# Special Appendix - Participant Vignettes

The following vignettes have been extracted from video recordings of screen capture files and for some vignettes, where possible or profitable, augmented with descriptions of physical interactions taken from 360 camera data. The process is described in more detail in Chapter 3.

## Table of Contents

# Summary of data cited in Chapters linked to evidence

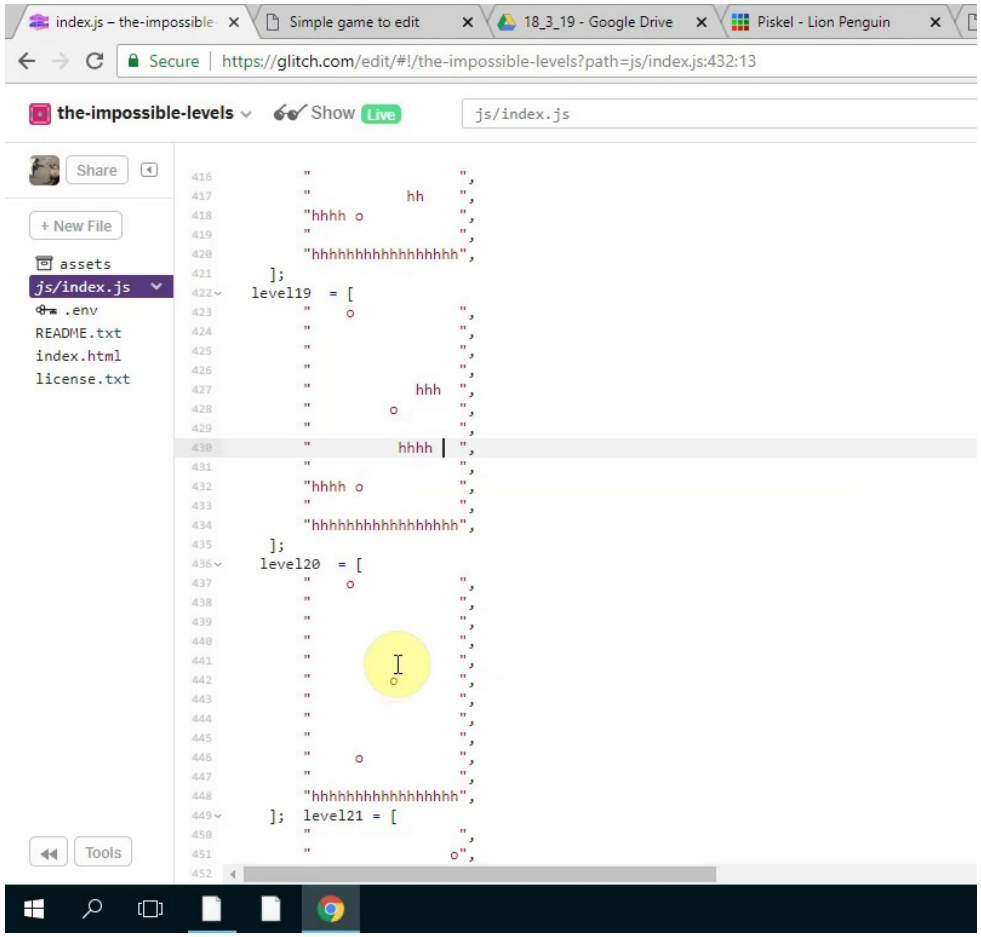
## Chapter Six

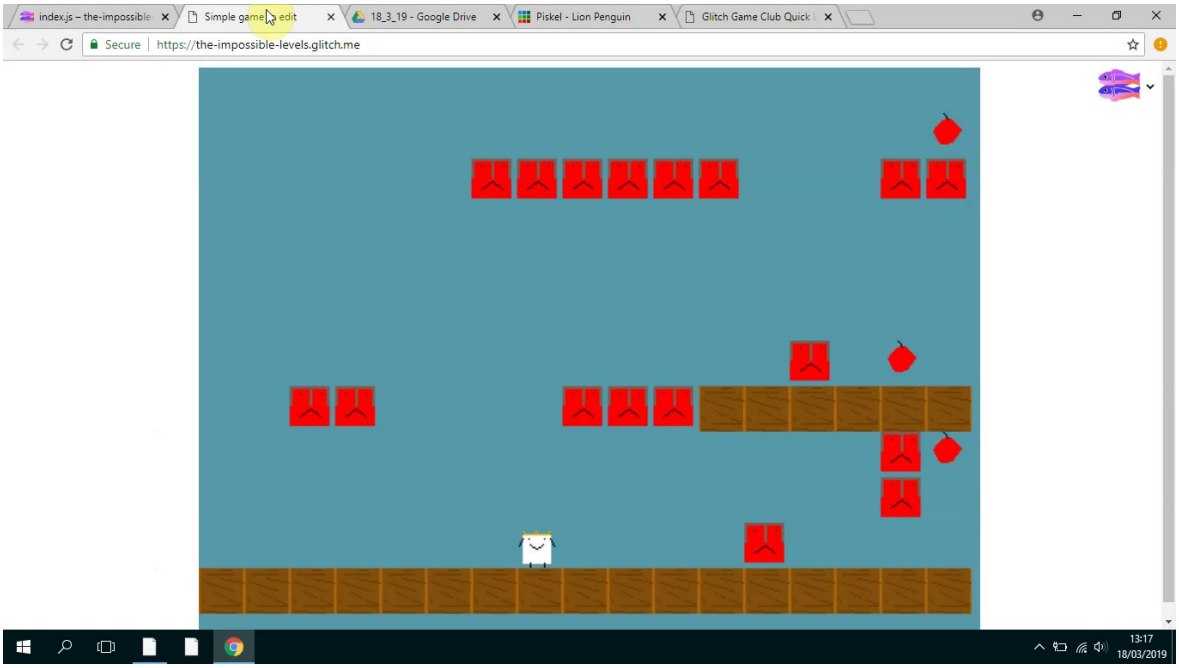
See also this table - https://docs.google.com/document/d/1Ce2cYIYnFCd9GM8zRntBd7lrud-dMbbrtgEQMoGNRmE/edit?tab=t.0

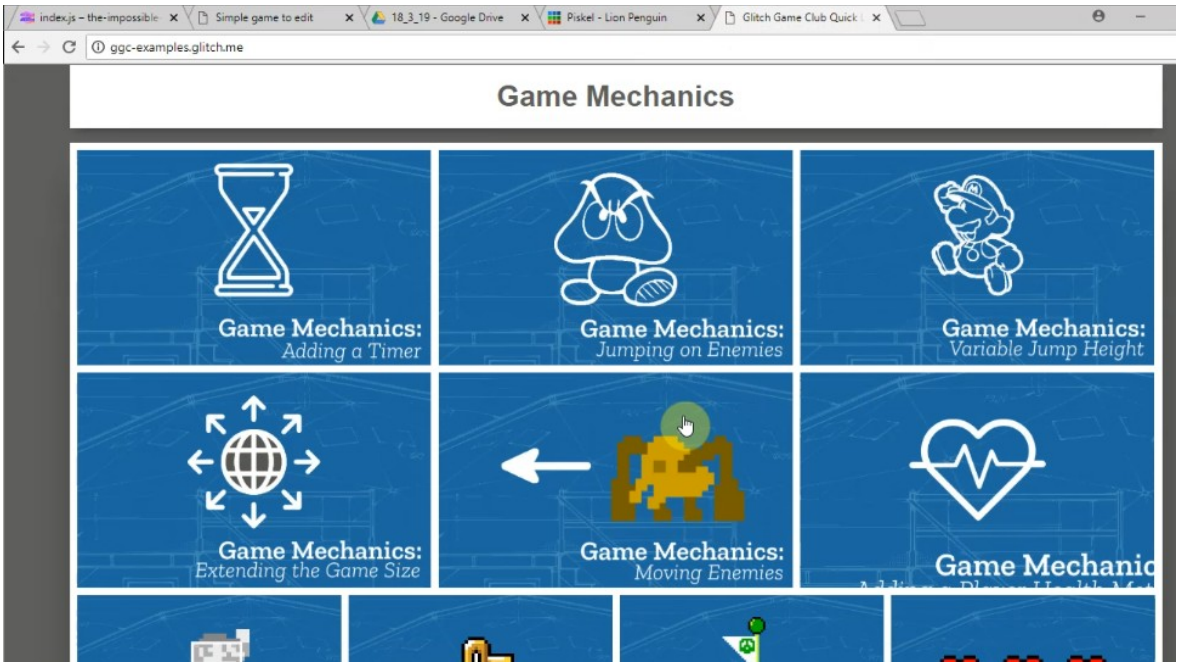
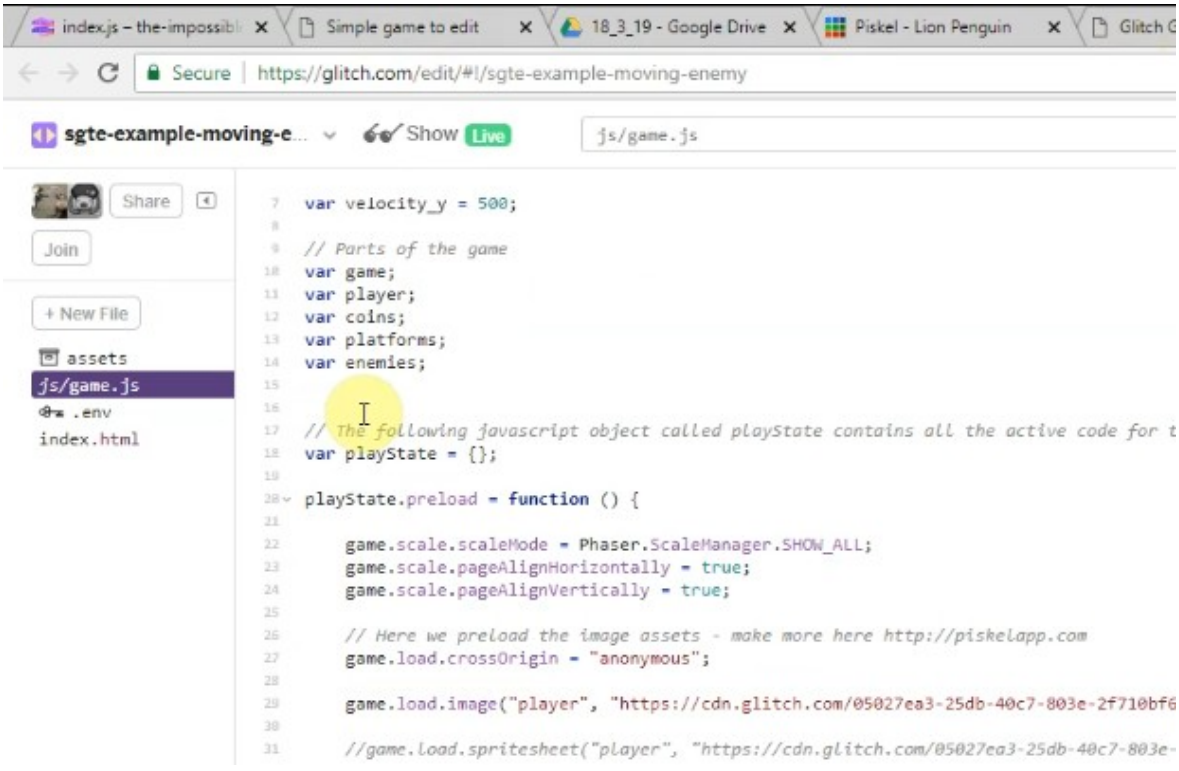
### Personal appropriation

