

A critical consideration of LEGO® SERIOUS PLAY® methodology for tourism studies

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A critical consideration of LEGO® SERIOUS PLAY® methodology for tourism studies

In recent decade tourism researches turned their attention to creative qualitative methodologies to gain the deeper understandings of tourism phenomena. Despite the considerable body of research focusing on creative methodologies there is a need to challenge and creatively disrupt conventional methodological approaches as they are criticised for their inability to be participant driven, capture the co-construction of research context or to address the impact of wider social dynamics to knowledge creation in tourism studies. Based on our research focused on host- guests experiences participating in the World Wide Opportunities on Organic Farms (WWOOF) programme in New Zealand we provide a critical consideration of LEGO® SERIOUS PLAY® for tourism studies. LEGO® SERIOUS PLAY® is a communication tool aimed at developing creative thinking through building metaphors around identities and experiences using LEGO® bricks. To demonstrate how the method can be used in tourism studies, we draw on examples from three LEGO® SERIOUS PLAY® workshops to illustrate the benefits and challenges of this methodological approach. LEGO® SERIOUS PLAY® offered a metaphorical way for participants to construct creative artefacts and explain their ideal WWOOFing experience, representing sometimes complex, entrenched and emotional issues, and relationships that may have been difficult to express via traditional methods. The method enables participant driven, co-production of knowledge in a playful, free-flowing way to foster creative thinking, meanings and possible solutions. The method helps participants creatively communicate complex and sensitive issues, especially around their relationships – to objects, landscapes, people and identities – aspects that may otherwise be silenced by traditional research methods. As a novel method LEGO® SERIOUS PLAY® provides opportunities for researchers who want to gain a deeper understanding of the social dimensions of tourism, to co-create spaces for knowledge exchange and develop an in-depth understanding of socially constructed relationships and realities.

Keywords: LEGO ® SERIOUS PLAY ®, creative methodology, host-guests' experience, constructionism, WWOOF.

Introduction

Nearly a decade ago, tourism scholars challenged traditional positivist approaches to tourism research and called for a Critical Turn in tourism studies (Ateljevic, Pritchard, & Morgan, 2007, p. 251). Tourism scholars have critiqued the ontological, epistemological and methodological limitations dominant within tourism academia instead, offering alternative methods of inquiry which aim to produce inductive, interpretive, reflexive accounts of subjective realities of participants (Decrop, 1999; Phillimore & Goodson, 2004; Riley & Love, 2000). Recently, tourism scholars have highlighted the importance of acknowledging epistemology in determining methodological choices (Ateljevic, Harris, Wilson, & Collins, 2005). They have discussed how this influences endeavours to provide spaces and voice to participants in order to explore their subjective experiences and gain co-created knowledge (Jennings, 2010; Pernecky, 2012). Indeed as Hughes and Sharrock (1997, p. 89) have stated, 'experiences of others can be grasped through the apprehension of their inner meanings' and applications of interpretive, inductive methodological tools of data collection and analysis develop research capacities for this co-production of knowledge to occur.

To contribute to this area of scholarship, we provide a critical consideration of the method and processes of the interpretive, creative methodological tool, LEGO® SERIOUS PLAY® for tourism research. LEGO® SERIOUS PLAY® is a facilitated workshop technique grounded in constructionist epistemology which enables individual participants to depict their understandings in a metaphorical and creative, playful way. This method allows participants to provide meanings about their experiences which might be difficult to articulate through verbal or written processes. By using a creative, playful method, LEGO® SERIOUS PLAY® seeks to reduce tensions involved in research, such as the power-authority dynamic. It also provides opportunities for both

1
2
3 individual and collaborative understandings of phenomena through the use of
4
5 metaphorical explanations. For example, researchers have noted that work across
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7 multiple industries and academic sectors creates problems in relation to knowledge
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9 management, developing understandings and creating capacities across the seemingly
10
11 disparate participants (Hart & Wolff, 2006). LEGO® SERIOUS PLAY® attempts to
12
13 overcome these boundary relationships, potential misunderstandings between people
14
15 and knowledge by using playful metaphorical depictions. While LEGO® SERIOUS
16
17 PLAY® is not a panacea for all research that aims to develop participant's voice, it does
18
19 offer an orientation for developing co-created understandings that attempt to overcome
20
21 the traditional approaches that rely on a translation of declarative knowledge between
22
23 participant and researcher.
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28 The paper begins by providing some brief background about the development of
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30 LEGO® SERIOUS PLAY®. The literature review section will critically evaluate
31
32 frequently used qualitative tools and provide discussion on the philosophical
33
34 foundations of LEGO® SERIOUS PLAY® methodology. This section is followed by
35
36 details of the case study that applied LEGO® SERIOUS PLAY®. Tourism researchers
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38 who adopt qualitative, inductive approaches to their research are always seeking tools
39
40 that allow participant driven understandings and co-creation of knowledge. To address
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42 this gap, we then discuss the findings of our case study research and our reflections and
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44 conclusions on the use of LEGO® SERIOUS PLAY® methodology for tourism
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46 research.
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52 53 **Background**

54
55 LEGO® SERIOUS PLAY® emerged in the early 2000s and is a method that
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57 has initially been used in business, education, community and more recently hospitality
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1
2
3 and tourism research. The idea of a method which uses a ‘playful approach’ and LEGO
4 bricks to improve organisational performance originated in 1995 within the LEGO
5 Group. The LEGO Group launched the LEGO® SERIOUS PLAY® method in 2001
6 (Gauntlett, 2007) and open-sourced a version of the method in 2010. Initially, the
7 LEGO® SERIOUS PLAY® method was considered as a tool for improving
8 organisational performance within the corporate environment (Oliver & Roos, 2007;
9 Peter, Jacobs, & Roos, 2005; Pickard, 2007).

19 The studies conducted by David Gauntlett pioneered LEGO® SERIOUS
20 PLAY® as a research methodology around the exploration of identities (Gauntlett,
21 2007; Gauntlett & Holzwarth, 2006). Drawing on his work, LEGO® SERIOUS
22 PLAY® has been applied as a business method to enhance strategic thinking in
23 organisations (Hadida, 2013) and as a brand research tool (Trebbin, 2016). Lately, the
24 LEGO® SERIOUS PLAY® methodology has been used in psychology research (Harn
25 & Hsiao, 2018), and education research as a tool for developing individuals’ learning
26 capacities (Barton & James, 2017; Kurkovsky; Montesa-Andres, Garrigós-Simón, &
27 Narangajavana, 2014). Other studies in education have focused on the application of the
28 LEGO® SERIOUS PLAY® method for providing kinesthetic forms of learning that
29 involve both the body and the physical realm (James, 2013a, 2013b, 2015; Peabody &
30 Noyes, 2017). In another example from education, Tseng (2017) found the LEGO®
31 SERIOUS PLAY® method was a useful tool for fostering narrative identity among
32 economically marginalised students. Similarly, within the community studies sector,
33 Fletcher, Greenhill, Griffiths, Holmes, and McLean (2016) illustrated how they used
34 LEGO® SERIOUS PLAY® to allow the voices of community members and
35 stakeholders in the town planning process.

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2
3 A recent hospitality study used LEGO® SERIOUS PLAY® as a data collection
4 tool to anticipate future changes in the hotel industry (Tuominen & Ascensão, 2016). In
5
6 tourism research, LEGO® SERIOUS PLAY® methodology is advocated for its ability
7
8 to create tourism realities (Wengel, McIntosh, & Cockburn-Wootten, 2016). Wengel,
9
10 McIntosh & Cockburn-Wootten (2016) argued that LEGO® SERIOUS PLAY® is an
11
12 effective methodology to gain deeper understandings of complex, dynamic, socially
13
14 constructed realities in tourism. Although previous studies have provided information
15
16 on the LEGO® SERIOUS PLAY® methodology, there remain few critical evaluations
17
18 of this tool for tourism research.
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24 To illustrate both the methodological processes and provide a critical evaluation
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26 of LEGO® SERIOUS PLAY® for tourism studies, we draw on a case study that
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28 investigated farm tourism research, with a particular focus on the WWOOF programme²
29
30 in New Zealand. In this example, as we will discuss later in the paper, LEGO®
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32 SERIOUS PLAY® offered a metaphorical way for participants to construct their ideal
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34 experiences, representing sometimes complex, entrenched and emotional issues, and
35
36 relationships that may have been difficult to express via traditional methods. As a
37
38 qualitative, inductive approach LEGO® SERIOUS PLAY® aims to understand ‘how
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40 social experience is created and given meaning’ (Denzin & Lincoln, 1994, p. 4). To
41
42 achieve this understanding, LEGO® SERIOUS PLAY® uses metaphorical explanations
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44 to demonstrate constructs from the participant’s imagination, which helps to illustrate
45
46 the multiple facets of their complex experiences visually. In our case study, the
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48 methodology enabled us to understand how organic farm hosts and their WWOOF
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57 ² WWOOF stands for World Wide Opportunities on Organic Farms and represents a network which promotes cultural and
58 educational experiences based on trust and non-monetary exchange. WWOOF connects farmers and volunteers who are
59 interested to exchange labour for food, accommodation and learning about organic farming practices and sustainable ways of
60 living.

