The Use of Metaphors With LEGO® SERIOUS PLAY® For Harmony And Innovation

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Abstract:

Organisational changes within Higher Education Institutions (HEI) over recent years have had a great effect on the roles of Higher Education (HE) staff and their attitudes, experience and satisfaction within those roles. The changes in the way HEIs are funded have resulted in institutional policies that are strongly market driven. Alongside this, policies of widening access to HE have led to the 'massification' of student numbers and the intensification of the workload of HE staff.

The increasing focus on measures and evaluations between and within institutions, with league tables and in the UK at least, Research Excellence Framework (REF) and its previous incarnations along with the recently introduced Teaching Excellence Framework (TEF), has led to a culture of audit and managerialism both at the level of institutional policy and at the micro level within faculties and departments.

These effects have been particularly acute in traditionally practice-based programmes and post-92 institutions, where these drivers are at times at odds with the motivations and expertise of many of the staff who joined these institutions under different conditions.

This paper presents LEGO® SERIOUS PLAY® as a method of enabling members of staff with diverse expertise, experience and expectations to come together to work towards a shared strategic plan in the light of the changing HE culture. The method is applied to a teacher education department within a post-92 university, where despite differing views of the challenges facing the department, consensus is achieved through the building of shared metaphors and joint narratives.

Keywords: LEGO® SERIOUS PLAY®, Higher Education, Strategic Planning, Education Management, Metaphor

1. Introduction

LEGO® SERIOUS PLAY® was originally developed as a commercial, business process, but with sound educational underpinnings. In recent years, there has been increased interest in the use of LEGO® SERIOUS PLAY® within educational settings and its use with HE settings is well supported (Nolan, 2010; Frick, Tardini, and Cantoni., 2013; James, 2013, Hayes, 2016).

The basis of LEGO® SERIOUS PLAY® is to create contexts where play and engagement allow participants to build physical representations of the conceptual metaphors they hold, so that these can be shared and reflected upon in a collaborative, non-hierarchical environment.

Successful LEGO® SERIOUS PLAY® workshops create and maintain an atmosphere of 'flow' (Csikszentmihalyi, 1990). This is characterised as a state of effortless engagement achieved through a balance of skills and challenge. Challenge plays a central part of the workshops. From the 'skills building' activities through to the more complex modelling of abstract ideas, participants are led through a series of conceptually more difficult activities, maintaining challenge whilst also developing skills in modelling symbols and metaphors to represent and share complex ideas.

Intertwined with this, a level of playfulness is maintained to encourage creative expression and sustain interest. The underlying sense of challenge, fantasy (through playfulness) and curiosity are engendered to recreate the environments which have been shown to be essential in creating immersive playful environments (Jones, 1998; Kirriemuir and McFarlane, 2004; Malone, 1980). This supports the effortless engagement associated with flow.

This paper focuses upon the use of LEGO® SERIOUS PLAY® as a mechanism to share conceptual metaphors to support the collaborative development of a departmental strategy within a university academic department.

2. Literature Review

2.1. Changes in English Higher Education

Over recent years, there has been a shift in HE financing in England from state funding to student fees, with many now paying in excess of £9000 per year of study. Whilst the students' relationship with HE is not directly one of customer and supplier, there is evidence that they have greater expectations of the HE experience, in terms of the quality of service delivery and other consumer-focused dimensions (Tomlinson, 2017; Bates and Kaye 2014).This combined with the Higher Education Funding Council for England's (HEFCE) model of funding being allocated, in part, based on student numbers has led to greater emphasis being placed on recruitment, retention and achievement (Mackenzie et al, 2016),as well as student satisfaction (Kandiko and Mawer,2013).

Alongside this, policies of widening access to HE have led to the 'massification' of student numbers and the greater emphasis on international agendas has led to intensification of the workload of HE staff as they adapt their practices to accommodate a greater diversity of social, cultural and educational experience (Kinman, 2016).

These changes at the macro-level of government policy have directly, or through the mediation of the meso-level of institutional policy, influenced the micro-level of the teacher student interface. (Brew et al, 2017). These dominant factors and the associated adjustments required have resulted in an increased intensity of the work of the academic and a far greater proportion of staff reporting high levels of stress than just a few years previously (Kinman, 2016).

However, the dominant theme within these various and diverse issues was less the changes themselves, but more importantly the way in which that change was managed and communicated. One of the most common indicators of job dissatisfaction was the way in which institutions were managed (Kinman and Wray 2017).

The drivers for HEIs are also changing. In previous generations, the HE ecology accommodated a diversity of HEIs, including research intensive universities, teaching and vocational focused institutions, and local providers meeting the needs of their community.

Despite a recognition of the need for diversity in the HEI landscape (Barnett, 2011), in recent times the yardstick by which all institutions are measured has been uniform. League tables rank all HEIs by the same criteria (Scott, 2015). Many of those HEIs which were granted University status following the Further and Higher Education Act (1992), which traditionally had a focus on teaching rather than research (Hunt, 2016), have changed their focus from their traditional remit to one which is more aligned with the indicators by which they are measured. It is in those HEIs which had established reputations for teaching, rather than research, often with a legacy of a large proportion of staff with excellent, practitioner credentials and rather less experience and expectation of research activity where the shift in emphasis is felt most acutely.

At the micro-level, many HEI educators find themselves in a position in which their motivation for teaching and training within HEIs is undermined as the institution around them adapts itself to the new environment, and they are compelled to reinvent themselves to maintain currency within academia. Within the context of this study, many of the staff previously felt quite legitimately that their role was to develop the next generation of teachers and, whilst these staffs were research informed, fewer were research active. However, the current climate results in many teaching-focused staff feeling marginalised (Bennett et al., 2018) within the wider strategy of the HEI, which focuses on research outputs rather than teaching quality, despite the lack of evidence for any relationship between the two (Hattie and Marsh, 1996).