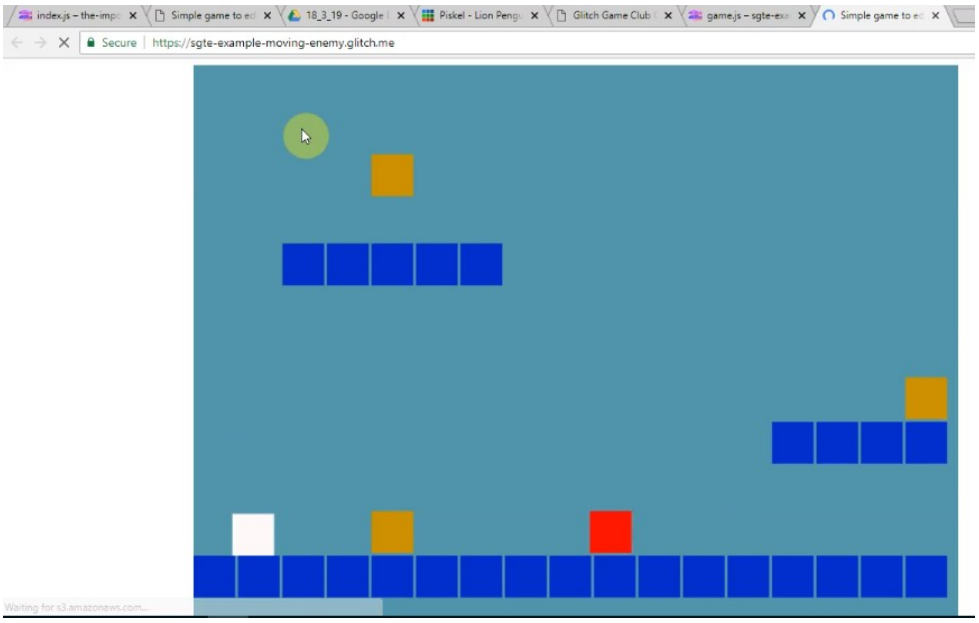
Fluidity of operations – Fluidity of operations v1.3 | V1.4

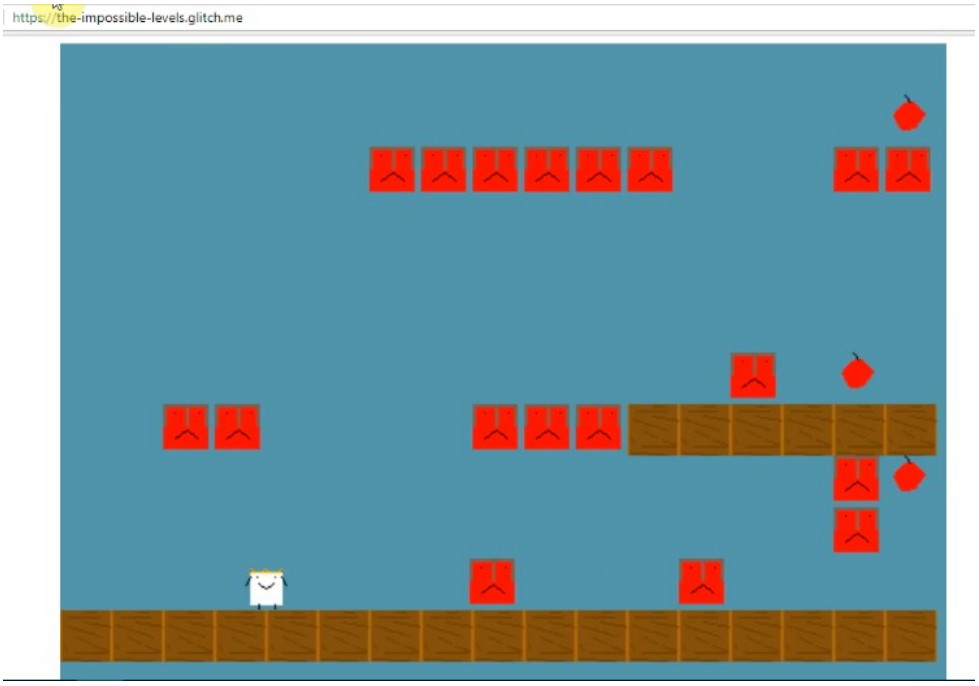
# Vignette 1: An extract of Toby and Veronica's coding activity

| Key | Dialogue | Activity |
|---|---|---|
| V1.1 | | Toby (T) returns to his computer. Open on the screen is a web browser with several tabs opened. The active tab shows the code view of Te's project in the code playground glitch.com. Toby has extended the starting template of the game from its initial three levels to over twenty. |
| 2 |  | |
| v1.3 | Mick makes an announcement to all participants: I don't really have much to say now apart from we've got this one final making session next and then, if you can make it, the Monday after we can play our games and we can share them with students. We can make the students frustrated when they can't beat our games. It's usually quite fun. So, if we can do that - same time next week let me know.<br>So, we'll keep trying to help you and yes good luck everyone! | As Mick is speaking Toby clicks on another browser tab to see a live preview of his game in a web page. He plays through the many different levels of his game showing fluidity and skill. |

| | | |
|---|---|---|
| V1.4 |  | |
| 5 | Veronica: What was that website called?<br>Toby: Glitch.<br>Veronica: With the key on?<br>Toby: The what?<br>Veronica: We're trying to work out how to make the game work. How to get that key and make it unlock that door. | Toby is still playtesting his game and tries to chip in to help Veronica who is seated next to him.<br><br>Mick also hears Veronica's request and attends to demonstrate how to access two different forms of help in the form of code examples and step by step tutorials. |
| 6 |  | |
| 7 | Mick: So we've got two ones. Here's the tutorial and there's the examples of code so you can compare what you are doing and see where the new code should be placed. | Mick shows different sources of documentation on the screen. The tutorials mentioned at https://en.flossmanuals.net/phaser-game-making-in-glitch/_full/<br>And a menu linking to code snippet examples at https://ggc-examples.glitch.me<br><br>Meanwhile Toby is playtesting his game. |
| 8 | | Toby finishes playtesting and navigates to the page containing a menu of game design patterns at https://ggc-examples.glitch.me |

| | | |
|---|---|---|
| | | He clicks on the image of Game Mechanics - Moving Enemies |
| 9 |  | |
| 10 | | This opens up a code project using the same code base as Toby's existing project.<br><br>He takes time to examine the start of code carefully. |
| 11 |  | |
| 12 | | Toby then clicks on the tab of his own game code and examines how it is different. He deletes a redundant line in his code.<br><br>He returns to the example code and scrolls down and examines the code needed to patch into his game. He hovers over it. He selects half of it and |

| | | |
|---|---|---|
| | | then hesitates. He then rapidly clicks on the Show Live button. |
| 13 |  | |
| 14 | | When Toby clicks on Show Live this opens up a live preview of the example code in a new browser. Toby plays this example game and avoids the moving red block as he navigates around the screen away from and back into the danger zone of the patrolling enemy (red square). |
| 15 |  | |
| 16 | | When Toby dies in the game he navigates away from this screen and returns to copy the full code needed from the example. He then navigates to the same section of his own code project template. He seems to check this, as indicated by mouse movements checking what was above and below the space he has created. He then pastes the code into this space and then navigates to the live preview of his game to check the result.<br><br>The game now shows a new enemy moving back and forth. Toby check his game by playtesting it and struggles to get past this new enemy, failing multiple times. |

| | | |
|---|---|---|
| 17 |  | |
| 18 | Helper1: How is your game going? Have you got anything else you want to add to it?<br><br>Toby: I'm just adding this moving enemy. It's so much harder. (laughs)<br><br>Helper1: You've got a lot of enemies going on here. What is it? Is it a sheep?<br><br>Toby: I've no idea my cousin designed it?<br><br>Helper: Has it got a crown on?<br><br>Toby: I think it does. My cousin designed it? I'm not that sure. (both laugh) | Toby is approached by a student helper.<br><br>As they begin to talk. Toby's grandmother Pearl turns her attention away from her and Clive's screen and looks over and looks at what is happening on the Toby's screen and at the helper. |

| | | |
|---|---|---|
| 19 |  | |
| 20 | Helper1: Is there anything else you want to add in this session?<br><br>Toby: Well I'm just trying to get this to work. I'm going to try to get it in the right position.<br><br>Pearl: (talking over Toby) Oh I see you've got one of those things to move.<br><br>Toby: I'm just going to check what it's like on the second level if I can get to it.<br><br>Helper1: What level is this? Level One? Is yours the one where level one is harder than level three?<br><br>Toby: Yep! (both laugh)<br><br>Helper1: I like that. | Toby continues play testing as Helper1 and Pearl lean in and watch him play and comment . |

## Vignette 1 Analysis

**NOTE - Also add Interview data?**

In vignette 4.x, an example of such an operation is Toby's quick navigation between different areas of the game code, the game preview window and other sources of documentation. In contrast, some tasks are new to Toby and are performed more hesitantly. In the vignette's description, it can be observed that at times Toby is careful and hesitant, checking and rechecking the process of copying and pasting new code into his game from the code example of a design pattern he has chosen. This

can be compared to the process of altering layout of games

The real or perceived audience of the completed games is relevant when considering the motivating objectives of participants at this level of activity. The explicit target audience were students and staff in the Manchester Met Brooks building at a final showcase event where the created games were shared in arcade cabinets. An additional audience are friends and family who can be send the games to play online. However, a more immediate and tangible audience for the evolving games were peer game makers and facilitators during the making sessions.