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3 volunteers (guests) represented and constructed their sustainability ideals, relationships
4 and the realities that they faced in their social interactions on the farm. Overall, LEGO®
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8 SERIOUS PLAY® enabled participants to communicate complex and sensitive issues
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10 in a creative way, especially around their relationships – to objects, landscapes, people
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12 and identities – aspects that may otherwise be silenced by traditional research methods.
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18 **Literature Review**

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20 Traditional qualitative research methods such as interviews, focus groups, ethnography
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22 as well as photo and video documentation, have established themselves as reliable and
23
24 useful methods in tourism studies (Buda, Martini, & Garcia, 2017). However,
25
26 challenges still remain for researchers seeking tools that allow participant driven
27
28 understandings and co-created knowledge. For researchers investigating topics that are
29
30 sensitive, deal with unethical and/or inhospitable environments, or participants who
31
32 have historically been excluded and neglected by the wider society, other research tools
33
34 have been sought (Campbell, Sefl, Wasco Sharon, & Ahrens Courtney, 2004). For
35
36 instance, tools that can ethically deal with facilitating voice, power, trust, and
37
38 relationship dynamics between the interviewer and the interviewee are crucial. For
39
40 researchers working within the community, disability and chronic illness sectors,
41
42 traditional qualitative tools do not do justice to the rich experiences of the participant, or
43
44 capture hidden illness, and can end up weakening the research relationship –
45
46 exacerbating participants feelings of exclusion and the academics' reputation as
47
48 "epidemics" (Bell, Addy, Madew, & Kainulainen, 2012, p. 95).
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Scholars have critiqued qualitative tools for their reliance on the researcher's
needs and values rather than enabling an understanding of the research context and a
participant's experience of the issue. For example, in-depth interviews have been

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3 critiqued for being time consuming, sometimes expensive, and the flexibility of the
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5 process which may have negative implications on the quality of data (Bryman, 2016;
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7 Esterberg, 2002; Mishler, 1991; Patton, 2015). Bosco and Herman (2010) criticise focus
8
9 groups for providing relational shared identity at the expense of individual experiences.
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11 Other researchers have suggested that the ‘charged atmosphere’ during a focus group is
12
13 a risky factor to manage and can negatively impact fruitful discussion (Finn, Walton, &
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15 Elliott-White, 2000; Goulding, 1997). Gauntlett (2007) criticises talk-based approaches
16
17 to data collection (for instance, interviews and focus groups) for the inability to get
18
19 direct access to individuals’ beliefs and mentions that these methods offer limited
20
21 opportunity for participants “to express themselves creatively” and “to significantly
22
23 affect the research agenda” (Gauntlett, 2005, p. 2). Talk and written based data
24
25 collection tools can also exclude participants who may have physical disabilities or
26
27 difficulties communicating in the researcher’s language. For example, participants with
28
29 a disability or those who speak a different language may find it challenging to articulate
30
31 their experiences using traditional qualitative methods (Cattell, 2001). Within tourism
32
33 studies, visual methods of data collection are largely employed by using existing visual
34
35 objects rather than artefacts or images creatively produced by participants (Albers &
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37 James, 1988; Hunter, 2012; Nyaupane, Lew, & Tatsugawa, 2014; Pritchard & Morgan,
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39 2003; Scarles, 2004; Uzzell, 1984).

46
47 Overall, traditional qualitative methods have been heavily criticised for their
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49 inability to be participant driven, capture the co-construction of the participants’
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51 realities or to address the impact of wider social dynamics (Liamputtong, 2007). Hence,
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53 there are reasons to explore the application of creative research methods tools such as
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55 LEGO® SERIOUS PLAY® methodology.
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The Philosophical Foundations of LEGO® SERIOUS PLAY®

Discussing various theoretical positions integrated in LEGO® SERIOUS PLAY®, researchers agree that initially the methodology rooted on four pillars: constructivism/constructionism, the concept of play underpinned by the use of imagination and metaphors, and the theory of flow (Barton & James, 2017; Gauntlett, 2007; James, 2013a; Nolan, 2010)

Constructivism

Historically, the LEGO® SERIOUS PLAY® method draws on many ideas from the fields of psychology and behavioural science. Two core concepts embedded into LEGO® SERIOUS PLAY® are Piaget's constructivism (1955) and Papert's constructionism (1991). According to Piaget's theory, learners are not "empty vessels into whom we can pour knowledge" (p. 82), but rather, learners could be described as active theory creators who construct and rearrange that knowledge based on their prior knowledge and experience (Kristiansen & Rasmussen, 2014). Piaget (1955) claimed that intelligence increases when the mind creatively interacts with the outer world. This theory was developed further by Papert, a follower of Piaget, in his theory of constructionism which focused on building knowledge through 'hands-on learning' (Papert & Harel, 1991). Central to Papert's theory was that learning is exceptionally productive when people are actively engaged in the creation or construction of something that is external to themselves.

According to Papert, constructionism allows abstract ideas and relationships to become more concrete, more visual, and tangible, and thus more understandable (Papert & Harel, 1991). Papert proposed that learners 'think through fingers' by producing various modes of thoughts, based on their creativity and imagination (Papert & Harel, 1991). Thus, learners are engaged when tangible objects are involved, and their abstract

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3 ideas become more concrete, visual, and therefore more understandable (Papert, 1999).
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5 LEGO® SERIOUS PLAY® methodology applied this idea of concrete thinking, which
6
7 is thinking with and through concrete objects as a mode of thinking that can be
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9 complementary to more abstract, formal modes of thought. A founding philosophy of
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11 LEGO® SERIOUS PLAY® methodology is that participants can unlock their creative
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13 thinking through play and ‘thinking with objects’ or ‘thinking through fingers’ when
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15 constructing their reality with LEGO® bricks.
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21 ***The Concept of Play***

22 The second pillar of LEGO® SERIOUS PLAY® is the ‘concept of play’ which
23
24 assumes that innovative and creative ideas are most likely to come through the playful
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26 free-flowing process (Gee, 2007; Kane, 2004; Terr, 2000). LEGO® SERIOUS PLAY®
27
28 methodology applies ‘play’ and encourages learning through exploration, storytelling
29
30 and/or metaphors. This method assumes that each play process has a purpose (Rieber,
31
32 1996) and defines play as “a limited, structured, and voluntary activity that involves the
33
34 imaginary” (LEGO® SERIOUS PLAY®, 2006, p. 4). An advantage of the LEGO®
35
36 SERIOUS PLAY® method is that when participants play, they play with their sense of
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38 who they think they are (identity), and with one or more specific goals in mind, such as
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40 social bonding, emotional expression, cognitive development, and constructive
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42 competition (LEGO® SERIOUS PLAY®, 2006). The concept of play is linked to
43
44 identities and imaginations, which are seen as central to the play process (Gauntlett &
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46 Holzwarth, 2006).
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52 Researchers argue that the motivational basis for play is primarily emotional and
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54 individuals attach emotional meanings to their experiences and objects (Fein, 1987;
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56 Vygotskiï & Cole, 1978). A further advantage of LEGO® SERIOUS PLAY® is that
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58 “through the use of modelling and metaphor, the objects of play can take on meanings
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3 and can embody abstract concepts, thus concretising formal relationships that can
4
5 otherwise be quite difficult to comprehend” (LEGO® SERIOUS PLAY®, 2006, p. 6).
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8 9 *Imagination and Metaphors*

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11 LEGO® SERIOUS PLAY® methodology is founded on three aspects of imagination:
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13 imagination as a way to describe something; imagination as a way to create something;
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15 and, imagination as a way to challenge something. The descriptive imagination is based
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17 on our experiences, and its purpose is to evoke images that describe our complex
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19 reality. While descriptive imagination allows us to see what is there in a new way,
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21 creative imagination enables us to see what is not there, hence allowing the creation of
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23 something new and different. In LEGO® SERIOUS PLAY® methodology, creative
24
25 imagination is associated with innovation and novel thinking. In turn, challenging
26
27 imagination goes beyond creative imagination; it does not add a new element to what is
28
29 already there, but starts from scratch and assumes nothing (LEGO® SERIOUS
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31 PLAY®, 2006). When these three types of imagination are combined during the
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33 LEGO® SERIOUS PLAY® workshop, they create a strategic imagination, which is
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35 seen as a source of original ideas.
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41 Imagination is closely linked to story-telling and the use of metaphors. In
42
43 qualitative research, metaphors help increase the depth of the meaning of understanding
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45 (Kangas, Warren, & Byrne, 1998) and “illuminate the meanings of experiences”
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47 (Carpenter, 2008, p. 274). Metaphors represent “a form of thinking and language
48
49 through which we understand or experience one thing in terms of another” (Lakoff &
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51 Johnson, 2003, p. 7). As a research method based on metaphorical creative exploration,
52
53 LEGO® SERIOUS PLAY® can reveal underlying thinking, understanding, and
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55 meanings of experiences (Carpenter, 2008; Gauntlett, 2007; Kangas et al., 1998). The
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57 LEGO® SERIOUS PLAY® methodology aims to foster creative thinking through
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2
3 building metaphors of participants' identities and experiences using LEGO® bricks.
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5 LEGO® SERIOUS PLAY® methodology may differ in terms of the content and focus
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7 on the workshop process, the role of the facilitator and the engagement of the
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9 participants through skills building and flow process. Overall, previous theorists, using
10
11 similar metaphorical processes, have argued that a metaphorical process is useful for
12
13 identifying and reflecting on the multiple social discourses that individuals are exposed
14
15 to, particularly around the tourism experience (e.g. Morgan (1980)). Consequently,
16
17 LEGO® SERIOUS PLAY® methodology is claimed to stimulate new awareness of
18
19 'reality' and provides deeper metaphorical meanings as well as the depth of
20
21 participants' lived experiences not captured by alternative methods (Wengel et al.,
22
23 2016).
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30 *The Theory of Flow*