Recent changes in the drivers for university-based teacher education, and more widely cultures of accountability and measures of university quality, has made such roles less viable in current cultures of performativity (Bennett et al, 2018). The transitions in personal and institutional identity demanded by these policy changes are difficult, as exemplified by Hunt (2016). Significant investment, both financially and ideologically, is made in developing and improving the research and enterprise profile in line with a marketised view of the institution (Deem, Hillyard and Reed 2007), whilst simultaneously maintaining intensive teaching loads which generate significant income (Croucher, Gooderham and Rizov, 2017).

As a result of these changes, this sense of being undervalued and marginalised can lead to uncertainty and dissatisfaction amongst many staffs who lack the opportunity to share views in a forum which allows all ideas and expression, born of different routes

and experiences, to be given equal expression and explored in constructive, non-adversarial and non-hierarchical ways.

2.2. Use of Metaphor

The way in which various staff views the role of HEIs reflects a variety of conceptual metaphors (Lakoff and Johnson, 1980), which underlie their approach to teaching and learning, research and enterprise within their institutions. Therefore, one might expect that depending on their route into Higher Education, role identity and the position of the HEI within the HE landscape at the time of their recruitment, staff might hold very different visions of the overall strategy for a department, faculty or institution.

Morgan (1997) suggests the use of different metaphors as a way of understanding, managing, designing and planning organisations to create new solutions 'we may not have thought possible before' (p.13). He posits that many of our taken-for-granted ideas about organisations are metaphorical, even though we might not recognise them.

This echoes Lakoff and Johnson's idea of 'conceptual metaphor', developing the idea that whilst metaphors are useful in allowing us to think about things we don't understand, in terms of things we do understand, they also serve to restrict our field of vision when we try to develop ideas (Lakoff and Johnson, 1980).

The process of building and sharing metaphors, provides the opportunities for *reflection-in-action* which Schon (1983) suggests engenders the 'reframing' of familiar events and processes to allow them to be seen anew and Nerantzi and Despard (2014) demonstrate the benefits of LEGO models particularly in developing reflection in this way. Furthermore, the sharing and combining of such metaphors allows the thoughts and ideas of all participants to be explicit and represented along with the relationships and connections between these ideas (McCusker 2014).

2.3. The LEGO® SERIOUS PLAY® Workshop

The LEGO® SERIOUS PLAY® method seemed a relevant approach within an academic department of a post-92 university, as the participants were particularly diverse in their background and outlook. The LEGO® SERIOUS PLAY® workshop was carried out with members of staff from the Education section of a larger department. The university and more specifically, the department, has in recent years undergone a change in focus placing a greater emphasis on research outputs in line with the upcoming Research Excellence Framework (REF 2021).

Most of the staff had previously served as teachers, advisory teachers or school leaders, recruited on the strength of their professional experience and expertise. Others, usually more recent appointments, had been recruited on their research experience and expertise, with a remit to develop the research culture within the Education section, some with little or no experience in the classroom.

Whilst it is acknowledged that the specific sample might present challenges for typicality, especially in statistical terms, Alexander (2000) makes the case that such samples can tell us much about the wider context in which they are embedded, if the research processes are sufficiently probing to understand the values and meanings represented by the observed responses. The level of insight which is gained through

LEGO® SERIOUS PLAY® supports the authenticity of this proposition within the context of a sample of 18 participants from a single academic department. As such, the responses of participants are situated within wider discourses of the changing nature of teacher education and research within changing institutions within a changing HE culture.

The focus of the workshop was to lay the foundations of a strategy for the Education department, constructed by this diverse group of stakeholders. The aim of the workshop was for participants; to discuss aims and goals with peers, explore and share ideas of Education identity and what they wanted to achieve. Within this, participants would work collaboratively to consider and reflect upon a strategy for the Education department and critically appraise that strategy, within the context of the wider University strategy.

3. Methodology

The workshop consisted of 2 groups of 9 participants each. The workshop was led by one accredited LEGO® SERIOUS PLAY® facilitator and one assistant, familiar with the process.

The entire workshop was recorded with a video camera and voice recorder at each group. Each model was photographed with a still camera, taking care not to include any personal identifying features of the participants. As far as possible, still photographs captured only the models and did not include the participants in any way. Images, and sound files were stored to a secure hard drive within the university network. Sound files were associated with the images using Audacity and video footage was used only for data corroboration. After this, source video files and image data which could identify individuals were removed from the network.

Prior to recording, participants were informed of the research applications of the data and which data was being recorded. At this stage, they were given the opportunity to withdraw from the research at any point. This was communicated to them both, verbally and through a research information sheet, approved by the University's Faculty Ethics Committee. Those who agreed to proceed with the research, signed a consent form confirming this.

Analysis was carried out by reviewing the participant comments relating to the models in relation to the still images. Narratives were transcribed and where relevant, key statements and comments were added to the still images to provide a visual and textual representation of the ideas and metaphors being presented.

4. The LEGO® SERIOUS PLAY® Method

4.1. Warm-up

Prior to the main workshop, participants were led through a series of increasingly complex 'warm-up' tasks, from building a tower, through to building model which represented an issue they were having at work. Through these participants gained familiarity and confidence in the LSP process of building, giving meaning, sharing and reflecting, at each stage developing the skills of creating a narrative around the model

as a means of sharing a story (Ohler, 2013). In this stage, the rules, guidelines and working atmosphere for the workshop were established, developing the 'flow' state and establishing an environment for creative and innovative expression.

