- 2 realise you already know how to play
- 3 question conventional wisdom
- 4 temporarily suspend your formal agenda or schedule
- 5 develop community competence
- 6 networking thrives on improvised relationships
- 7 invite others to play
- 8 take an excursion into adventure learning
- 9 play with models, simulations and prototypes
- 10 harvest the learnings from play

serious play? 10 ways to develop your competence

"play subverts boundaries and opens us, sometimes painfully and against our will, to a wider field of experience and phenomena" paulus & horth (2004)



"question conventional wisdom & invite others to play"


the automatic, a creative space in liverpool, has a nintendo wii as an invitation to play

the automatic, liverpool john moores university



"heart & guts"

"take an excursion into adventure learning & create physical spaces that invite play"




interfacing mobile phones and big screen displays?

at the automatic that sounds like an idea for a game

With your team, recreate a scene from the film "Gladiator" (Starring Russell Crowe). Points will be awarded for creativity & authenticity.

play with models, simulations and prototypes




bringing the creativity, the exuberance, and the inspiration of play to the serious concerns of the world of work

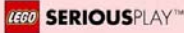

or building knowledge by building things!

"realise you already know how to play & temporarily suspend your formal agenda or schedule"

learning happens especially well when we actively construct something external to us



play & learning: constructionism and imagination

```

    graph LR
      A[LEGO Group and Lego Serious Play] --> B[Lego Serious Play training/certification, licence & tricks]
      B --> C[partners and facilitators]
      C --> D[clients]
      C --> E[services including Lego Serious Play]
  
```

the automatic is a Lego Serious Play partner

partner programme and facilitator training





simple guiding principles

insights

action points



real time strategy for the team

a short movie

a day in the life of the automatic delivering a team building workshop using play

- ❖ how could you bring play into your organisation?
- ❖ how can you use play in your leadership?
- ❖ could a lego serious play workshop be helpful to you?

harvest the learnings from play



remember sometimes to do something just for the joy of it...and perhaps transfer some of that attitude to work?

Buffalo State
Declare yourself.



TheAutomatic



some online resources



[the automatic, jmu](#)
[lego serious play](#)
[international centre for studies in creativity,](#)
[buffalo state college](#)