31 Another pillar of LEGO® SERIOUS PLAY® methodology is Csikszentmihalyi's
32
33 (1991) theory of flow. The theory of flow describes the emotional state of a person
34
35 while undertaking a focused task or activity when the skills level is matched to the
36
37 difficulty of the task (Csikszentmihalyi, 1991). LEGO® SERIOUS PLAY® method
38
39 embraces the theory of flow to the extent that the methodology allows participants to
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41 stay in the flow while engaging, enjoying, and concentrating on the process of
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43 construction guided by the facilitator regardless of participants' familiarity with
44
45 LEGO® bricks.
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50 Currently, there is a LEGO® SERIOUS PLAY® 1.0 (an open source version
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52 with basic principles released by LEGO Group) and LEGO® SERIOUS PLAY® 2.0
53
54 version. The 2.0 version is a complete version of LEGO® SERIOUS PLAY® method
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56 developed by the Association of Master Trainers in LEGO® SERIOUS PLAY®
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58 method which includes seven application techniques and four core steps of LEGO®
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3 SERIOUS PLAY® process. One significant difference of the LEGO® SERIOUS
4
5 PLAY® 2.0 is that the facilitator ensures that participants are engaged in the process
6
7 and experience flow. This is achieved by applying step by step the LEGO® SERIOUS
8
9 PLAY® process and taking participants through the skills-building process where the
10
11 increasing challenge of the task is balanced by improved skills of the participants
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13 (Kristiansen & Rasmussen, 2014). This process illustrates and reflects the theory of
14
15 flow, as by ‘experiencing flow encourages a person to persist at and return to an activity
16
17 because of the experiential rewards it promises and thereby fosters the growth of skills
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19 over time’ (Csikszentmihalyi, 2014, p. 249).
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25 **The Case Study**

26
27 The case study that applied LEGO® SERIOUS PLAY® investigated farm tourism
28
29 focusing on host-guest experiences in the World Wide Opportunities on Organic Farms
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31 (WWOOF) programme in New Zealand. WWOOF is a tourism related phenomenon
32
33 and is a global exchange programme which connects volunteers (WWOOFers) with
34
35 organic farmers to support cultural and educational experiences based on trust and
36
37 nonfinancial exchange, with the aim to help build a sustainable, global community
38
39 (Federation of WWOOF Organisations, 2016). This research aimed to understand how
40
41 hosts (farmers) and guests (WWOOFers) construct the ‘ideal’ WWOOFing experience
42
43 to ensure a mutually beneficial encounter for both farmers and volunteers. Underpinned
44
45 by constructionist epistemology, the research adopted LEGO® SERIOUS PLAY®
46
47 methodology to involve participants in a discussion about their experiences.
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52
53 The principal author participated in one-week long training in 2013 and is
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55 certified by the Association of Master Trainers in the LEGO® SERIOUS PLAY®
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57 Method as a facilitator of LEGO® SERIOUS PLAY® method and materials. This
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59 research project adopted the 2.0 version and was guided by LEGO® SERIOUS PLAY®
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3 etiquette based on the training manual. As such, we applied two application techniques:
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5 (1) building individual models and stories, and (2) building shared models and stories
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7 (Kristiansen & Rasmussen, 2014). The first application technique allows participants to
8
9 build an individual model and to share new knowledge with other participants. The
10
11 second application technique allows collaboration among participants to make decisions
12
13 and gain a mutual understanding of a given topic by combining some individual models
14
15 or parts of the individual models into one shared model. We sourced 20kg of LEGO
16
17 bricks for the workshops. An individual customised Starter Kit for skills-building
18
19 exercises was created based on the requirements that had been provided during the
20
21 LEGO® SERIOUS PLAY® training (Figure 1). In our farm tourism research, a custom
22
23 starter kit contained solid coloured bricks, transparent bricks, ‘multi metaphor bricks
24
25 (e.g. a fence, a flagpole), ‘single metaphor bricks’ (e.g. plants, animals), some ‘people
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27 bricks’ (e.g. mini figures, accessories and ‘eye bricks’) as well as bricks for making
28
29 movements (e.g. wheels, hinges, and other rotating elements) and a base plate.
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35 [Figure 1 near here]

36
37 The remaining LEGO® bricks were used as an ‘Identity and Landscape kit’.
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39 This kit was enlarged by various connection elements, green elements, as well as
40
41 DUPLO³ elements representing plants and animals to fit the farming theme of the
42
43 workshops. Another adjustment of LEGO® SERIOUS PLAY® to the current research
44
45 was that the principal author played a dual role during all workshops: the role of the
46
47 facilitator and the role of a participant. This adjustment was made to gain participants
48
49 trust and overcome participants’ scepticism towards LEGO® SERIOUS PLAY®
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51 methodology (as LEGO® bricks are mainly associated with being a children's toy). This
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59 ³ LEGO DUPLO is a product range created for children between 1.5 and 5 years old. Duplo bricks are two times larger in length,
60 height and width compared to standard LEGO bricks (<https://www.lego.com/en-gb/themes/duplo>)

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3 adjustment helped to eliminate this limitation and developed a more positive mindset
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5 from participants' attitudes towards this creative method.
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7
8 Three LEGO® SERIOUS PLAY® workshops with a total of 13 participants
9
10 were conducted on three farms in New Zealand. Each of the workshops employed two
11
12 application techniques: building individual models and stories and building a shared
13
14 model. At the end of each workshop participants built a shared model of the 'ideal'
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16 WWOOFing experience. All workshops were video- and audio-recorded. As a method,
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18 LEGO® SERIOUS PLAY® requires all participants to be available at the same time
19
20 and location. At times, this might be a limitation as it can be challenging to get
21
22 participants together in one site. Ethics approval was obtained from the Waikato
23
24 Management School Human Research Ethics Committee to protect participants'
25
26 confidentiality and to ensure informed consent. Table 1 provides a summary profile of
27
28 the participants.
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33 [Table 1 near here]
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35 Before starting each workshop, participants were given information about the
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37 LEGO® SERIOUS PLAY® process.
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40 Additionally, the principal author explained to participants the concept of
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42 LEGO® SERIOUS PLAY® and, in particular, noted it as a method of detachment from
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44 the person/the issue to instead one of metaphor. Every workshop started with skills
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46 building, a series of icebreaker and warm-up exercises. Specifically, participants were
47
48 asked to build a duck and a tower using a customised starter kit. During all the
49
50 workshops, the participants were asked to build different models related to WWOOFing
51
52 by using LEGO® bricks first as an individual and then as a group. During each
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54 workshop, the principal author posed questions as a facilitator, explaining to the
55
56 participants that she was acting as the facilitator. When the participants were being
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3 encouraged to provide a metaphorical explanation of their model one after another, she
4
5 always provided her answers last. She tried to notice what other participants had
6
7 mentioned and described her models in a neutral way, to reduce any potential bias and
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9 so that no new knowledge was minimised by her insights. When she switched roles
10
11 from a participant to a facilitator, she reminded the other participants that she was doing
12
13 so.
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16
17 After a series of LEGO® SERIOUS PLAY® workshop steps, participants were
18
19 invited to create a joint model consisting of individual models, or parts of an individual
20
21 model, that embraced the ideas and experiences of farmers (hosts) and WWOOFers
22
23 (volunteers) at the same time. During this process, participants were encouraged to
24
25 negotiate what parts of a model or models would constitute the final model, the ‘ideal’
26
27 WWOOFing experience. At this stage, the principal author, as a participant, held back
28
29 her ideas and let the participants determine the model and the story of the social
30
31 construction of the WWOOFing experience. By the end of each workshop, the
32
33 participants had constructed a joint model of an ‘ideal’ WWOOFing experience, which
34
35 is further described in the following section.
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40 To create their metaphors, participants used the LEGO® bricks imaginatively,
41
42 before drawing on their conscious knowledge of what they perceived an ‘ideal’
43
44 WWOOF experience for them to be. Thus, metaphors are used as a filter to uncover the
45
46 multiple aspects of the WWOOF phenomenon from the participants’ subjective points
47
48 of view. In verbal language, metaphors represent a way to reveal the underlying
49
50 thinking or understanding of a person. This creative approach to research can be seen to
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52 allow a deeper insight into the understanding of participants’ lived experiences and
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54 helped to explore their personal meanings and attitudes.
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Findings