4.2. Stage 1: Building beneficiaries

The first stage of the workshop asked participants to build models of those whom they considered to be the beneficiaries of the activities of the Education department. These could be thought of as 'client group' or 'audience'. The phrasing was deliberately vague to encourage some 'generative ambiguity' leaving specific interpretation to the individuals.
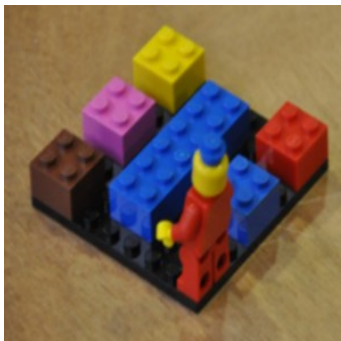
4.2.1. Responses

Three typical models from the first stage are shown in Figures 1-3. The first model, Figure 1, is highly metaphorical as it represents the beneficiaries as people (particularly school support staff) who are elevated above the 'brown stuff' which surrounds them, to the top of a pedestal. The second model, Figure 2, uses a series of simple blocks to represent many stakeholders. In this, the builder has embraced the LEGO® SERIOUS PLAY® principle that the models have the meaning only that is imparted to them. Each block in Figure 2 represents a different stakeholder who is seen as a beneficiary of the department; students, partnership schools, international partners, government, the children who benefit from the people who train at the department, and the university management and wider institution. The mini-figure represented 'ourselves' to whom it was seen there was also a responsibility. Figure 3 was typical of some of the more abstract models which were built. A mini-figure represents the student body, seen as central to departmental concerns, various parts of the model also represented different agencies, the black structure topped with currency represented the government which hold the purse strings, the mini-figure without a head represented 'faceless' management and the multicoloured structure represented a 'springboard' reaching out to the community, seen as multicultural. Finally, the wheel represented that these structures and priorities were constantly moving, in a state of flux.

Figure 1: Above the 'mire' (left)	Figure 2: Many stakeholders (middle)	Figure 3: Multiple agencies (right)

4.2.2. Summary

Often models were divided into two broad groups; those which participants felt it was their role to help, namely students and the wider community and those who they felt they were answerable to, such as Government and other regulatory bodies, including the University administration. The latter group was seen largely as constraining. The concept of the 'community' was represented by many participants, from local community, through the wider community of the North East of England, to the global community or society as a whole, with all the variety and diversity which this entailed. In general, the department was presented as an organisation that held a central role within these communities both as a focus for innovation and creativity, workforce development and as an agent of transformation for individuals and communities. The role of research was not explicit though was not necessarily excluded in the descriptions of the beneficiaries.

4.3. Stage 2: Outputs

The second stage asked participants to build models of what they considered should be the output of the Education department. Again, the generative ambiguity was maintained and typical results are shown in Figures 4-6.

4.3.1. Responses

In Figure 4, the output is presented as graduates, with different hats, representing creative adventurers and risk takers. They all look upwards as they are looking to the stars. The model has wheels to show that the graduates have the capability to go on whichever journey they desire. The grand aim within this was to create a stronger society.

Figure 4: Adventurous (left) **Figure 5: A journey (middle)** **Figure 6: Seeing the world differently (right)**

Figure 5 shows the student coming in (at the base) and the outcome is the plant at the top representing a stronger more informed person. The interleaving of coloured blocks with the black bricks indicated that the input from the department is woven in with that which each individual brings.

In Figure 6, the student (or child) is shown holding a magic wand, representing inspiration which allow them to see the world (represented by the half globe) differently; the other various pieces represent the variety in the world.

Other models focussed on the students, their success and their preparation for the outside world, with some referring to social equity and engagement, as well as the impact the department could make to wider society.

4.3.2. Summary

Broadly speaking there was strong alignment about the beneficiaries of the department and how this might be manifested within society. There was some divergence concerning the specifics and final outcomes, for some this was the success of the students, for other this was extended to include the impact which these students might have on a wider society. The contribution to knowledge at the level of academic impact or as a knowledge hub was present, but rather less well represented.

4.4. Stage 3: Provision

Stage 3 required that the participants build a model which represented some provision of the Education Department which facilitated their desired outcome. This was framed as a request to identify something the department need 'to be' or 'to do' which allowed the transformation or connection from any of the 'beneficiaries to any of the 'outcome' models.

4.4.1. Responses

Having built their models and explained them to colleagues, participants were asked to find three words which characterised their models, as a pre-cursor to building the shared models and to reinforce their meaning within the group. These summary responses are shown below in Table 1 and Table 2.

Table 1: Responses from Group 1	Table 2: Responses from Group 2
Nurturing, Investing, Listening	Flexible Innovation
Think with Society,	People-focused Flexibility, Focus
Sustainable Investment, Well-being,	Quality, Systems, Structures
Partnerships: Respectful and Strategic	Flexible, Structure, Collaboration
Coherent, Creative, Curriculum	People-focused, Knowledge-finding
Space, Continuity, to Breathe	Consultation, flexibility, systems
Visionary Research Leadership	Community, Links, Collaboration
Space, Time, Inspiration	
Equality, opportunity, collaboration	
Start from Scratch	

Following the sharing and reflection stage, each group was asked to move and cluster all their models in ways which demonstrated how their ideas related to each other in a landscaping stage. Here participants worked as a group to cluster their 'beneficiary' models in ways which represented the proximity of their ideas and their interconnectedness. Participants were also asked to cluster their 'outcome' models in the same way and then cluster their provision models in between the two sets. The only constraint was that models of each phase (beneficiary, provision or output), were not clustered together. Participants were enjoined to move only their own models, leaving ownership with the builder. People could only move a colleague's model with explicit permission. This resulted in a very active process with all participants involved in the negotiation and discussion of ideas.

4.4.2. Summary

These stages allowed participants to gain some understanding of the conceptual metaphors held by colleagues and reflect on the way these aligned with and interacted with their own. Each group was asked to combine and arrange their individual model of provision into a single model which included every individual's contribution. This phase recognises that whilst there are individual strategies which can meet the requirements of isolated or specific strategic demands, an overall strategy cannot be made up of series of individual strategies. This process required the participants to work together to combine their individual ideas and metaphors into a single shared metaphor which represented everybody's ideas in a way which allowed everyone to feel engaged and valorised.