There are two main GDPs addressed in the vignettes. One alters the level deigns, an inbuilt pattern to the template explored in C1. The other is a new feature, not included in the template which Toby must implement using external help, explored in C3.

Activity was driven by learners motivations to implement varid game design patterns, requesting help and then implement code structures based around altering or adding new features to the game using tools available in the learning environment.

## Part Two - Toby and Bertie and propagation of GDPs.

Bertie: Why's that enemy in every level
Toby: He's not.
Bertie: Can you show me how you add more levels on to yours?
Toby: Yeah sure.
Pause
Toby: I'm just going to have one go of beating this (refering to his own game which he is playtesing). It's 21 levels in it. So .. Yeeeeah.
Pause
Bertie: It's like parkours in Minecraft but timed. It's like playing the game Wipeout. Have you ever played Wipeout?
Toby: Er not really.
Bertie: Or seen it?
Bertie: That's like my second level.
Toby: Ah so hard (Toby fails at a high level on his game and starts to move off)
Toby: (To someone else calling for attention) No I'm helping Bertie.
_(Toby then follows Bertie to his workstation to help him implement more levels.)_

This is explore in Chapter 6.

Parkour in Minecraft and Wipe out are both game experiences whose main gameplay mechanic is about judging jumps to landing accurately. Bertie makes links to his existing experience of games making comparisons between Toby's game, commercial games and his own. In doing so Bertie is able to show his knowledge and analysis of gameplay patterns to this community. While his motivation is not clear, one interpretation is that Bertie could be making this contribution not only to openly share experience but also as a offering in return for his request for help which he has just made.

When Toby moves to Bertie's game he playtests it and then looks at the code. He notes that Bertie has added a variable for a fourth level but then goes on to demonstrate to to add an array representing the next level, and a conditional statement to select level 4 when level 3 is completed. At

Toby uses the keyboard completes this work, Bertie reads aloud the code which is being typed in by Toby.

A different pattern of propagation was that participants notice and comment on a game element or pattern during during playtesting, and then to use supporting resources or facilitator help to implement it. A less frequent pattern involved participants' diligent and deliberate use of supporting resources to identify and implement features without peer influence.

# Vignette 2 – Suzanne and Olivia

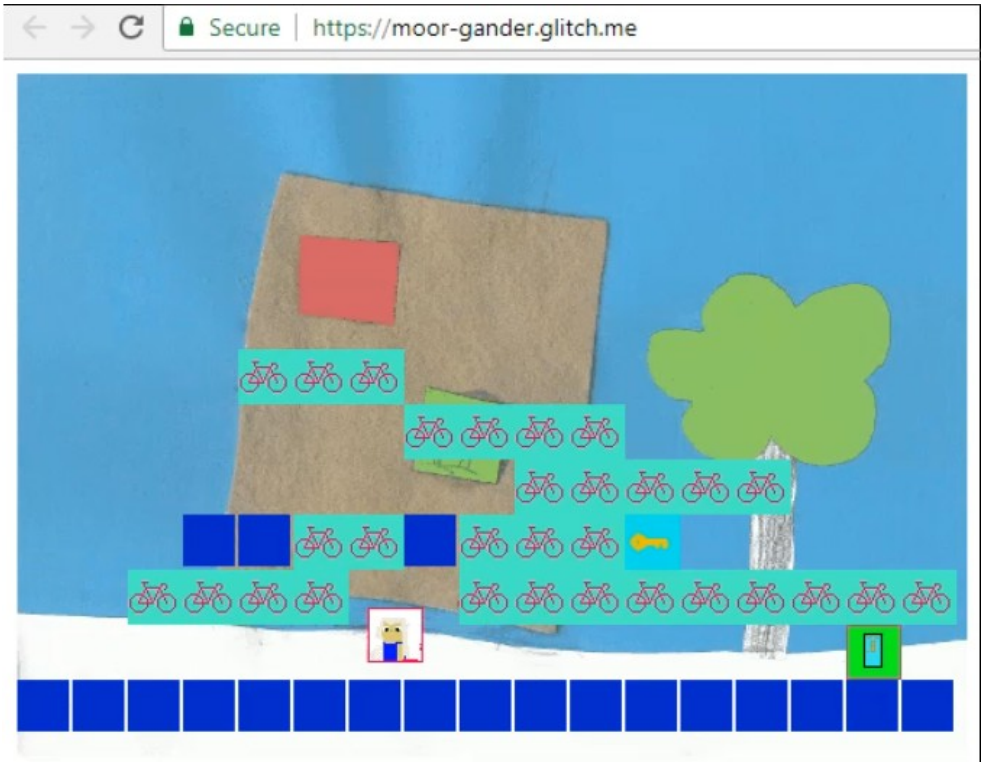
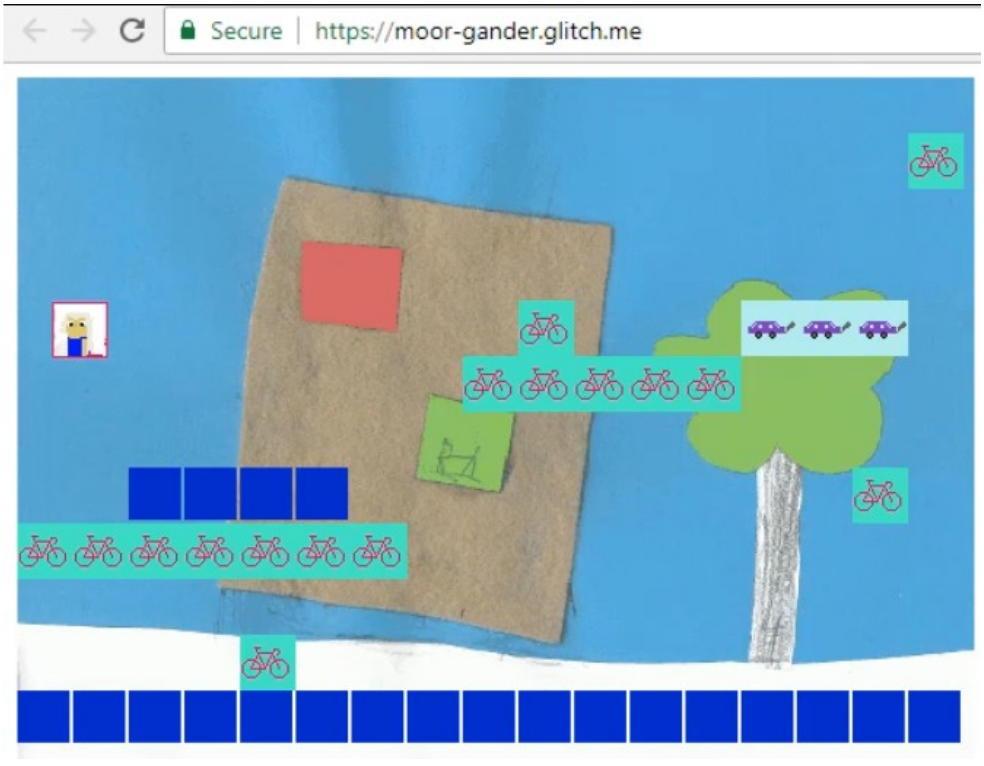
Date .11 3 19