Two core themes were revealed through the LEGO® SERIOUS PLAY® workshops. These themes were people/relationships and sharing/collaboration. WWOOFing participants believed that an ‘ideal’ WWOOFing experience depended upon the people involved in it sharing things, activities, and experiences. Some of the models created by the participants focused on a mismatch of expectations, communication, and cultural problems in the host-guest experience. For example, James (farmer, farm 1), mentioned that most of the negative cases of WWOOFing experiences on his farm were connected to the lack of engagement from WWOOFers: “We open our life, and our house and they are not connecting, they are not interested in all of these” (Figure 2). This model used several standard LEGO® elements to describe James’ negative experiences metaphorically. In his model, the LEGO® open window element represents a house, the host mini figure is giving a ‘rope’ and shows his willingness to connect with the WWOOFer mini figure, but this volunteer prefers to have “his own agenda” (represented by the flag) and is not interested in the hosts’ life and farm activities. The volunteer is standing with his side to a fence (which is representing a barrier), and he is also wearing a helmet, which is metaphorically explained as a lack of motivation and interest in WWOOFing. The plants in front of the ‘house’ represent the farm and WWOOFing activities.

[Figure 2 near here]

In the LEGO® SERIOUS PLAY® workshops we asked the participants to build models of the positive WWOOFing experience. Many participants reported stories related to the interaction between people. For example, Linley (farmer, farm 2) built a model of a farmer and her WWOOFers working together in the garden (Figure 3). A minifigure with a hammer on the left represents a farmer who is connected with the

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2
3 plants on the farm (represented by the rope). On the same side, this connection extends
4
5 to the figure with many eyes. This figure represents international WWOOFers who
6
7 come to work on the farm with Linley and to experience New Zealand. The silver pipe
8
9 connecting WWOOFers (represented by the figure with many eyes) and plants
10
11 metaphorically describe the interest of some volunteers in their sustainable lifestyle and
12
13 their willingness to experience the local life by interacting with their farm hosts.
14
15 Participants used a variety of LEGO® bricks with eyes, smiles, mini figures and
16
17 elements showing interaction such as ropes, cords, ladders and tools like spades,
18
19 hammers and scissors to describe people sharing work on the farm.
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23
24 [Figure 3 near here]
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26 From the workshops, we saw that both shape and also the colour of LEGO®
27
28 bricks and elements helped participants to explain their experiences and relationships
29
30 with others, objects and the lifestyle. This was illustrated in the metaphors participants
31
32 used in their workshops. For instance, in several individual models (see Figure 4),
33
34 participants used many green LEGO® bricks and elements representing plants. They
35
36 used these elements to metaphorically describe the farming element of the WWOOFing
37
38 experience where farmers and volunteers take care of plants and animals.
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42 [Figure 4 near here]
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44 Participants highlighted that being close to nature, working with animals and plants
45
46 were distinguishing features of WWOOFing and distinguished WWOOFing from other
47
48 tourism related exchange programmes like Couchsurfing or Help-X.
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51 One participant built a model of his transformational experience by presenting a
52
53 model of compost (Figure 5). This model visually represented a cubic metre of the
54
55 compost pile. For Steffen (volunteer, farm 1), the WWOOFing experience had a
56
57 transformative component as he got to understand a food life cycle by volunteering on
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3 the farms. Apart from the plant bricks representing what compost is made of, Steffen
4 explained that the clear, transparent window element represents his ‘enlightenment’
5 about the food processes and compost lifecycle as one of the central elements in food
6 production. From one of the hosts, he had learned about the food life cycle and compost
7 as a crucial element in it. Steffen commented that before becoming a WWOOFer he
8 never thought about food and where it comes from; he just used to get it from the
9 supermarket. However, his WWOOFing experience motivated him to learn more about
10 the food cycle and the central role of compost in food growing cycle to keep the soil and
11 the plants healthy and full of nutrients.
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24 [Figure 5 near here]

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26 The example in Figure 5 shows how participants described their ideas and connected
27 tangible objects and their metaphorical meaning to their experience. Through
28 metaphorical explanations LEGO® SERIOUS PLAY® methodology allows
29 participants to have time (while building a model) to reflect on their experiences and
30 possibly to have a hand-mind connection to draw on their memories and bring their
31 lived experiences to the surface.
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40 An advantage we found of using LEGO® SERIOUS PLAY® methodology is its
41 ability to allow participants to communicate potentially sensitive issues more neutrally.
42 In this research, many participants mentioned intercultural and interpersonal
43 communication as challenging issues. In Figure 6, the left photo is an individual model
44 built by Mary (farmer, farm 1) and the right photo is a model built by Lauren
45 (WWOOFer). Both models describe the challenges and, at times, frustrating emotions in
46 terms of their communication and mutual understanding about the lifestyle,
47 sustainability values and experiences on the farm. In the left model, the mini figures are
48 shown looking to opposite sides to represent the miscommunication. The WWOOF
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3 volunteer described that when a person is ‘on top of the tower’ or ‘in your [their]
4 element’, a person tends not to hear what others are trying to communicate. In the
5 model on the right, a helmet was used as a strong metaphor signifying the unwillingness
6 of the farmer to look beyond their own experience and to hear the advice of the
7 WWOOFer. The emotional frustrations of the volunteer are evidenced in the metaphors
8 applied in this model, and her disappointment that communication of advice between
9 WWOOFer and farmer could not be reciprocal.
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19 [Figure 6 near here]
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21 Another example of a sensitive issue communicated in a workshop was related
22 to the rules. In addition to legal requirements, findings exhibited rules that were more
23 ambiguous and related to the farmer’s lifestyle preferences. These rules were open to
24 miscommunication and had the potential of developing negative emotions among either
25 party. These negative emotions arose if the rules were interpreted as unfair, deemed
26 unwarranted or not clearly communicated to the new volunteer. For example, one
27 participant built a model using farm gates with a door to metaphorically describe the
28 importance of following rules on the farm, especially for health and safety and ensuring
29 resource availability.
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42 Describing his positive experience with WWOOFers, Mike (farmer, farm 2)
43 mentioned that he enjoyed engaging with international people on his farm because ‘they
44 bring the world to us’. Figure 7 below represents Mike’s point.
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49 [Figure 7 near here]
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51 Although the model may appear simplistic as the different shape and colour of bricks
52 are not even attached to each other, it has deep meaning. Mike explained that bricks of
53 different shapes and colours represent WWOOFers coming from various countries, and
54 the central element in this model is his farm and his family (represented by the LEGO®
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3 mini figures surrounded by bricks representing the WWOOFers). During the LEGO®
4
5 SERIOUS PLAY® workshops, other farmers too mentioned that they enjoyed the
6
7 interaction with WWOOFers and enjoyed seeing them connecting with locals, nature
8
9 and animals. One of the farmers mentioned that she loved hosting WWOOFers because
10
11 she is not able to travel physically but she ‘travels’ metaphorically by listening to the
12
13 stories of her WWOOFers. To metaphorically represent this experience Charlotte
14
15 (farmer, farm 3) built a map and established ‘connections’ between New Zealand and
16
17 other parts of the world where the WWOOFers were coming from (Figure 8).
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21 [Figure 8 near here]
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24 Figure 9 represents an example of a shared model of an ‘ideal’ WWOOFing
25
26 experience built by five participants during a LEGO® SERIOUS PLAY® workshop on
27
28 farm number 2. This model contains several elements of individual models and full
29
30 individual models built by the participants during the previous stages of the workshop.
31
32 The whole model is ‘embraced’ by Mike’s individual model explained earlier (see
33
34 Figure 7). Participants agreed that an ‘ideal’ WWOOFing experience is one where
35
36 farmers interact with WWOOFers coming from different countries; WWOOFers are
37
38 represented by different coloured LEGO® bricks shaping a circle around the model. In
39
40 the centre of the model, there is a farmer’s family and their WWOOFers. In this
41
42 workshop, hosts mentioned that they enjoyed the creativity of their volunteers,
43
44 represented by the yellow LEGO® brick with red and green elements on top of it.
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49 Furthermore, this model again mentioned the importance of rules on the farm,
50
51 which is metaphorically represented by the white gate in the middle of the model.
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53 Finally, farmers suggested making this model in a round shape as they predominantly
54
55 had positive WWOOFing experiences with their volunteers and a circle represents a
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57 balance for them.
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3 [Figure 9 near here]
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5 Participants also highlighted the importance of having social time together while
6 sharing and learning about different cultures. For example, in this model (Figure 9), six
7 mini figures are cooking together at the top of the photo. Another important component
8 of the ideal WWOOFing experience co-constructed by the participants related to
9 education and acquiring new skills (for example, represented by the mini figure with a
10 tool next to a tree and a tractor at the bottom left of the photo).
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19 The three models of an 'ideal' WWOOFing experience brought participant's
20 individual experiences together into a co-constructed environment where everyone had
21 a chance to express their voice. The LEGO® SERIOUS PLAY® models revealed the
22 multiple realities within the WWOOF programme. Notably, during the workshops,
23 participants tried not only to co-create their ideal WWOOFing experience
24 metaphorically but also used various green LEGO® bricks, elements and animals to
25 replicate the physical farm appearance. In the workshops, green LEGO® bricks and
26 elements not only represented plants on the farm but also metaphorically described the
27 creativity and energy of the WWOOFers that farmers enjoyed. Participants proposed
28 that an 'ideal' WWOOFing experience could be achieved when participants are
29 mutually interested in each other and farming activities, as well as when they share
30 work, food, social time and understanding the rules.
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50 **Reflections on LEGO® SERIOUS PLAY® Methodology**