4.5. Making Connections

In the 'connecting' task, participants were given LEGO connection strings and asked to make a connection between two parts of the model which they considered to be the most important relationship. This could be within phases or from one part of the provision model to the beneficiary models or to the output models. They were given the opportunity to add another connection if they wanted.

A brief glance at the overall model allows participants and observers to see those points through which most participants had placed connections; this identifies those areas considered to be of greatest importance. Within this, participants are given the opportunity to modify or create models which could be added to the overall model.

4.6. Shared Narratives

The final stage of the workshop required each group to create a single narrative which explained their shared model, including all components and explaining how they all fitted together. This represented a strategic map of a shared idea of who the Education department served, what the benefits and outcomes for those people should be and how this could be achieved. This shared narrative was constructed through a process of negotiation and discussion which resulted in consensus of the meaning and significance of the model. Both groups were able to provide a single coherent story which represented a shared vision of a departmental strategy.

4.6.1. Narrative Results – Group 1

The key points of the narratives, relating to the metaphorical models are detailed in Figure 7. In this we see the variety of representations which were used, but also the shared vision and connectivity between the models, following a narrative line.

Figure 7: Group 1 – Education Landscape
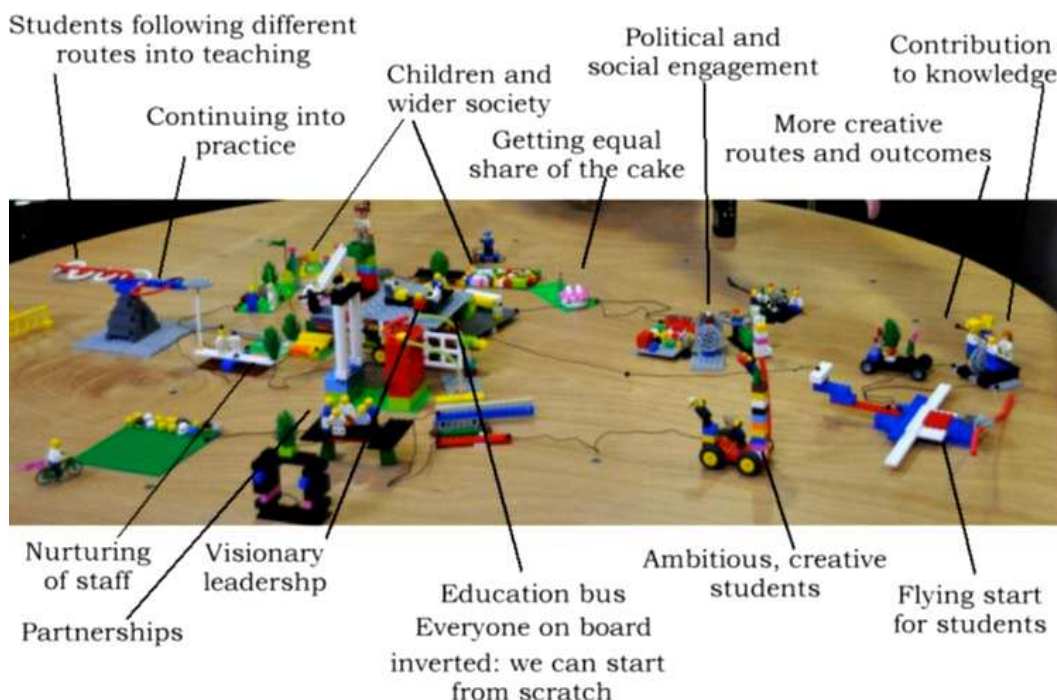
Additional Models: barriers and enablers in light of University Strategy

Participants were asked to consider the ways in which the recently published university strategy, impacted upon their models.

They were asked to build additional models which represented enablers and barriers associated with the university strategy and how this interacted with the departmental strategic model they had built. These individual models were integrated with the shared models to demonstrate how the University strategy affected the current visions of the departmental endeavour.

The group was required to describe their new model, including the adaptations which had been made. Aspects of the resulting adapted model are shown in Figure 8. Within this image, key metaphorical ideas are highlighted. There is the Doctoral Lion – signifying strength and leadership / guardianship, protecting the pride and allowing others to thrive. Another strong metaphor is the Education Bus – contains all the staff, everyone is on board. It represented inclusion - travelling together. However, all the passengers were inverted to represent "allowing everyone to start again" and consider opportunities. One further model was of the successful PhD graduate, representing the

freedom afforded by achieving Doctorate, this was seen as a transition "has become more knowledgeable" allowing access to greater knowledge and freedom to explore areas of interest.

The model included representations of creativity, potential and well-roundedness alongside representations of the Office for Standards in Education, Children's Services and Skills (OFSTED) and ideas of 'quality' loosely defined. Quality was presented as contextually constructed, not absolute. This echoed ideas that 'quality' is subjective. Interestingly, whilst OFSTED appeared amongst the beneficiaries, they are not explicit in the outcomes, or processes within the rest of the model.