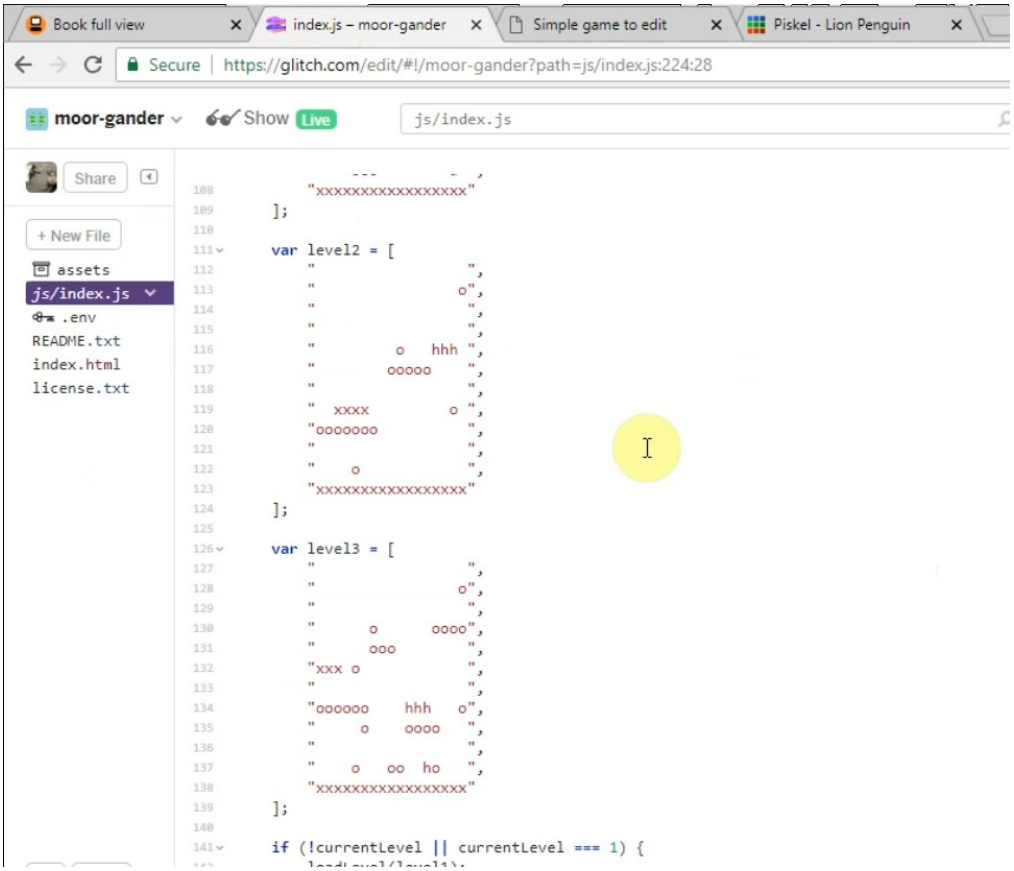
## Context

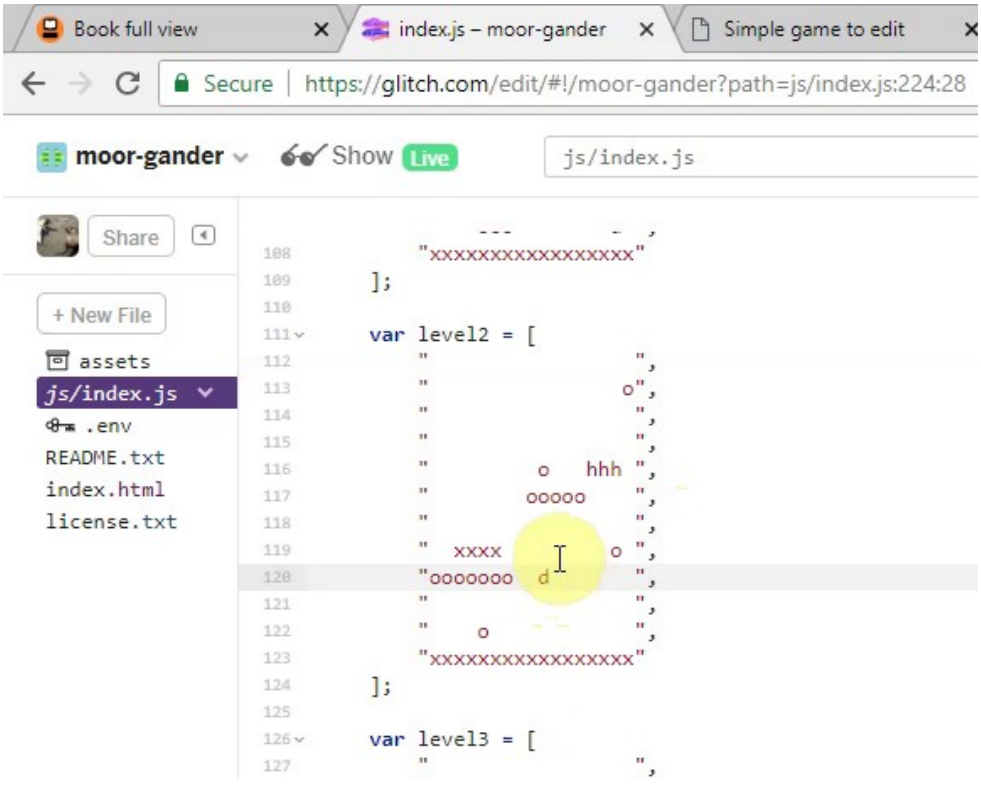
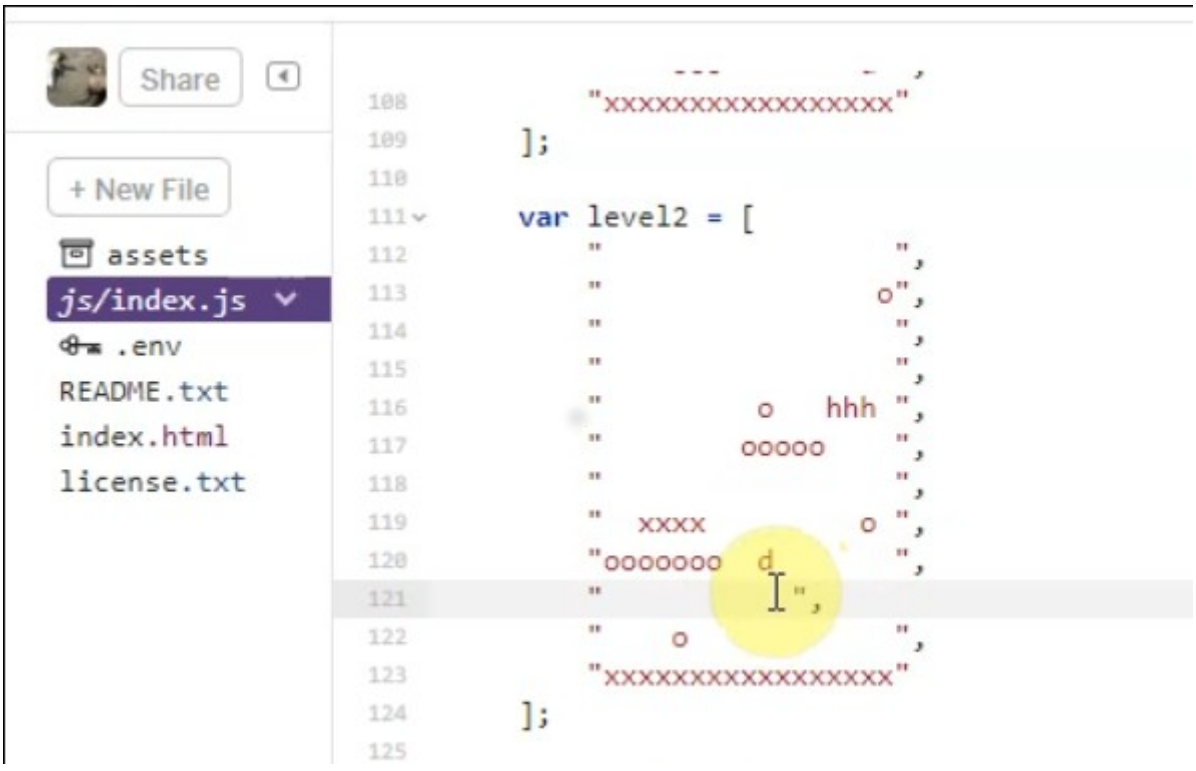
For the previous 5 mins the parent Suzanne and child Olivia had a shared objective of fixing a glitch in the software which prevents their wider motivation of adding the game play design pattern of adding levels to the game. Suzanne has been trying many different things and changing things in the code while Olivia has been expressing boredom. In response Suzanna has expressed frustration. This vignette begins with Suzanna suggesting that Olivia asks facilitator for help to resolve the coding glitch.

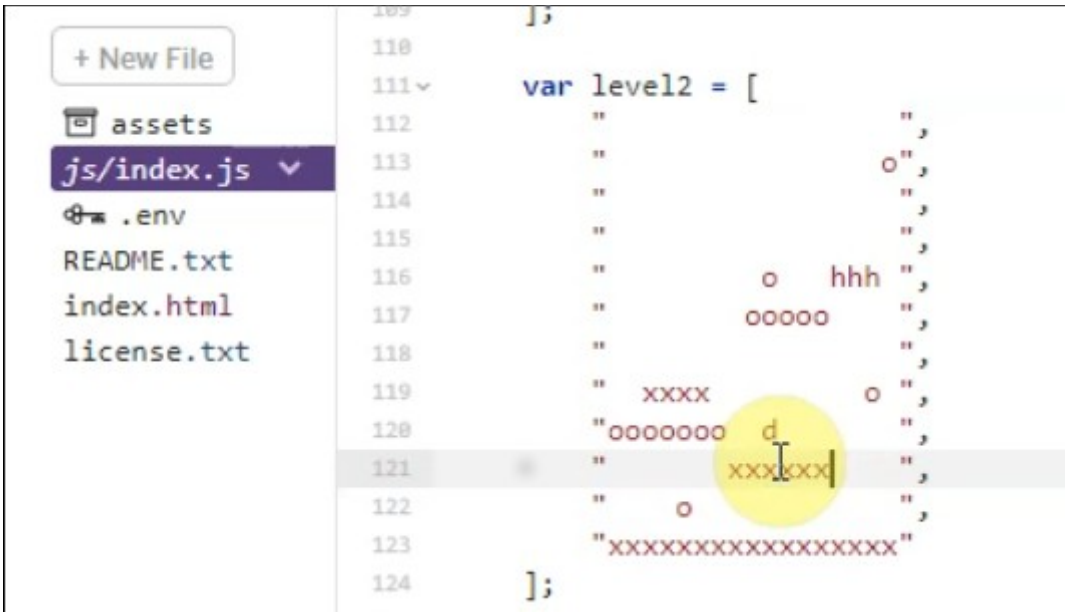
## Transcript and Activity Log

| Key | Dialogue | Activity |
|---|---|---|
| 1 | Suzanna: You can ask him for help again if you want.<br>Olivia: Why<br>Suzanna: Cos I can't do it.<br>Olivia: OK. | Suzanna is using laptop. T is nearby |
| | Exchange follows with Mick and Suzanna- Problems solving using debugging methods and exchange of information about sequencing of variables. Ends after several minutes with game exhibiting desired behaviour of moving to the next level after collecting a key.<br><br>The exchange contains good troubleshooting of sequencing<br>And uses the debugger as a tool.<br>A fuller transcript is available.<br><br>One error is due to different versions having different state names. So documentation is out of date. | |
| 3 | Mick: Great | (On Screen) Platform game bug is resolved shown by game progressing to the next level. |
| 4 | Suzanna: Thank you.<br>Did you see Olivia? | (Off Screen) Mick cedes computer to Suzanna. |
| 5 | Olivia: Did it do it? | |
| 6 | Suzanna: Yes | |
| 7 | Suzanna: I'll reload it. Here you go | Suzanna presses refresh key to reload the game |
| 8 | Olivia: Laughs | Olivia moves laptop to point towards her and takes over using the keyboard |