51 The LEGO® SERIOUS PLAY® workshops allowed for a playful and creative process
52 with the freedom to explore the social construction of the New Zealand WWOOFing
53 experience. On reflection of our case study research, we would like to highlight two
54 overall benefits of LEGO® SERIOUS PLAY® for tourism researchers. Firstly, it was
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3 clear from our experience that the process allowed a positive, playful experience that
4 enabled participants to (co)creatively represent their experiences metaphorically and
5 with detachment from the person and/or issue. Secondly, LEGO® SERIOUS PLAY®
6 also facilitated reciprocal learning to occur and allowed tacit ‘hidden’ experiences and
7 knowledge to be communicated.
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14 In this research, it should be noted that we made two adjustments. First, we
15 created custom LEGO® SERIOUS PLAY® kits using the guidelines provided during
16 the facilitator’s training. Secondly, the facilitator also participated in the research
17 process to try and overcome the participants’ unfamiliarity with LEGO® bricks as a
18 research tool. In previous LEGO® SERIOUS PLAY® workshops facilitated by the
19 principal author, she found some participants were reluctant to use LEGO® SERIOUS
20 PLAY® as a research method; hence, it is not always easy to predict how participants
21 will feel. LEGO® SERIOUS PLAY® is not an exception among creative methods, as
22 previous researchers have reported participants’ negative associations with creativity
23 and reluctance towards participation in methods involving creative thinking, painting or
24 producing a collage (Gauntlett, 2005, 2007; Greenwald, Poehlman, Uhlmann, & Banaji,
25 2009; Mueller, Melwani, & Goncalo, 2012). We feel that the adjustment we made
26 helped facilitate trust and a more positive attitude from participants towards using
27 LEGO® bricks as a new creative method for research. This can be supported in the
28 following quote from one of the participants:
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50 In the beginning, I did not believe that you are seriously using LEGO®
51 for your research. But now, after we have done it, and it was so much
52 fun, I understand that it is not about bricks but about the stories you tell.
53 Thanks for persuading me to participate. (Mike, Farmer, Farm 2).
54

55 Other participants commented that they enjoyed having the opportunity to be
56 involved in a creative process and valued the possibility to share their LEGO® models.
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3 Many participants enjoyed being in ‘flow’ while they were creating their models
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5 (Csikszentmihalyi, 1991). This level of enjoyment is certainly found in previous LEGO
6
7 applications (Wengel et al., 2016). In particular, participants enjoyed sharing and
8
9 listening to stories of the New Zealand WWOOFing experience. Participants sharing
10
11 not only their own stories but also seeing and listening to what others had provided
12
13 deeper meanings and understandings of how an ‘ideal’ WWOOFing experience was
14
15 socially constructed by the participants of this volunteer farm tourism exchange
16
17 programme.
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21 We found that LEGO® SERIOUS PLAY® offers participants an opportunity to
22
23 express themselves creatively, allows researchers to ‘dig’ deeply into participants
24
25 experiences to bring to the surface those experiences and facilitated learning. LEGO®
26
27 SERIOUS PLAY® methodology in this case study proved itself as a good tool to access
28
29 more complex, sometimes sensitive information from participants’ experiences. One
30
31 advantage of the LEGO® SERIOUS PLAY® is that it offers a variety of pre-formed
32
33 bricks and elements which are used in the models. This allows participants to overcome
34
35 any lack of ‘creativity’ in enabling metaphors to be built and explained. Notably,
36
37 participants frequently used several elements to metaphorically describe their
38
39 experiences and relationships with others, objects and lifestyle. For example, windows,
40
41 gates and doors were often used to describe interpersonal and intercultural
42
43 communication aspects, mini figures and eyes were used to describe people and beings,
44
45 animal and plant elements were used to describe the farm setting.
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51 Furthermore, the colour of the brick was important when participants tried to
52
53 replicate physical environments. For example, for plants, they used green bricks, and for
54
55 water blue bricks were used. The window elements and connection elements, such as
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57 ropes, cords and ladders, were frequently used by participants to metaphorically
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3 describe networks, connections and disconnections between participants. This proved a
4
5 more subtle and conflict adverse way to communicate and engage in conversation
6
7 around the emotional aspects of the experience.
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10 The LEGO® SERIOUS PLAY® process facilitated a learning space for
11
12 participants through their interactions to reflect on the knowledge gained from their
13
14 experiences. Traditional data collection tools typically see interactions as merely
15
16 facilitating the talk based content rather than collaborations for learning (Wibeck,
17
18 Dahlgren, & Öberg, 2007, p. 251). To achieve these interactions for learning requires
19
20 the intentional creation of space and activities, and for the researcher to change their
21
22 expert role to instead use dialogic conversational communication techniques (Hinthorne
23
24 & Schneider, 2012). The researcher's role alters to one that "facilitates the learning
25
26 rather than acting as a knowledge dispenser" (Wibeck et al., 2007, p. 251) Participants
27
28 collaborating/co-creating over an activity allows interactions that help researchers to
29
30 learn about how participants develop 'sensemaking' and overcome problems around
31
32 their experiences. These types of research tools enhance learning for both participant
33
34 and researcher through the "act of critical reflection through experiential learning and
35
36 dialogue" (Hinthorne & Schneider, 2012, p. 2808). Despite these benefits, one of the
37
38 limitations of LEGO® SERIOUS PLAY® is the level of skills and experience
39
40 participants have with LEGO® as a toy. For example, participants who had played with
41
42 the bricks as a child were more experienced and tended to build more complex models.
43
44 This level of experience may unbalance the flow of the workshop process with people
45
46 finishing their models at different times. Hence the facilitator needs to be attentive,
47
48 especially in the skills building stage of the workshop. In our experience, one
49
50 participant who was at first reluctant to use the methodology (because he perceived it as
51
52 a child's toy) actually built a complex individual model with deep metaphorical
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3 meaning, which was eventually echoed in the models of other participants. Another
4
5 limitation mentioned earlier is the need for all participants to be at the same time and
6
7 place, which might be not possible for some research settings.
8
9

10 Although the methodology entails the same critiques and limitations of the
11
12 constructivist paradigm more generally (including lack of generalisability and
13
14 replicability of the data), the models from all workshops did share common similarities
15
16 in the description of the participants' experiences, which means that even in a relatively
17
18 small sample (such as this study with three LEGO® SERIOUS PLAY® workshops),
19
20 LEGO® SERIOUS PLAY® allowed rich data saturation to occur and enabled common
21
22 themes that may be compared to other WWOOF contexts to emerge. We were
23
24 concerned that constructing and explaining ideas metaphorically might be difficult for
25
26 participants for whom English is a second language. However, due to its hands-mind
27
28 connection, implementation of symbols and metaphors, and time given to construct a
29
30 model, LEGO® SERIOUS PLAY® has proven itself as a particularly useful method for
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32 investigating areas where the participants may be using more than one language in order
33
34 to try to communicate their experiences to the researcher.
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40 Overall, the structured workshop process allowed participants to test the ideas
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42 without fear of saying something wrong or upsetting relationships, especially when they
43
44 are living and working together at the farm. While participants assigned meaning to
45
46 their individual models, they also assigned meaning to their stories, and tacit
47
48 understandings that were taken-for-granted emerged. In sharing their experiences using
49
50 this method, participants exchanged advice, understandings and solutions for creating
51
52 an 'ideal' New Zealand WWOOFing experience.
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Conclusion

As a constructionist technique, LEGO® SERIOUS PLAY® offers a valuable methodology for researchers seeking deeper explorations of socially constructed tourism realities that are complex and sometimes sensitive (Wengel et al., 2016). As a visual method, LEGO® SERIOUS PLAY® provides the researcher with insights into participants' imaginations and conceptual understandings of situations and relationships. Also, LEGO® SERIOUS PLAY® offers researchers a tool that can overcome barriers from traditional talked based data collection methods. In our case study, LEGO® SERIOUS PLAY® offered opportunities for bringing different perspectives together to consider an issue with the aim of reciprocal learning, communication and developing solutions. According to Schön (1983), metaphors can play an integral role in answering research questions. In this research, metaphors were used to enrich explanations of what WWOOF means for the participants and to provide a pallet of meanings, definitions and possible solutions.