Figure 8: Group 2 – Adaptation for University strategy
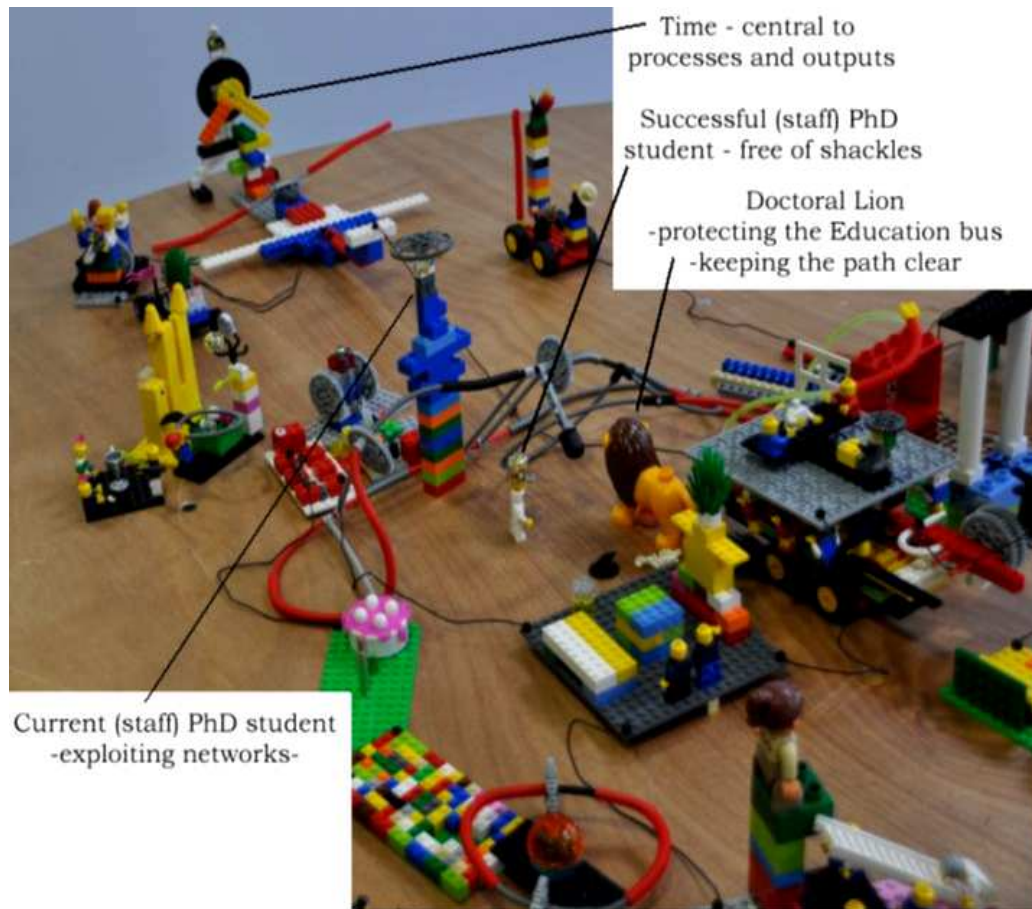
4.6.2. Narrative Results – Group 2

The key points of the narratives, relating to the metaphorical models are detailed in Figure 9. A variety of representations were used to develop the shared vision and connectivity between the models. However, in comparison to the previous group, the narrative is less linear and slightly more radial.

Figure 9: Group 2 – Education Landscape
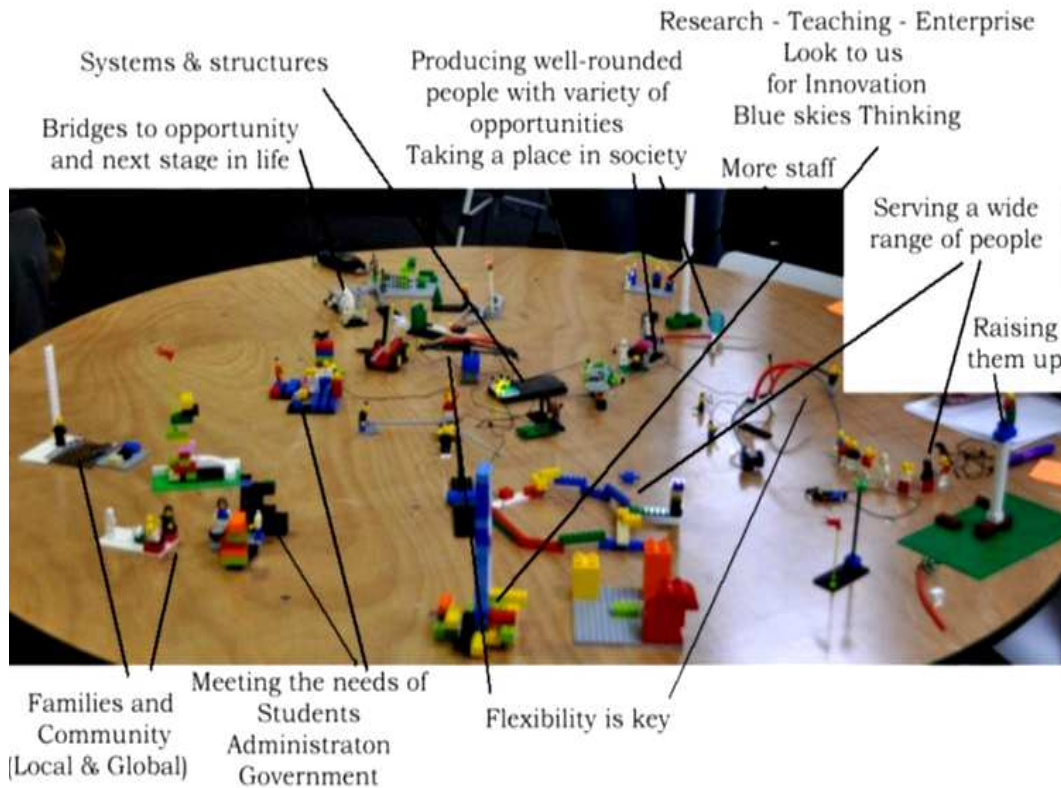
Additional Models: barriers and enablers in light of University Strategy

As with the first group, participants were asked to consider the ways in which the university strategy, impacted upon their models and to build additional models to integrate with their shared model.

Aspects of the resulting adapted model are shown in Figure 10. Some of the key metaphors emerging in this model were the bridges and ladders which represented opportunities and transitions to the next stage in life. A strong theme which emerged here was in the diversity of the stake holders, these were represented either by many mini-figures, multi-coloured blocks and occasionally mini-figures with missing parts, and were often shown in a balance, meeting the needs of many groups simultaneously. Treasure chests were used to represent income streams, highlighting a financial imperative. Importantly a STOP sign was used, to highlight the need to pause and consolidate to consider if all current activities were necessary.