| | | |
|---|---|---|
| 9 |  | |
| 10 | Olivia: (Makes excited cat noise) | Olivia is using arrow keys to control game and checks desired behaviour of player progressing to level 2 is working. T progresses to level 2 where there is not a door or key. |
| 11 |  | |
| 12 | Olivia: We need a door in this one.<br>I want to make more levels now.<br>So you can put lots of doors and lots of keys<br><br>(in a rhythmic voice)<br>Key Door Key Door Key Door | Suzanna moves computer back to take over the use of the keyboard. She changes browser tab and navigates to the section of the code which deals with the design of levels and placement of different game components. |

| | | |
|---|---|---|
| | (in a sing song voice)<br>Key Door Level. Key Door Level, Key Door Level | |
| 13 |  | |
| 14 | S. Well. Where are you going to put your door in level two? Do you want to change the layout at all? | Suzanna gestures to screen |
| 15 | Olivia: What's door? | Suzanna doesn't move laptop but gets closer to take over keyboard |
| 16 | Suzanna: d | |
| 17 | Olivia: Ok | |
| 18 | Olivia: d . Door right there. | Inserts a "d" in an array high above a platform |

| | | |
|---|---|---|
| 19 |  | |
| 20 | Suzanna And where's the key going?<br>Must be quite hard through get to that door<br>Key is K | |
| 21 | Olivia : (Calmly) Ok just let me do something | Olivia starts to delete multiple characters on a line |
| 22 | Suzanna (Alarmed) What are you doing? | |
| 23 | Olivia: Back. You'll see!<br>Olivia: Ah yes | |
| 24 |  | |

| | | |
|---|---|---|
| 25 | Suzanna What are you.. Ah you're making a platform. I see. | Olivia starts to add x's to replace the spaces she has deleted |
| 26 |  | |
| 27 | Olivia: See! | |
| 28 | Suzanna So where is the key going? | |
| 29 | Olivia: Key, so it's K? | |
| 30 | Suzanna: Yes | |
| 31 | Olivia: Where's K gone | |
| 32 | Suzanna: There | Suzanna indicates where the K key is on the keyboard by pointing |
| 33 | Olivia: Back. K …. for Key | |
| 34 | Suzanna Are you putting one in your third level as well? | |
| 35 | Olivia: Yes and then I'm going to make more levels | Olivia Smiles at Suzanna and then looks away for a short while |
| 36 | Olivia: You do this bit | |
| 37 | Olivia: And then delete those H's. And in there. | |
| 38 | Suzanna No. No. | |
| 39 | Olivia: Then, let me do it. | (off screen) Olivia takes over the keyboard |
| 40 | Suzanna It's no fun having a game with any hazards to avoid. | |
| 41 | Olivia: Is for me!<br>How do you go that way back?<br>So sorry for deleting… They just… | (on screen) Olivia deletes hazards in Level 3 of game |
| 42 | Back Back Back<br>O O O. | (on screen) Olivia adds three coins to Level 3 by inserting o in the matrix |

| | | |
|---|---|---|
| | (laughs)<br>(replaces another) Back O (giggles) | |
| 43 | Suzanna: Goodness me what was the point of designing our car with fumes if we're not going to use it? | |
| 44 | Olivia: I don't know (sighs)<br>Olivia: You put the key and door in this one.<br>Olivia: Go on then. Key - Door - Person. | |
| 45 | Suzanna: Person? | |
| 46 | Olivia: Key Door Person. | (off screen) Olivia indicates that her mother is the person she is referring to<br><br>She add a platform and a key and door to the design of the third level |
| 47 | Olivia: (laughs) | Suzanna starts play through of their game again. She progresses past the first level, completes second level. The game then goes back to the first level unexpectedly. |
| 48 | Suzanna: Is this the first level again | |
| 49 | Olivia: I think so | |
| 50 | Suzanna: OK so our the door for the second level goes back to first level and we want it to go to the third level presumably | |
| 51 | Olivia: Yes (laughs) Yes. Why could that be? That's silly | |
| 52 | Olivia: I'm just going to go see something | Suzanna dives into the code to try to troubleshoot the problem. Olivia watches for a short while becomes disengaged. She then leaves mother to explore the wider environment of the room and objects within it. |
| 53 | | |

## Commentary on Interaction

The child Olivia also wants to add additional levels to their game. In recent sessions several young participants had added new levels to their games, including Toby who added over twenty. This activity had sparked much discourse between participants which may have influence Olivia's interest.

For this pair, these more involved coding activities were beyond the ability of the child.
The pattern involves adding two new functions (), which while simple enough, represent new code structures and thus this adds a new level of conceptual and practical complexity.
Suzanna has taken on the role of solving harder code problems and in doing so has built important proficiency in coding practice. These include which include; finding and comprehending supporting documentation, fluidly navigating between undertaking more advanced coding to implement new GDPs, playtesting and preparing the coding environment for more basic coding of her child.

Dialogue and gestures of the participants indicate that they have established a working pattern where the child directs the direction of design and tests the game play
and the adult uses their more advanced digital literacy to drive the code changes and use of software tools at trickier points of the process. When there are points of game making which are within the capability of the child she is able to take over the computer to implement those changes and test the results.  Even though this general pattern seems established, this process is not without conflict.

For example, this direction of design is not uncontested in this interaction. The mother is closely monitoring the changes of level design. When the child makes changes that are not clearly purposeful, the mother challenges this *'(Alarmed) What are you doing?'*. The child takes delight in surprising her mother with an unexpected design element.

Additionally, after asking her mother to take back control of the keyboard the child also directs her mother to delete many 'h's' (hazards) from the game. When the mother realises the plan is to delete all hazards she protests, *"It's no fun having a game with no hazards"*. The child responds. *"It is for me."*

The child appears to consider the level of complexity needed to add a new pattern into the code to be beyond her ability and thus directly delegate the task to her mother. Feedback from the parent indicated that this division of labour was partly due to reading ability.

> *"Olivia got on better during the coding once the student who was hovering initially left us alone. Because every time Olivia hesitated, she jumped in to do it for her. Whereas I know her better so can judge how to facilitate more minimally, and I resist the urge to fix things immediately when she struggles.  Plus she can't read yet, so she was recognising the relevant bits of code by matching the individual letters, which takes longer."*

The parent outlines her strategies used to address lack of reading ability as a barrier to participation. The design choice of a grid of letters representing different elements of the platform game appears appropriate in the case of a novice learning to code and read at the same time.

The child is one of the younger participants when blockages occur she explores the room or to dwell on the periphery of other participants interactions.

# Discussion and Links to other Observations

There are three key pieces of learning that I can initially draw from this interaction which feature extensively in my design and observation journals. These are:

- participant awareness of game making patterns and systems concepts
- evidence of different types of game maker behaviour
- home interests – funds of knowledge

## Awareness of and disparity between perespectives on designing for otthers

H1: Have you enjoyed making the game?
Olivia: Yes
H1- Has it been a lot of fun
Olivia: Yes and I like making it frustrating. that other people find it frustrating!

...
Olivia: You've nearly got to mine. Mine's very hard to get to.
H1. Is it?
Olivia: You'll like it when you get to it.
H 1: How many levels do you have?
Olivia: Four. Mine's the last one. And it's very fun. Do you want to guess about it?
H1: Erghm. Is there lots of bikes?
Olivia: Yes, guess how many there are?
H1: Is it the whole screen?
Olivia: YES! Laughs
...
H1: I will get it to your level
Olivia: You seem to not give up. that's good
Olivia turns away to get a hug from her mother.
H1: I got to your level
Olivia: Good! (laughs)
Olivia: It's a secret, special one. (...) If people tried hard they would get to my level.

Chapter 6 explores the difference in perspecdtives of designing for others.
The exchange above shows that Olivia;'s (c) perspective may evolve based on the feedback that other players are giving her. She notes that the student helper does not give up and persists beyond initial frustration to get to the final screen which plays against the platformer genre's conventions to contain a screen fillled with the reward.
This playing against the normal levels mechanic can be seen as an alignment with another mechanic within video games, that of bonus stages which can be seen as a reward for completing harder stages which allow for rapid points earning in a risk free environment [1] (Fandom, 2025).

## Home interests

I propose that a contributing factor to this motivation is the ability to replicate a familiar pattern of game play via her own work in construction. It is the ability to translate this home knowledge into her own artefact which gives a sense of mastery over an otherwise foreign environment.

The child uses her concepts of game design patterns in the end of course evaluation. She responded to the question _What would you like to see next time? What would you add?_ with the comment. "Olivia: I'd add a health bar and lots more levels and keep on changing the characters and background."

## Game Making Patterns and Systems Concepts

For both participants there is an explicit awareness of game making patterns and concept of the game as a dynamic system. Both seem to drive their work on the design and coding mechanics of the game.

Game making patterns are outlined by both the child and parent. They talk of adding more levels, of the mechanic of keys and doors and then progressing to another level. The child takes delight in outlining this pattern of game progression. The transformation from the period of time when her parent was problem solving code is dramatic. I propose that a contributing factor to this motivation is the

1 https://ultimatepopculture.fandom.com/wiki/Bonus_stage

ability to replicate a familiar pattern of game play via her own work in construction. It is the ability to translate this home knowledge into her own artefact which gives a sense of mastery over an otherwise foreign environment.