The LEGO® SERIOUS PLAY® process allows participants to tap into their creativity through the hands-mind connection which provides the researcher with an insight into their complex understandings and descriptions of the investigated tourism phenomena. Also, certain sensitive topics that participants might be reluctant to discuss, especially in front of others, can be explored in this creative, playful process. The process can reduce any possible conflict and negative emotions, for example, if a host is frustrated by guests who do not follow their rules, or if a guest wants to voice that their knowledge might be useful for the farmer to hear. In talk based methodologies this may need careful facilitation but with visuals, metaphors and crucially, through the framework of a 'playful approach' these interpersonal communications can be discussed in a constructive manner.

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3 Finally, for tourism researchers, LEGO® SERIOUS PLAY® facilitates a co-
4 creative, reflective thinking and learning framework for tackling understandings around
5 topics that may yield issues of power or sensitivity, or where there might be difficulty in
6 articulating tacit understandings of a tourism phenomenon. The tool enables participants
7 to apply metaphors to “generate an image for studying subject” (Morgan, 1980, p. 611).
8 By encouraging the use of metaphors to understand how participants make sense of
9 these images, the method could also be applied to look at stakeholder perspectives in the
10 tourism system to engender creative thinking around change for broader action planning
11 for sustainable tourism development.
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References

- Albers, P. C., & James, W. R. (1988). Travel photography: A methodological approach. *Annals of Tourism Research*, 15(1), 134-158. 10.1016/0160-7383(88)90076-X
- Ateljevic, I., Harris, C., Wilson, E., & Collins, F. L. (2005). Getting 'entangled': Reflexivity and the 'critical turn' in tourism studies. *Tourism Recreation Research*, 30(2), 9-21. <http://dx.doi.org/10.1080/02508281.2005.11081469>
- Ateljevic, I., Pritchard, A., & Morgan, N. (2007). *The critical turn in tourism studies: Innovative research methodologies*. Amsterdam, Netherlands: Elsevier.
- Barton, G., & James, A. (2017). Threshold Concepts, LEGO® SERIOUS PLAY® and whole systems thinking: towards a combined methodology. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*, 12(2), 249-271.
- Bell, Addy, Madew, & Kainulainen. (2012). Universities as agents in the empowerment of local communities in Germany, Finland and Russia. In L. Goodson & J. Phillimore (Eds.), *Community research for participation: From theory to method* (pp. 89-105): Policy Press.
- Bosco, F., & Herman, T. (2010). Focus groups as collaborative research performances. In D. DeLyser, S. Herbert, S. Aitken, M. Crang & L. McDowell (Eds.), *The SAGE Handbook of Qualitative Geography* (Vol. 220-236). New York, NY: Sage.
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford, United Kingdom: Oxford University Press.
- Buda, D., Martini, A., & Garcia, L.-M. (Eds.). (2017). *Qualitative Tourism Research*: SAGE Publications Inc.
- Campbell, R., Sefl, T., Wasco Sharon, M., & Ahrens Courtney, E. (2004). Doing community research without a community: Creating safe space for rape survivors. *American Journal of Community Psychology*, 33(3-4), 253-261. 10.1023/B:AJCP.0000027010.74708.38
- Carpenter, J. (2008). Metaphors in qualitative research: Shedding light or casting shadows? *Research in Nursing & Health*, 31(3), 274-282. <http://dx.doi.org/10.1002/nur.20253>
- Cattell, V. (2001). Poor people, poor places, and poor health: The mediating role of social networks and social capital. *Social Science & Medicine*, 52(10), 1501-1516. [https://doi.org/10.1016/S0277-9536\(00\)00259-8](https://doi.org/10.1016/S0277-9536(00)00259-8)
- Csikszentmihalyi. (2014). *Flow and the foundations of positive psychology: The collected works of Mihaly Csikszentmihalyi*: Springer Netherlands.
- Csikszentmihalyi, M. (1991). *Flow: The psychology of optimal experience*. New York, NY: Harper Perennial.
- Decrop, A. (1999). Triangulation in qualitative tourism research. *Tourism Management*, 20(1), 157-161. [https://doi.org/10.1016/S0261-5177\(98\)00102-2](https://doi.org/10.1016/S0261-5177(98)00102-2)
- Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: SAGE.
- Esterberg, K. G. (2002). *Qualitative methods in social research*: McGraw-Hill.
- Fein, G. (1987). Pretend play: Creativity and consciousness. In D. Görlitz & W. J. F. (Eds.), *Curiosity imagination and play*. Hillsdale, N.J.: Lawrence Erlbaum.
- Finn, M., Walton, M., & Elliott-White, M. (2000). *Tourism and leisure research methods: Data collection, analysis, and interpretation*: Pearson Education.

- 1
2
3 Fletcher, G., Greenhill, A., Griffiths, M., Holmes, K., & McLean, R. (2016). Creatively
4 prototyping the future high street. *Production Planning & Control*, 27(6), 477-
5 489. 10.1080/09537287.2016.1147094
6
7 Gauntlett, D. (2005). Using Creative Visual Research Methods to Understand Media
8 Audiences. *Medien Pädagogik*, 9
9 <http://dx.doi.org/10.21240/mpaed/09/2005.03.29.X>
10
11 Gauntlett, D. (2007). *Creative explorations: New approaches to identities and*
12 *audiences*. London, United Kingdom: Routledge.
13
14 Gauntlett, D., & Holzwarth, P. (2006). Creative and visual methods for exploring
15 identities. *Visual Studies*, 21(1), 82-91.
16 <http://dx.doi.org/10.1080/14725860600613261>
17
18 Gee, J. P. (2007). *What video games have to teach us about learning and literacy* (Rev.
19 and updated ed.). New York, NY: Palgrave Macmillan.
20
21 Goulding, A. (1997). Joking, being aggressive and shutting people up: the use of focus
22 groups in LIS research. *Education for Information* 15(4), 331-341. 10.3233/EFI-
23 1997-15406
24
25 Greenwald, A. G., Poehlman, T. A., Uhlmann, E. L., & Banaji, M. R. (2009).
26 Understanding and using the implicit association test: III. Meta-analysis of
27 predictive validity. *Journal of Personality and Social Psychology*, 97(1), 17-41.
28 <https://doi.org/10.1037/a0015575>
29
30 Hadida, A. L. (2013). Let your hands do the thinking! *Strategic Direction*, 29(2), 3-5.
31 10.1108/02580541311297976
32
33 Harn, P.-L., & Hsiao, C.-C. (2018). A preliminary study on LEGO®-based workplace
34 stress reduction with Six Bricks and LEGO® SERIOUS PLAY® in Taiwan.
35 *World Journal of Research and Review*, 6(1), 64-67.
36
37 Hart, A., & Wolff, D. (2006). Developing local 'communities of practice' through local
38 community – university partnerships. *Planning Practice & Research*, 21(1),
39 121-138. 10.1080/02697450600901616
40
41 Hinthorne, L. L., & Schneider, K. (2012). Playing with purpose: using serious play to
42 enhance participatory development communication. *International Journal of*
43 *Communication*, 6(1), 2801-2824.
44
45 Hughes, J. A., & Sharrock, W. W. (1997). *The philosophy of social research*: Longman.
46
47 Hunter, W. C. (2012). Projected destination image: A visual analysis of Seoul. *Tourism*
48 *Geographies*, 14(3), 419-443. 10.1080/14616688.2011.613407
49
50 James, A. (2013a). Lego Serious Play: A three-dimensional approach to learning
51 development. *Journal of Learning Development in Higher Education*, 6.
52 Retrieved from [http://seriousplaypro.com/wp-content/uploads/2014/11/208-](http://seriousplaypro.com/wp-content/uploads/2014/11/208-1112-1-PB.pdf)
53 [1112-1-PB.pdf](http://seriousplaypro.com/wp-content/uploads/2014/11/208-1112-1-PB.pdf)
54
55 James, A. (2013b). The serious use of play and metaphor: Legos and labyrinths.
56 *International Journal of Adult Vocational Education and Technology*, 4(3), 1-
57 12. 10.4018/ijavet.2013070101
58
59 James, A. (2015). Learning in three dimensions: Using Lego Serious Play for creative
60 and critical reflection across time and space. In P. C. Layne & P. Lake (Eds.),
Global Innovation of Teaching and Learning in Higher Education: Transgressing Boundaries (pp. 275-294). Cham: Springer International Publishing.
- Jennings, G. (2010). *Tourism research* (2nd ed.). Milton, Qld., Australia: John Wiley & Sons.
- Kane, P. (2004). *The play ethic: A manifesto for a different way of living*. London, United Kingdom: Macmillan.