Figure 10: Group 2 – Adaptation for University strategy
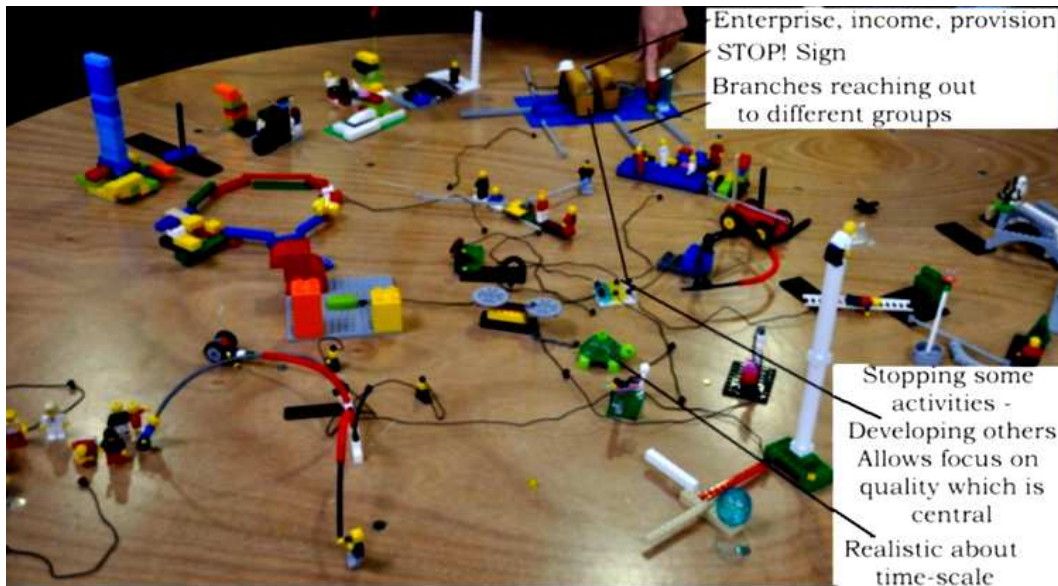
5. Results

Colleagues with different career trajectories and experiences used a range of metaphors to represent their individual ideas about the purpose of the department, from the people it serves, what those people can expect from the department and how this is achieved. These supported Lakoff and Johnson (1980) ideas of the ways in which conceptual metaphors frame and shape our thinking.

Various metaphors were used to represent these ideas, some through the abstract use of multi-coloured bricks to represent a multi-cultural and diverse society, or the use of translucent 'bright' pieces to represent bright futures for current students. Others represented trainee teachers, current teachers, the teaching profession and the myriad routes through this, with a series of intertwining loops. Still others represented the idea of serving children, sometimes in conflict with serving regulatory bodies and officialdom, with regulatory bodies placed on a pedestal 'to be knocked off' whilst children were shown to be below them. Global research interests were shown simply using spherical pieces as a globe. Communities were shown with a 'family scene' which represented local and global communities. Yet others showed school support staff, elevated on a tower above the 'mire' in which they were previously stuck.

Through the use of LEGO models, diverse views emerged, these tended to align with the professional role of the participants, the routes through which people arrived within the department and their professional focus, on research, management or teaching.

This wide range of conceptualisations of 'beneficiaries', resonant of the varying drivers in HEIs (Deem, Hillyard and Reed 2007; Croucher, Gooderham and Rizov, 2017) illustrates the difficulty in trying to create a single coherent strategy for a department in which individuals all feel a responsibility to a different group of stake holders.

Models of the outcomes of engagement with the department demonstrated slightly greater coherence. However, there was still great diversity in the metaphors used to represent these ideas.

Fantasy and historical pieces were often used to support the metaphor. Knights' helmets were used to depict fight and resilience, whilst magic wands and wizard hats were often used to show skill acquisition and empowerment. In one example a figure with a wizard's hat was described as a 'Gandalf' character, representing wise leadership. Interestingly, this character was also given an extra eye 'to spot the gaps in knowledge'. However, management were also represented as 'faceless' and remote, supporting Kinman and Wray's (2017) findings that dissatisfaction with change was often rooted in poor communication and management of that change.

Hats were used to show that students had become 'explorers' 'daredevils' and adventurers, these were shown looking forwards and upwards, representing ambition. Plants were used to represent the growth of the student. Several models used chains to represent the idea of constraint, by external pressures and regulation highlighted by Bennet et al. (2018) and the need to create opportunities to escape this. Ladders, elevated pedestals, steps and bridges were regularly used to show progression or transition. Flags were frequently used for success or quality. Models often showed groups of people clustered around a centre, others used more conventional metaphors such as 'thinking outside of the box' or bridges. Cogs were used to represent engagement, flexible pieces and wheels for organisational flexibility. 'Attractive' LEGO® pieces were used to represent 'quality' in systems and structures. Some models used a network or web-like structure, allowing access to people from any background to come together. Metaphors also included a window as a 'window of time' with elevated platforms and a safety net to allow people to climb and take risks, enabled by time. A variety of different metaphors were used to demonstrate variations around a theme of developing potential in those who interacted with the department, providing them with the opportunity to transform their lives and those of others with whom they engaged within a wider society.

Another metaphor used a 'big bus', which 'we all have to get on board' to make sure we get from A to B, "regardless of anything else we have to be on that bus". This spoke of unity and shared endeavour. However, the number of people on the bus also represented staffing pressures arising from intensified workloads as identified by Kinman (2016).

Common themes were of investment and nurturing of staff. In some cases, a balance was used to show that such considerations needed to be balanced against pressures of time. Other models connected the university to society, thorough multiple pieces, representing strong links between the two.