In terms of understanding of the game as a dynamic system, this is seen clearly in the parent's alarm at the child's deletion of all elements of hazard. The parent is keen to keep a sense of game balance to ensure a sense of challenge for the imagined player. "It's no fun having a game without any hazards to avoid." The child seems determined to remove all hazards. My understanding is that she is also aware of implications for game balance but is taking pleasure in this seeming destruction of the key challenge of the game as an act of disruptive play.

# Vignette 3  Mark and Ed’s use of GDPs within their organisation

Date **2019-03-11**

The following exchange between participants Ed and Mark  shows GDPs being used to try to organise future activity. At this stage of their process, some of these patterns have been discussed and sketched out some started but only partially completed. For example, the child has designed different frames of animation but this has not been exported to the right format or implemented in code form. This interchange shows a tension between a more chaotic style of working jumping from one goal to another and a parental motivation to prioritise one work to be done. This tension is outlined when a parent Mark gives an update on progress. "So, we’ve made quite a lot of progress this week. I think the issue we’re having is that Fi’s super excited so we’re kind of jumping from one thing to another and that’s kinda overwhelming me a bit." An earlier interaction illustrates this dynamic clearly.

The pair's initial listing of features is a brainstorming technique aid a creative process, in this case use of the approximate names of of game design patterns (*get the person animated*, *get an enemy in*, *changing the platforms*, *make a theme tune*). The parent says he is *overwhelmed* pointing to the child's lack of focus on one pattern  - "that’s what I mean, you can’t just skip around like that".  The parent appears to be keen to quickly pick one pattern, then then work through the documentation on that pattern, a process he later refers to in interview data a plodding.

Ed: Yeah.
Mark: Yeah?
Ed: I also want to make a theme tune.
Mark: Yeah. It’s, that’s what I mean, you can’t just skip around like that.
Ed: Hmmm.
Mark: Just cos it gets really overwhelming.
Mark: Yeah..? So…?
Long pause.
Mark: Well I’ll have a look at the code and see if I can make sense of that.

| **Description of interlude**<br><br>In the interlude between these sections the child Ed has been working on graphical asset creation. | | |
|---|---|---|
| **13.35** | Mark: I’ve brought the music, and also we | Ed is editing head and finishes this |

| | | |
|---|---|---|
| **On the clock** | could just concentrate on one thing and just change that. You know, keep working through.<br><br>Ed: Yeah. I think I want to get an enemy in - oh no - my person animated.<br><br>Mark: So you want to get your person animated that's the main thing. Shall we concentrate on that and changing the platforms into something different?<br><br>Ed: Yeah.<br>Mark: Yeah?<br>Ed: I also want to make a theme tune.<br><br>Mark: Yeah. It's, that's what I mean, you can't just skip around like that.<br><br>Ed: Hmmm.<br><br>Mark: Just cos it gets really overwhelming.<br>Mark: Yeah..? So…?<br><br>Long pause.<br><br>Mark: Well I'll have a look at the code and see if I can make sense of that. | off finding a tool to remove redundant blank pixels |
| | | |

| **Time** | **Dialogue** | **Activity / Gesture / Notes** |
|---|---|---|
| | | Before dialogue starts the parent child pair are getting settled in front of one laptop.<br><br>The child, Ed, is play-testing their existing game with laptop in front of them<br><br>Mark is on left of Ed with supporting documents in front of him |

| | | |
|---|---|---|
| **12.15** | Ed: What shall we do now?<br>Mark: I'll get my notes out, and then…<br><br>Mark: I think we should get sheep in and stuff<br><br>Ed: The Tea Cup<br><br>Mark: and the Tea Cup yeah.<br><br>Ed: We need to get lives as well.<br>Ed: shall I make a little ... | F playing game as discussion happens<br><br>M gets bag to locate notes |
| **12.30** | Mark: There's lots to do but we can't do it …<br><br>I think we need to take it one step at a time or we'll get completely overwhelmed<br><br>Ed: Should I make little heads for lives? We could have a little line?<br>Mark: Heh<br>pause | M gets notes out of bag<br><br>Ed gestures to screen to indicate location for proposed feature<br><br>Ma distracted with task of getting notes out of bag |
| **12.42** | Ed: Should we?<br>Mark: What's that sorry?<br><br>Ed: Shall I make little heads, for down there?<br>Mark: Heads?<br><br>Ed: Like little things that are showing your lives.<br>Mark: Oh you want to make the life icons?<br><br>Ed: Yeah.<br>Mark: Yeah you can do. | Ma directs attention to screen.<br><br>Ed points again to screen to indicate location for proposed feature.<br><br>Ma leans into towards Ed and his screen. |
| **13.00** | Ma | F then starts navigates to piskel website to edit pixel character<br>Runs into difficulty |

| | | |
|---|---|---|
| **13:25** | Ma “It’s piskelapp.com” | Ma takes over to find correct URL Points to right option from partial google search. |
| **13:30** | mA “It’s taking a while isn’t it” | Takes while |
| | | |
| **Commentary**<br>This interchange shows a tension between a more chaotic style of working jumping from one goal to another and potential resolution with parental dialogue prioritising work to be done. There is also the use of the game playing as an activity to do while discussing what to do. | | |
| **Description of interlude**<br><br>In the interlude between these sections the child F has been working on graphical asset create of | | |
| **13.35 On the clock**<br><br>**No video data.** | Mark: I’ve brought the music, and also we could just concentrate on one thing and just change that.<br>You know, keep working through.<br><br>Ed: Yeah.<br>I think I want to get an enemy in - oh no - my person animated.<br><br>Mark: So you want to get your person animated that’s your main thing.<br>Ed: Yeah<br><br>Mark: Shall we concentrate on that and changing the platforms into something different?<br><br>Ed: Yeah.<br>Mark: Yeah?<br>Ed: I also want to make a theme tune.<br><br>Mark: Yeah it’s, that’s what I mean, you can’t just skip around like that.<br>Ed: hmmm<br>Mark: just cos it gets really overwhelming.<br>Mark: Yeah..? So…?<br><br>Long pause | F is editing head and finishes this off finding a tool to remove reducant blank pixels |

| | | |
|---|---|---|
| | Mark: Well I'll have a look at the code and see if I can make sense of that. | |
| **24.00** | | Mick explaining a DL thing of uploading images assets instead of it being large hex/bin codes. |
| | | |

At a different stage Mark is engaged puzzling over documentation on how to add animation to a character for some time. This results in Ed being blocked from progressing. In the following exchange, the child proposes dividing their labour informally.

Mark: Quite complicated. But we can do it. But it would mean a lot of mucking around
Ed: Ah Er
Mark: Which is difficult to do while we're here. But it's doable.
Mark: It's like a project in itself really.
Ed: Project in itself?
Mark: Yeah! (laughing). I just want to know like. We can get him in. So if I ask about the sizing.
Ed: Hmmn
Mark: I think you can edit the size here.
Ed: Why don't you go here for a computer and you can do that?
Mark: Why. What. While you're doing what?
Ed: Um making a sound track or something. I could do something like that.
Mark: Ok. Yeah. I'll see if there's any more computers in the cupboard.

The child suggests splitting and using one laptop each. He names one of the other pattern. The child continues to work on parallel patterns or component actions of patterns.

This child also begins researching other toolsets, in this session, research to identify an online tool to create an short audio soundtrack.

While the father was keen to prioritise and then complete one pattern, the child takes a more piecemeal approach. Later in the session the father then gets drawn into creating audio assets after observing his son searching for suitable tools. The father becomes distracted from his stated task as he is responsive to help the child when they get stuck on an alternative pathway they have chosen to avoid waiting on the parent. While this may be stressful for the parent, lots of progress in the overall game project can be observed in any particular session and the child seems to be developing useful skills managing the parent.

both with the familiar graphical asset tool Piskel and exploring new territory by researching an seeking a new tool for creating audio assets, specifically a background theme tune .

Add analysis of the situation as overcoming a tension using 3GAT terms.

## Vignette 4 - Feedback on the dynamics of Molly's player movement

In this design the jump mechanic is determined by the use of variables controlling gravity, jump velocity and movement velocity.

Parent Molly had been focused mostly on completing asset design. The only changes she had made to the deliberately frustrating initial player movement (discussed in design chapter) was to change player jump velocity. Player jump (y) velocity was set very high but left right (x) velocity was slow. This created a very frustrating game feel.

She had been made aware by her daughter Ne about the relevant game variables. In response, Molly asked for advice but Ne gave none walking away. Molly noted "She's left me to my own devices."

Bertie: That looks nice (referring to the graphical look of the game)

Molly invites Bertie to play as she can't progress due to the difficult game controls.

Bertie: It jumps super high but so slow
Pause
Molly: He has to go slow be cause he's an astronaut, you see.
Bertie: It's hard.
Bertie leaves.
Molly: (to peer parent with serious tone.) It's hard. Wow.

Ed comes to play the game.
Ed: How much jump speed to you have?
Ed: Your jump speed is massive.

Other children come and play Molly's game but only for less than a minute before leaving. While their feedback is non verbal the very short length of time that some of them spend is noticeable. After the last one leaves Molly comments "It's so frustrating."

This form of interaction can be analysed using the professional framework called MDA. The Mechanic dimension here is the jump game mechanic, D is the ?, and A is the frustration experienced by fellow testers. Further parallels with MDA are explored later.

We can see that Molly justifies the game feel of a very high fast jump with a narrative response about the character being spaceman. However, the limited amount of time anyone plays her game and her own frustration in playing it is telling. The game feel is frustrating in the wrong way here. Molly seems to initially misconstrue the feedback she is getting here equating her ability to make the game hard as a positive thing. However, towards the end she notes the frustrating nature of the game.

The same message is delivered in a variety of ways, above we can see feedback from Mick trying to bridge a technical and conversational approach, direct feedback of the personal challenge level and an interpretation of the cause from Bertie and then a more specifically technical explanation involving the naming of the variable *jump speed*.