- 1
2
3 Kangas, S., Warren, N. A., & Byrne, M. M. (1998). Metaphor: The language of nursing
4 researchers. *Nursing Research*, 47(3), 190-193.
- 5 Kristiansen, P., & Rasmussen, R. (2014). *Building a better business using the Lego*
6 *Serious Play Method*. Hoboken, NJ: Wiley.
- 7 Kurkovsky, S. (Teaching Software Engineering with Lego Serious Play (pp. 213-218):
8 ACM. 10.1145/2729094.2742604
- 9 Lakoff, G., & Johnson, M. (2003). *Metaphors we live by*. Chicago, IL: University of
10 Chicago Press.
- 11 LEGO® SERIOUS PLAY®. (2006). *The science of LEGO® SERIOUS PLAY®*
12 Enfield, CT: executive discovery llc.
- 13 Liamputtong, P. (2007). *Researching the vulnerable: A guide to sensitive research*
14 *methods*. London, United Kingdom: SAGE.
- 15 Mishler, E. (1991). *Research Interviewing: Context and narrative*. Cambridge, MA:.
16 Harvard University Press.
- 17 Montesa-Andres, J., Garrigós-Simón, F., & Narangajavana, Y. (2014). A Proposal for
18 Using Lego Serious Play in Education. In M. Peris-Ortiz, I. Pechuán & F.
19 Garrigós-Simón (Eds.), *Innovation and Teaching Technologies* (pp. 99-109).
20 New York: Springer.
- 21 Morgan, G. (1980). Paradigms, metaphors, and puzzle solving in organization theory.
22 *Administrative Science Quarterly*, 25(4), 605-622.
23 <http://dx.doi.org/10.2307/2392283>
- 24 Mueller, J. S., Melwani, S., & Goncalo, J. A. (2012). The bias against creativity.
25 *Psychological Science*, 23(1), 13-17. <https://doi.org/10.1177/0956797611421018>
- 26 Nolan, S. (2010). Physical metaphorical modelling with lego as a technology for
27 collaborative personalised learning. In J. O'Donoghue (Ed.), *Technology-*
28 *supported environments for personalized learning: Methods and case studies*
29 (pp. 364-385). Hershey, PA: Information Science Reference.
- 30 Nyaupane, G. P., Lew, A. A., & Tatsugawa, K. (2014). Perceptions of trekking tourism
31 and social and environmental change in Nepal's Himalayas. *Tourism*
32 *Geographies*, 16(3), 415-437. 10.1080/14616688.2014.942233
- 33 Oliver, D., & Roos, J. (2007). Beyond text: Constructing organizational identity
34 multimodally. *British Journal of Management*, 18(4), 342-358.
35 <http://dx.doi.org/10.1111/j.1467-8551.2007.00516.x>
- 36 Papert, S. (1999, March 29). Child psychologist Jean Piaget. *Time*, p. 105. Retrieved
37 from <http://content.time.com/time/magazine/article/0,9171,990617,00.html>
- 38 Papert, S., & Harel, I. (1991). Situating constructionism. In S. Papert & I. Harel (Eds.),
39 *Constructionism*. Retrieved from
40 <http://www.papert.org/articles/SituatingConstructionism.html>
- 41 Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory*
42 *and practice* (4th ed.). Thousand Oaks, CA: SAGE Publications.
- 43 Peabody, M. A., & Noyes, S. (2017). Reflective boot camp: adapting LEGO®
44 SERIOUS PLAY® in higher education. *Reflective Practice*, 18(2), 232-243.
45 10.1080/14623943.2016.1268117
- 46 Pernecky, T. (2012). Constructionism: Critical Pointers for Tourism Studies. *Annals of*
47 *Tourism Research*, 39(2), 1116-1137.
48 <http://dx.doi.org/10.1016/j.annals.2011.12.010>
- 49 Peter, T. B., Jacobs, C. D., & Roos, J. (2005). From metaphor to practice: In the crafting
50 of strategy. *Journal of Management Inquiry*, 14(1), 78-94.
- 51 Phillimore, J., & Goodson, L. (2004). *Qualitative research in tourism: Ontologies,*
52 *epistemologies and methodologies*: Routledge.
- 53
54
55
56
57
58
59
60

- 1
2
3 Piaget, J. (1955). *The construction of reality in the child*. London, United Kingdom:
4 Routledge.
- 5 Pickard, A. J. (2007). *Research methods in information*. London, United Kingdom:
6 Facet.
- 7
8 Pritchard, A., & Morgan, N. (2003). Mythic geographies of representation and identity:
9 Contemporary postcards of Wales. *Journal of Tourism and Cultural Change*,
10 1(2), 111-130. 10.1080/14766820308668163
- 11 Rieber, L. P. (1996). Seriously considering play: Designing interactive learning
12 environments based on the blending of microworlds, simulations, and games.
13 *Educational Technology Research and Development*, 44(2), 43-58.
14 <http://dx.doi.org/10.1007/bf02300540>
- 15
16 Riley, R. W., & Love, L. L. (2000). The state of qualitative tourism research. *Annals of*
17 *Tourism Research*, 27(1), 164-187. [https://doi.org/10.1016/S0160-](https://doi.org/10.1016/S0160-7383(99)00068-7)
18 [7383\(99\)00068-7](https://doi.org/10.1016/S0160-7383(99)00068-7)
- 19
20 Scarles, C. (2004). Mediating landscapes: The processes and practices of image
21 construction in tourist brochures of Scotland. *Tourist Studies*, 4(1), 43-67.
22 10.1177/1468797604053078
- 23 Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*.
24 New York, NY: Basic Books.
- 25
26 Terr, L. (2000). *Beyond love and work: Why adults need to play*. New York, NY:
27 Touchstone Book.
- 28
29 Trebbin, J. (2016). *Let it click with the brick*. Berlin School of Economics and Law,
30 Berlin.
- 31
32 Tseng, W.-C. (2017). An intervention using LEGO® SERIOUS PLAY® on fostering
33 narrative identity among economically disadvantaged college students in
34 Taiwan. *Journal of College Student Development*, 58(2), 264-282. DOI:
35 10.1353/csd.2017.0019
- 36
37 Tuominen, P., & Ascensão, M. (2016). The hotel of tomorrow: A service design
38 approach. *Journal of Vacation Marketing*, 22(3), 279-292.
39 10.1177/1356766716637102
- 40
41 Uzzell, D. (1984). An alternative structuralist approach to the psychology of tourism
42 marketing. *Annals of Tourism Research*, 11(1), 79-99.
43 [https://doi.org/10.1016/0160-7383\(84\)90097-5](https://doi.org/10.1016/0160-7383(84)90097-5)
- 44
45 Vygotskii, L. S., & Cole, M. (1978). *Mind in society: The development of higher*
46 *psychological processes*. Cambridge, MA: Harvard University Press.
- 47
48 Wengel, Y., McIntosh, A. J., & Cockburn-Wooten, C. (2016). Constructing tourism
49 realities through LEGO® SERIOUS PLAY®. *Annals of Tourism Research*, 56,
50 161-163. <http://dx.doi.org/10.1016/j.annals.2015.11.012>
- 51
52
53
54
55
56
57
58
59
60 Wibeck, V., Dahlgren, M. A., & Öberg, G. (2007). Learning in focus groups: an
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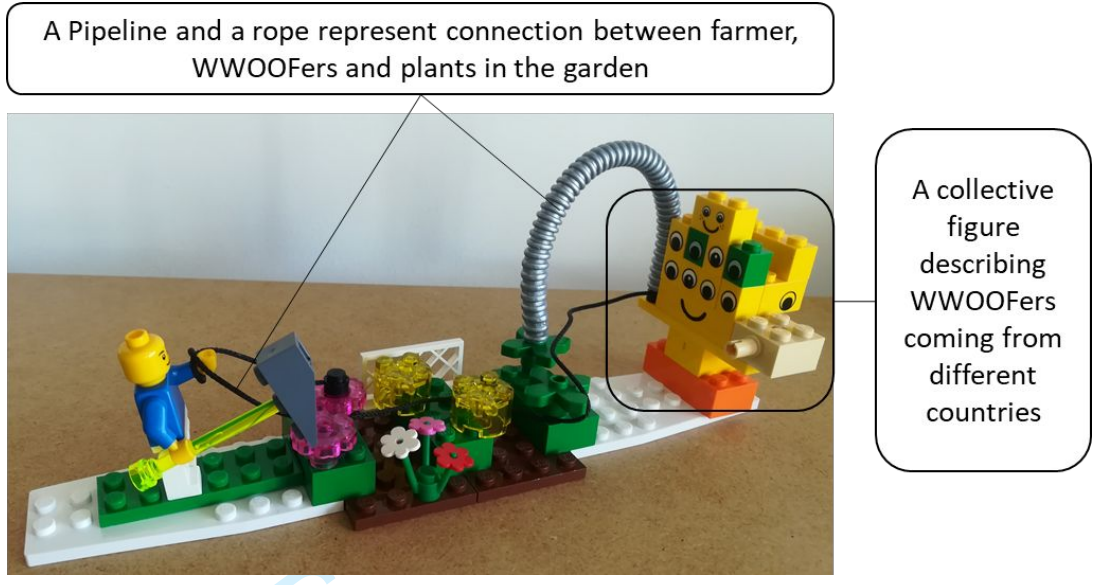
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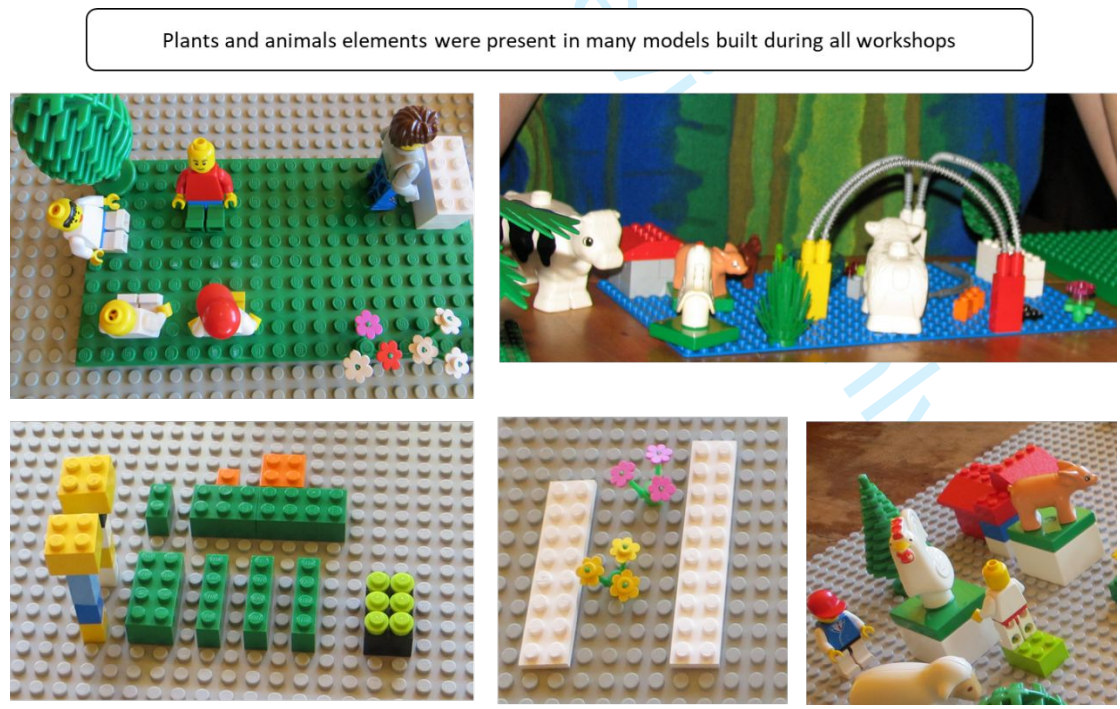
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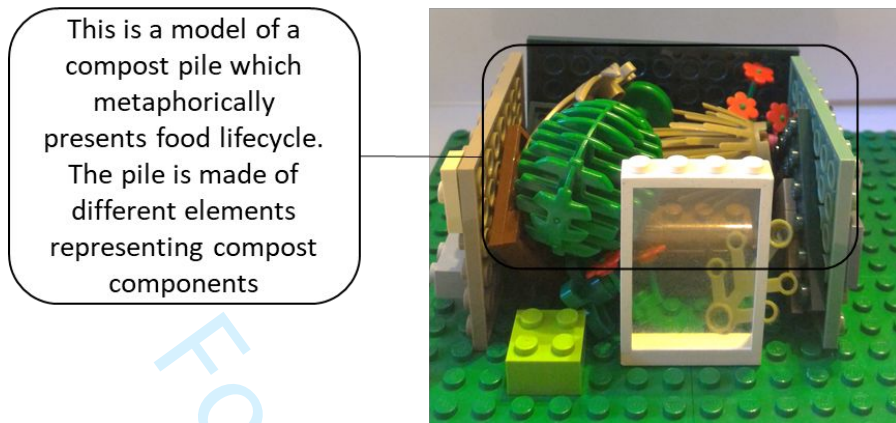