There were also examples of the individual development of metaphor. For example, one model was archer with an owl as a head, this metaphor showed knowledge within the system and the ability to deliver it directly to the places where it could be used.

Another metaphor began with a platform which represented the staff within the department in a rather straightforward way with mini -figures. However, the power of this metaphor came when the participant revealed that the model needed to be turned on its head, to show that "we need to start from scratch" Everything was to be turned on its head and the strategy needed a new beginning.

The diverse set of models reflected the diverse make-up of the department, constructed as it has been through a period of change. The challenge at this stage was to somehow take all these models that had been built, representing different ideas and reflecting different conceptual metaphors about the aims and purpose of the department, and combine them into a single extended model which included all the main ideas and placed and connected them to each other in a way which was meaningful.

5.1. Mixing Metaphors

The process of creating a shared model was a complex interactive task. Models needed to be arranged relative to a large number of other models. This process required participants to discuss their models and the idea they represented. From an initially chaotic arrangement of ideas, coherent structures were formed, connecting and relating individual ideas to each other, and as this progressed, these larger structures were further related to each other until an overall coherence of the models emerged. These did not represent a single shared idea. However, they did represent the way in which ideas overlapped and related to each other, such that a single shared narrative could be created which in which every participant's model was present and each participant felt that their ideas had been included in the overall narrative.

6. Discussion

The reality of any strategic planning for a department such as the one described in this paper, is that despite individual aims and priorities, any proposed solution must be generalised rather than individualised and as such must try to meet the needs of the individuals who make up the departmental team.

The purpose of this paper is not to concentrate on the outcomes of the discussion, though these do provide some useful insights into a 'bottom-up' strategy for an Education department within an HEI. More important within this context is the way in which a diverse group of colleagues working in the same institution, with ostensibly the same goal are able to combine their differing and diverse viewpoints in a harmonious way without argument and rancour.

Individually, participants built models to represent strategies which would facilitate the transition from the 'client' as identified in the first model to the desired outcome as depicted in the second model.

These models and metaphors represented the means by which participants felt they could achieve any or all of the desired outcomes. Unsurprisingly, asking a diverse group how to achieve a particular 'open' solution resulted in a diverse set of responses using a variety of metaphors.

The LEGO® SERIOUS PLAY® process encouraged playfulness and subversion in the early stages. This reinforced for the participants that the usual hierarchical boundaries were not encouraged within a LEGO® SERIOUS PLAY® workshop. This allowed a series of imaginative and innovative ideas to emerge. The process of allowing participants to build their responses, before reporting back to the group allowed them

time to reflect on their ideas without the influence of other people's views. The focus on the model rather than the speaker overcame some of the reservations which delegates might have when they feel they are the centre of attention, allowing a deflection of the focus to the model, both for the speaker and the audience. This combined with the environment where all participants were encouraged to give their full attention when the builder described their model, ensured that all voices were heard and that those voices were more authentically from the speaker. Furthermore, on completion of each building round, ideas were 'concretised' and (literally) placed on the table for consideration. In demanding the creation of a single shared narrative, the often-adversarial approach was avoided. Participants immediately moved to looking at how ideas could be combined in ways which enhanced contributions harmoniously. Discourse tended to be about mutualism and commensalism rather than conflict.

This study explored whether or not LEGO® SERIOUS PLAY® could enable strategic planning decisions in an Education department within an HEI. Participants were from different backgrounds, with different experiences and motivations and agendas both professionally and personally. The main contributions of the process were in building understanding of the issues of the diverse group, identifying the key challenges facing the department and building a shared and inclusive strategy to address these challenges. The use of metaphor played an important role in this process: firstly, in revealing participants' visions of audience, strategy or outcomes; and secondly, by allowing participants to build solid representations of these visions, participants were able to orient, combine and relate them to each other and so create a single shared 'mixed' metaphor for an overall strategy. As Morgan (1997) had suggested, the explicit use of metaphor provided the Education department the opportunity of understanding and managing a variety of conceptualisations and to develop those into a planning strategy which may have not been possible otherwise.

7. Conclusion

Feedback from the LEGO® SERIOUS PLAY® strategic planning process was generally positive, with many participants expressing that they were able to express ideas they would not normally have expressed, that they valued the opportunity to take time to reflect upon the ideas the most wanted to represent. Some welcomed the opportunity for equal, non-hierarchical participation, which other forms of group tasks may not have enabled. Some also reported that they were interested to learn that many colleagues shared the same ideas, even if they were expressed in different ways. As a balance, others also said that they would have expressed the same ideas if asked directly and others felt that the workshop was perhaps 'too long'. A common theme was that this process allowed people to know and understand each other better and to hear everyone's ideas, particularly those who were often silent in such consultations. A simple, positive heuristic was that the great majority expressed that if such a workshop were to run again, they would be willing to participate. The management team who scheduled the workshop were also very positive, stating that they felt there was greater participation and engagement as well as a greater sense of unity and shared endeavour. Strategically, the exercise achieved the creation of a shared vision, articulated after the workshop session, concerning the development of a cohesive

curriculum. This enabled the Education team to translate the corporate strategy into one which made sense within the current context and was used to inform actions for the subsequent academic year and beyond.

A considerable practical consideration of LEGO® SERIOUS PLAY is the 'buy-in', of both participants and management. LEGO® can be seen as trivial and non-serious resulting in a lack of engagement from participants or a resistance from management, to accept the messages which emerge from the workshop The LEGO® SERIOUS PLAY® method is established within commercial environments. However, despite recent endeavours, the natural scepticism of academics demands further research to develop a solid body of evidence to support the method if it is to be accepted more widely. Current evidence supports the internal validity of the method, with good feedback and positive outcomes being reported. However, this needs to be partnered with a strong theoretical basis and evidence for the benefits of LEGO® SERIOUS PLAY® methods over other discursive approaches.