The concept of difficulty for most of the participant's games was dependent on the interaction between the feel of the game controls and elements of game challenge associated with placement of hazards and moving enemies. The term *game feel* has varied interpretation but is generally framed as the responsiveness and feeling of control over the main character during the core movement of the game. In this case, it effects the ability of players to move between platforms and avoid enemies. In this design the jump mechanic is determined by the use of variables controlling gravity, jump velocity and movement velocity.

The importance of these variables to is was behind the design decision to place these variable right at the top of the code and to rename them with player centric names rather than mathematical terms like velocity and acceleration.

The regular playtesting of games allowed participants to give each other feedback regularly and game feel was one of the aspects that young people in particular to gave frequent feedback on.

Parent Molly had been focused mostly on completing asset design. She had been made aware by her daughter Ne about the relevant game variables.

In response, Molly asked for advice but Ne gave none walking away. Molly noted "She's left me to my own devices."

Player jump (y) velocity was set very high but left right (x) velocity was slow. This created a very frustrating game feel. The following is a compilation of feedback comments or reactions over a 15 minute time period.

Molly: (Talking to self) No! It's so hard that. (referring to a particular jump in her game.)
Mick: How are you getting on Mi? It's looking good.
Mick: (Noting frustrated air of Mi) Have you made it too hard?
Molly: I don't know. Can you jump from here to here with this.. this.. him? (point to main character)

Mick: So it looks like you bump your head and fall down.

Mick: One bit of friendly feedback that I would give you is that it's taking a long time to move left and right. And that is something that you can change if you want to.

Molly: Oh right yeah.direct

Mick: Yeah.

Molly: Yeah, actually that's a good idea.

Mick: If you think about average games. Your average jump time would be about one second in the air. So that can be a bit of guide sometimes.

As a facilitator, I shared feedback about the frustratingly slow movement time and an indirect feedback on the high velocity jump value. I use quite indirect language when giving feedback and while I reference Mi's frustration rather than giving direct feedback.

These norming behaviours some of the informal norming behaviours that are less directive seen in the work of Rogoff and colleagues as explored in literature review [@rogoff_cultural_2003].

# Vignette 5 - Molly and Nadine working with graphics and stories as funds of knowledge and identity and emerging specialism

## 5.a - Specialism emerging in interaction between Molly and Nadine

Molly continues to do solo design using the Piskel graphical too. She encounters a design problem. When erasing a part of the design she gets rid of background colour. Mi asks for help from partner but receives misleading advice which does not help her progress.

Molly: Oh no it’s not done that has it?

Molly calls the name of her child across room with theatrical gesture and loud whisper voice
Molly: “Nadine!”
Molly then makes face, wiggles head and shrugs at parent peer. The other parent laughs.
Nadine arrives to help.
Molly: I’m trying to delete them but they turn light grey.
Nadine: So you want to get rid of them?
Molly: What are you doing? You have to tell me what you are doing so I can do it myself.
Molly: laughs
Nadine: laughs.
Molly: I’ll just have to keep shouting at you if you don’t tell me.
Nadine uses the mouse to select the grey background colour with the colour picker tool, then the pen tool to fill in gaps in the design. She then swaps the active colour back from grey to black by clicking the option to swap foreground and background colours.
Molly: How did you do that so quickly? I’ve got to like, carefully... (makes hand gestures to show a sense of hesitant keyboard use)
Parent peer laughs

Nadine bounces up in place and smiles broadly.
Molly: Thanks
Molly: So am I like back with the black now?
Nadine: Yeah but if you want to delete it just press X (which switches between foreground and background colours) and then do it.
Molly: Oh X. Alright Bubs. Thanks.

## 5.b - Extract of interaction between Molly and Sonia

Sonia:  That's Good!
Molly: Oh do you like it?
Sonia: Yeah
Molly: Thank you. I'm very proud of it. Concentrated extremely hard. The thing is, you can get quite consumed doing things like this can't you?
Sonia: Yeah
Molly: That's the problem at home I get a bit kind of lost. I can't get the knack of some things. It takes me so long to get it. I'm like  so excited.
- Both laugh.
Sonia: So are you going to do bits at home? When the kids are..
Molly: I tried and I lost it all. And you know when you just completely... And even Ne didn't know so I just ... what a shame..  hours .... (Laughs)

Molly: Lost time. Never mind.  We live and we learn.

Molly: We're finished. Right what's next? Now I'm an expert pixel? Now I have to figure out how to get it in there don't I? Without losing it I'll be very upset.
Sonia:– Have you saved it?
Molly:– No I've not saved it.
Sonia:– Save there. (points to relevant button on screen)

## 5.c  - Developing shared language

Molly: Right so I don't want this rocket here. I want the rocket to be the yellow thingie.
Nadine – Gold coins.
Molly - Right so, What are you doing? Do you know what you are doing?
I want the aliens to be the hazard, the rockets to be the gold coins and the spaceman to be the character.
Molly: Poop Ping? (alarmed) What are you doing? What's poop ping.
Where's my spaceman?
Nadine : Wait! What do you want the aliens as?

Molly: The hazards.
Molly: Yaaay!
Molly: And now the rocket thing as the like you know the good thing - the reward.
Nadine : Who wants a rocket for their reward?
Molly: Because if a spaceman gets to a rocket he can get home. But if he doesn't then the aliens get him.
Nadine : It's a very violent game.
Molly: What?
Nadine : It's a very violent game.

## 5.d - Using technical language - DoL and technical processes

Molly - Nadine !, Nadine ! Nadine .

Molly: Do you know how to get it in the game?
Nadine : Oh my god!
Molly: Well . First of all save it to the gallery. How do you save it? Ah there you are. Save it. Is it saved? Right now export it.
Nadine : Do you even know what export means?
Molly: I know what export means!
Nadine - Ok then smartie pants.

the interaction also shows positive affect of child.
her role in the community can be explored here.

Molly: I'm trying to delete them but they turn light grey.
Nadine : So you want to get rid of them?
Molly: What are you doing? You have to tell me what you are doing so I can do it myself.
Molly: laughs
Nadine : laughs.
Molly: I'll just have to keep shouting at you if you don't tell me.
Molly - How did you do that so quickly? I've got to like, carefully... (makes hand gestures to show a sense of hesitant keyboard use)
Parent peer laughs
Nadine bounces up in place and smiles broadly.

Here the child has a powerful position and seems to enjoy this. In contrast the parent explains her frustration but does this light heartedly.

Molly, the mother wants to export an image from the graphical editing tool and to import this into the game. The mother's focus has been on creating graphics and has expressed pride in this her growing expertise in this area. She asks her daughter for help "I want the aliens to be the

hazard, the rockets to be the gold coins and the spaceman to be the character." The mother shows a developing proficiency of expressing GDP related concepts and language as this interaction develops. Nadine  appears to enjoy using the language and norms of game culture to tease her mother. "Who wants a rocket for their reward?" Here the daughter recognises the GDP of reward after used by her mother but questions the aesthetic choice and its appeal to game players.

The child takes on the role of guiding her mother to export graphics from Piskel gallery to the hard drive as a downloaded image file before them importing it to he code project and updating the relevant lines of code. The mother demonstrates her increased level of understanding and participation on overall process after being playfully challenged by daughter about her use of technical language. "Do you even know what export means?". Emerging laguage is used blending both technical terms like _export_ with more folk terms _getting it in the game_ rather than importing.

Nadine appears reluctant to help at first and when she does she is mostly non-verbal and makes changes quickly in a way that her mother cannot initially follow or replicate. The process of explaining this to her parent would be more time consuming. There may also be a power dynamic happening as well with the child enjoying showing proficiency without sharing the process perhaps as a performative
demonstration agency or growing status within this community.

This technical process for some participants it would be a more conscious process, for others it has become second nature.

In terms of division of labour, the interaction here is complex.
Both the parent and child here takes great pride in the graphical work of game making. The parent shows this after being complemented by a fellow parent on graphical design saying "Thank you I'm very proud".

This allows them a level of participation which is helpful without being stuck on more tricky technical or code related problems.

The child also specialises in this aspect spending much time on this aspect. This interaction show her demonstrating to her mother on request proficiency in tool use, another example shows this in asset migration.

This example shows  a practical division of labour based on the building of emerging skills and technical processes. The learning design which prioritises choice of different GDPs facilitates this. The process here illuminate the process of  building an identity as an individual or a family is. The next section develops this theme.

# 5d – Moved from Chapter 7 on non-GDP funds of knowledge

### Emerging use of narratives and graphics which drawing on home funds of knowledge - AVOID OVERLAP AND CHANGE FOCUS TO AGENCY FROM START

NOT REALLY ONLY TO DO WITH PLAYTESTING.

RECAP WHAT HAS ALREADY BEEN EXPLORED,
In the previous chapter,

**While the potential to add graphics was a core affordence of the starting processes of the templated game, the process of designing and sharing and the peer commentary on the process emergered as the sessions evolved.**

The literature review outlined the potential of home interests as funds of knowledge, especially informal learning. This learning design provided participants with different ways to input and explore their home interests in the narrative and graphical elements of their created games. For example the choice of game characters allowed the expression of identity. Other designed elements for example audio and graphical effects or written messages added to the overall aesthetic or polish of the game.

Video evidence indicated that conflicts involved between learner expectations and their technical abilities are helped by the use of the starting template. The constraints of provided game elements and implied narrative structure of the template accelerated the initial creative process.

<!-- (like a  musical style from which to jam from, or provided constraints in a drama process which help guide improvisation.) -->

One pair Clive and Pearl, the grandparents of Toby, included a narrative message at the start of their game. This process surfaced the expertise of the family as beekeepers, sparking interesting conversations with other participants.

var starttext = "This is a game which pits a honey bee against a swarm of Asian hornets, which are alien invaders attacking bee  hives in the UK and which beekeepers are trying to stop spreading  here. Try to guide the bee to collect all the flowers without being caught by the hornets.
Use the arrow keys to move the bee. Press return to START.";

<!-- In a noteworthy exchange a young participant Zi asks one of the grandparents of child if they had done any amazing things in their life. This exchange follows

zi: Have you done amazing things?