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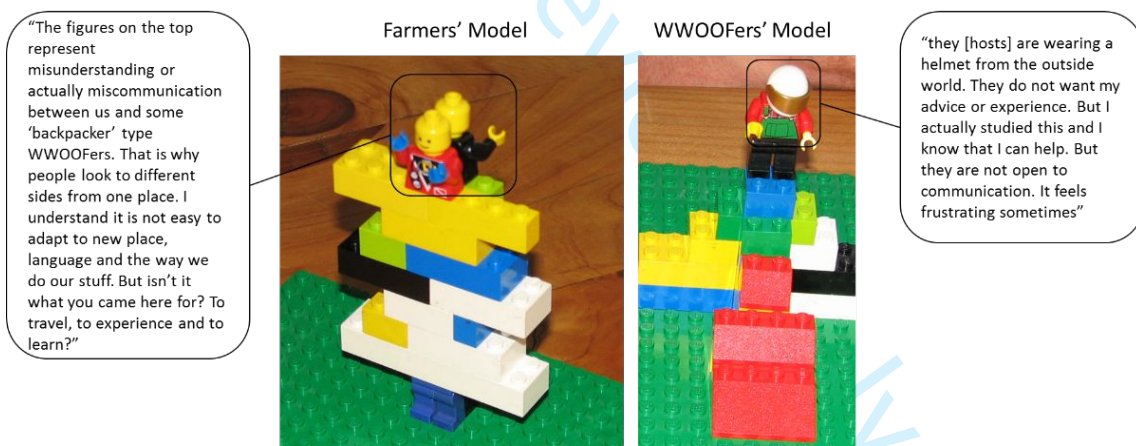


Figure 6. Individual Models, Mary (Farmer, Farm 1) and Lauren (Volunteer, Farm 3): Communication Challenges Models. Source: Authors.

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The host is surrounded by coloured bricks which represent volunteers coming from different countries

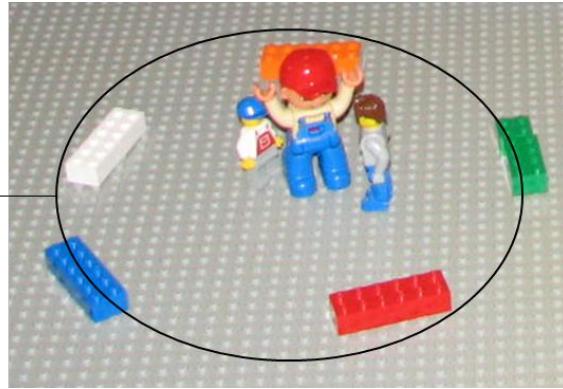
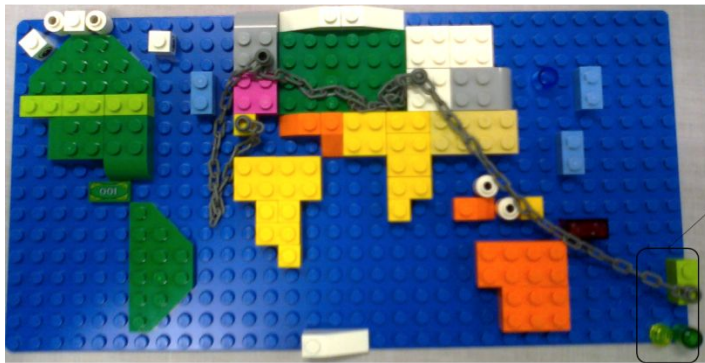


Figure 7. Individual Model, Mike (Farmer, Farm 2): “The World is Coming to Me” Model.

Source: Authors.



“This is me living here in New Zealand now, and WWOOFers coming to me from everywhere, the chains represent connection between us. We are alike. They travel and they bring their stories with them. They are the best tales I heard and it all reminds me of my youth, when I had my backpack and travelled around the world. I was young and eager to get new experiences, just like this guys who come to WWOOF to New Zealand”

Figure 8. Individual Model, Charlotte (Farmer, Farm 3): Positive WWOOFing Experience.

Source: Authors.

Table 1 LSP Workshops and Participants. Source: Authors.

Participant Number	Name*	Country of Origin	Farmer/ WWOOFer	Workshop duration
Workshop 1 at Farm 1				
Location: North Island, New Zealand				
Farm Type: private, no commercial activity				
1	Xavier	Spain	WWOOFer	04:12 hrs
2	Steffen	Germany	WWOOFer	
3	Yana*	Russia	WWOOFer	
4	Mary	New Zealand	Farmer	
5	James	New Zealand	Farmer	
Workshop 1 at Farm 2				
Location: North Island, New Zealand				
Farm Type: private, commercial activity-sheep grazing				
1	Danny	Mexico	WWOOFer	05:03 hrs
2	Yana**	Russia	WWOOFer	
3	Linley	New Zealand	Farmer	
4	Mike	New Zealand	Farmer	
5	Chloe	New Zealand	Farmer	
6	Caleb	New Zealand	Farmer	
Workshop 1 at Farm 3				
Location: North Island, New Zealand				
Farm Type: private, no commercial activity				
1	Samantha	USA	WWOOFer	03:30 hrs
2	Lauren	USA	WWOOFer	
3	Yana*	Russia	WWOOFer	
4	Charlotte	New Zealand	Farmer	

* Original names have been changed.

** Principle author facilitated the workshop process and additionally participated as a WWOOFer.