Acknowledgement

8. References

1. Bates, E.A. and Kaye, L.K., (2014), "Exploring the impact of the increased tuition fees on academic staffs' experiences in post-92 Universities: A small-scale qualitative study", *Education Sciences*, Vol. 4, No. 4, pp. 229-246. https://doi.org/10.1080/00131911.2017.1363718

2. Bennett, D., Roberts, L., Ananthram, S., and Broughton, M. (2018), "What is required to develop career pathways for teaching academics?", *Higher Education*, vol. 75, No. 2, pp. 271-286. https://doi.org/10.1007/s10734-017-0138-9

3. Brew, A., Boud, D., Lucas, L. and Crawford, K., (2017), "Responding to university policies and initiatives: the role of reflexivity in the mid-career academic" *Journal of Higher Education Policy and Management*, Vol. 39, No 4, pp. 378-389. https://doi.org/10.1080/1360080X.2017.1330819

4. Csikszentmihalyi, M. (1990), *Flow: The Psychology of Optimal Experience*, New York: Harper and Row.

5. Croucher, R., Gooderham, P. and Rizov, M. (2017), "Research performance and the organizational effectiveness of universities", *Journal of Organizational Effectiveness: People and Performance*, Vol. 5, No. 1, pp. 22-38, https://doi.org/10.1108/JOEPP-06-2017-0057

6. Deem, R., Hillyard, S., and Reed, M. (2007), *Knowledge, higher education, and the new managerialism: The changing management of UK universities*, New York: Oxford University Press.

7. Frick, E., Tardini, S. and Cantoni, L., (2013), *White paper on* LEGO® SERIOUS PLAY®*: A state of the art of its applications in Europe*, Lugano: Università della Svizzera Italiana. [Online] Available from: http://www.s-play.eu/attachments/article/70/splay_White_Paper_V2_0_1.pdf [accessed on 18 Sept 2018].

8. Hattie, J., and Marsh, H. W. (1996), "The Relationship Between Research and Teaching: A Meta Analysis", *Review of Educational Research*, Vol. 66, No. 4, pp. 507–42. https://doi.org/10.3102%2F00346543066004507

9. Hayes, C., (2016), "Building care and compassion—introducing LEGO SERIOUS PLAY to HCA education", *British Journal of Healthcare Assistants*, Vol. 10, No. 3, pp.127-133. https://doi.org/10.12968/bjha.2016.10.3.127

10. Hunt, C. (2016), "'Teachers' to 'academics': the implementation of a modernisation project at one UK post-92 university", *Studies in Higher Education*, Vol. 41, No. 7, pp. 1189-1202. https://doi.org/10.1080/03075079.2014.968544

11. James, A.R., (2013), "LEGO SERIOUS PLAY: a three-dimensional approach to learning development", *Journal of Learning Development in Higher Education*, No. 6, pp. 1-18.

12. Kandiko, C. B. and Mawer, M. (2013), *Student Expectations and Perceptions of Higher Education.* London: King's Learning Institute.

13. Kinman, G., (2016) "Effort–reward imbalance and over commitment in UK academics: implications for mental health, satisfaction and retention" *Journal of Higher Education Policy and Management*, Vol. 38, No. 5, pp.504-518. https://doi.org/10.1080/1360080X.2016.1181884

14. Kinman, G. and Wray, S. (2017), *Work-related wellbeing in UK Higher Education-2014*, University and College Union.

15. Kirriemuir, J. and McFarlane, A. (2004), *Report 8: Literature Review in Games and Learning*. UK: Futurelab Series. [Online] Available from: https://www.nfer.ac.uk/media/2755/futl27literaturereview.pdf [accessed on 18 Sept 2018]

16. Lakoff, G. and Johnson, M. (1980), *Metaphors we live by*, Chicago: University of Chicago Press.

17. Mackenzie, H., Tolley, H., Croft, T., Grove, M. and Lawson, D., (2016). "Senior management perspectives of mathematics and statistics support in higher education: moving to an 'ecological' approach", *Journal of Higher Education Policy and Management*, Vol. 38, No. 5, pp.550-561. https://doi.org/10.1080/1360080X.2016.1196932

18. Malone (1980), *What Makes Things Fun to Learn? A Study of Intrinsically Motivating Computer Games*, Palo Alto: Xerox

19. McCusker, S. (2014) "LEGO SERIOUS PLAY: Thinking about teaching and learning", *International Journal of Knowledge, Innovation and Entrepreneurship*, Vol. 2, No. 1, pp. 27-37.

20. Morgan, G. (1997), *Images of organizations,* 2nd ed., Thousand Oaks: Sage Publications.

21. Nerantzi, C. and Despard, C., (2014), "Do LEGO® Models Aid Reflection in Learning and Teaching Practice?", *Journal of Perspectives in Applied Academic Practice*, Vol. 2, No. 2, https://doi.org/10.14297/jpaap.v2i2.81

22. Nolan, S., (2010), "Physical metaphorical modelling with LEGO as a technology for collaborative personalised learning", In: O'Donoghue, J. (Ed), *Technology-supported environments for personalized learning: Methods and case studies*, Hershey: IGI Global, pp. 364-385, https://doi.org/10.4018/978-1-60566-884-0.ch020

23. Ohler, J.B., (2013), *Digital storytelling in the classroom: New media pathways to literacy, learning, and creativity*, Thousand Oaks: Corwin Press.

24. Schon, D. A. (1983), *The reflective practitioner: How professionals think in action*, New York: Basic Books.

25. Scott, P., (2015), "There is a third way universities could take between state and market", *The Guardian*, 7 July [Online] Available from: https://www.theguardian.com/education/2015/jul/07/universities-build-networks-work-together (accessed on 18 Sept 2018)

26. Tomlinson, M. (2017), "Student perceptions of themselves as 'consumers' of higher education", *British Journal of Sociology of Education*, Vol. 38, No 4, pp. 450-467. https://doi.org/10.1080/01425692.2015.1113856