The exchange seems to throw Pa but they draw Zi's attention back to the game. Showing that it demonstrates their interest in bees as they are beekeepers.

The source of Pa's hesitancy to share more is not clear. However her willingness to share that part of her personal story via the narrative of the game is shown here as is the willingness of the young participant to ask about the personal experiences of the older participant during the process of peer testing her game. -->

In another example, Mark and Ed designed a game around the character of a train driver that needed to collect coal. In subsequent post course interview Mark describes the impact of the child feeling like they could bring their own identity and interest into the project. "I know just your eyes lit up when you realised you could expand your interests into gaming." See Appendix 4.x (Mark and Ed working with home interests)

<!-- The process of creating assets builds in Molly the identity of a proficient maker. She wants to build on her achievement of being an "expert pixel". -->

<!-- NOTE
NARRATIVE / drama IN PREVIOUS CHAPTER?
how do these two sections work together? remove this one?
-->
<!-- The incorporation of the graphic was relatively quick and easy change to make the game but had a significant factor in the affect towards the game [erikssonUsingGameplayDesign2019;] BRING ON OTHER LITERATURE HERE ON PERSONAL EXPRESSION, FUNDS OF KNOWLEDGE IN THIS AREA. Roque, Scratch, Kafai, Gee etc. -->

<!-- Ideally look for evidence of sharing in communities, especially developing processes, avoiding traps which sap momentum, -->

<!-- While these aspects are covered in other literature, and are therefore not covered in depth in this chapter, it is important to include their strong presense in the data of study. And to situate them in relation to other chapter contents. HOW EXACTLY. -->

Other participants expressed pride over their graphical creations. In this excerpt parent Molly has spent time creating a pixel art representation of an alien. The full exchange (see appendix 4.x) sees Molly cultivating a sense of ownership over the graphical element that she has created. There is also the development of a growing sense of competency in this area of asset design. She notes she is an "expert pixel".

Molly: We're finished.  Right what's next? Now I'm an expert pixel? Now I have to figure out how to get it in there, don't I? Without losing it. I'll be very upset.
Sonia: Have you saved it?
Molly: No I've not saved it.
Sonia: Save there. (points to relevant button on screen)

The growing mastery of this area also seems to help drive motivation to complete the next challenge. The sense of ownership spurs the technical process of saving projects. Her pride in her work and concern surrounding losing it provokes a fellow parent to show her how to save her work.

# Vignette 6 –  Mark and Ed working with home interests

## Use of game graphics and funds of identies in Interview data

Mick: (17-46) Can you tell me anytime that you felt like you bring your own identities or interests into what you were doing.
Ma - Oh, definitely. Yeah.
Mick: Let's ask Ed that as well.
Mark: Yeah.
Mick: Can you do feel like in making the games, you're able to bring your own interests or things that you related to into it?
Ed: Yeah. The Fireman.
Mark: Yeah, well, tell us about that game. Tell about your interests and stuff?
Ed: A little fireman, he's going around collecting coal for this train. They lost it. But then there's sheeps on the line.map
....
Mark: What is your aspiration for your life?
Ed: I wanna be a fireman (on a steam train).
...
Ed: I really like trains, since like I was very, very young.

Mick: Do you think I mean, was that was that like something that helps you a little bit keep your interests go in for the game?
Mark: I think it excited you to have to build a fireman sprite? Is that right?
Ed: Yeah.
Mark: and to have it train themed, didn't that like, keep your interest in the designing part of it up? Is that true?
Ed:  Yeah.
Mark: Because the whole theme of it. Just I know just your eyes lit up when you realised you could expand your interests into gaming.

## The use of technical language within the application of GDPs

This example for the most part covers a the technical process of removing redundant space from around art in graphical editors. However the process becomes much clearer to Molly when linked directly to here experience of a game design pattern of altering the sprites hit box.

Ed: for people with background like yours You can use the cramping tool.
Ed leads Molly to his workstation and involves his father in the process.
...
Mark: In Piskel. You can crop it to the sprite  - cause it take that area too. (gestures – draws a large square with hands – then gestures to the edges). You approach an enemy if you're close to it, it'll trigger it.
Molly: 'cause, sometimes you think how am I just sitting on this ledge here?
Mark: And you're floating?
Molly: Yeah. Yeah that's what's happening. So..
Mark: So you can put your sprite back in again and you can crop it down.

Mark: Show what? What are we doing?
Ed: On this one it's like this.
Molly: Oh that's good how did you do that?
Ed: The cramping tool. (laughs nervously)
Mark: The what?
Ed: What… Is it cramping? (gestures with hands as scrunching / clutching motion)
Mark: For doing what? What did we do? I don't know what we've done.
Ed: People have used the whole block.
Mark: Oh yeah. We've just cropped it. So it's got no border around it. So you don't set things off when you get really close to them.
Molly: Aaaah. I see yes. Cos the corners actually could have. (makes a small square gesture with fingers)

# Vignette 7 Dan and Toby – Home experiences of Gameplay design patterns.

### 2019-05-08-te-da pt 1 - Transcript of interaction between Dan and Toby

The following exchange shows how the use of GDPs help participants navigate the professional practice of forking a codebase and the exploration of developer resources. Technically, he has the courage to divert from the existing game paradigm from platform to maze. Practically it brings up issues as many of the dominant game design patterns are different. Thus the first one they identify that of enemy following is not present in the current menu of choices.

Toby adopts with this suggestion readily once he understands Dan's suggestion. He then approaches Mick with a suggestion.

Dan: Have you thought about pushing it a bit further and have a different style of game?
Toby: What do you mean?
Dan: Well the previous style of game was a platform (makes shape with hands) game wasn't it? You went along and there was gravity pushing down (points down). There are other types of games aren't there?
Toby: Pause. I don't know what to do thought.
Dan: Well quite but what other games are there?
Toby: I don't know er.
Dan: Well I tell you what .. muffled.
Toby: Erm - (navigates to list of GDP for platform game)
Dan: So. You played them before didn't you (indicating grid of games )
Toby: What do you mean?
Dan: The flying game that's a different kind of game
Toby: Oh like kind of like moving along kind of thing
Dan: Yeah and those where. There are games where you are in a world and you have to move around the world like pac-man (points down and moves an imaginary character around),
Toby: nod
Dan: There are games where things drop down like Tetris
Toby: … game. You could have a game where every 15 seconds 10 seconds you could add and enemy to such and such a random number between such and such (holds up hands to indicate parameters). You could block it somewhere.
Dan: So instead of.. instead of the world… the world being sideways. We could have the world being looked down on. (reindicates the change of perspective)
Toby: Hmm. How should I do this then?
Dan: That's a good question. Shall we ask Mick to see if that would mess things up or not?
Toby: Mick
Mick: Hi ya.
Toby: Erm. Thinking about what game to do . I was thinking can we make like a pacman game kind of thing (indicates movement of character with hands)
Dan: If we had an on the top game rather than a platform game
Mick: I think it could work. You could kind of adapt that game by kind of removing gravity.
Dan: and see what happens?
Mick: and see what happens.
Dan: It's not a bad starting idea is it?

Toby: I suppose make a new one (begins the process of remixing game from the template)

Dave  expresses his desire to for the pair to try something new by implementing a pattern not in the menu of GDPs provided. Their new choice is a change of perspective which involves a new game pattern of a new movement game mechanic. The specific proposal is to remove a jumping game mechanic and using a 2D top down movement mechanic used in maze and adventure games (e.g. Pac-man and Zelda games).

Toby takes on the role of checking these change of direction with me. He uses a concrete example of a game to indicate the shift of genre and games space structure implied, saying "I was thinking can we make like a pacman game kind of thing". Dan  is more explicit naming the shift of perspective and genre. Mick takes this to a concrete code level by making reference to a key change of code that would be involved.

The decision to divert from the existing menu of GDPs and genre can be triangulated with interview data from Dave  on the motivation behind his involvement in volunteering at Coder Dojos.

> Honestly, it's just it's just my hobby and I love it is the main reason. In fact, it's probably the only reason. If I can, if I can persuade / cajole / trick my kids into being involved at the same time, then that's even better. Personally, I think that's about it. I've always been interested in computers. I love, I love, I love programming. I'm no good at pencils and pens drawing or anything like that. But writing software is the closest I get to a creative outlet. So I just love doing that.

Given this additional perspective, I interpret Da's influence to divert as a way of embracing a creative challenge and bringing his child along for the ride. However, Dave  is also aware of potential challenges of straying too far from the template. He does not want to "mess things up".

A BIT ON FORKING ISSUES - TO EXPLORE LATER MOVE BELOW TO DISCUSSION?

This tension has a parallel to a professional practice of "forking" code-bases in open-source code communities. The practice of forking can involve taking a code base in a new direction and the benefits of adaption may be out-weighed by disadvantages including the friction involved in splitting an existing community and duplication of effort. The parent checking with a Mick a guiding community member about the advantages and disadvantages of a major fork in the code structure mirrors this professional tension.

This example shows that while the use of GDP can help support choices within a frame, there is also the ability to break out of that restriction and keep some of the benefits of the shared code base.

My own positive response to their suggestion was driven partly from knowledge of Da's cultural background a both a professional coding and a volunteer supporting children's coding programmes. While simultaneously checking with other groups that they use the starting template as a base, to avoid overload as previously discussed in design decisions, I encourage this pair to see what happens as a potential learning opportunity. I am conscious that the change of movement may open up different possibilities for new game patterns that this pair may be able to solve. This outweighs the possibility that the pair will get bogged down in complex code problems or structures which may be beyond the capacity of the young person. After all even if they encounter father must solve, the apprentice does not need to understand everything in order to benefit from observing the master at work.

### Interview extract and observations of technical process of finding documentation

> I try never to touch the keyboard of who's there. If they are stuck on something I always tell them what to do. Even if it's then taken me five minutes to explain what a semicolon is. And point. It's that key. Because it was just, I could do it so effortlessly. I think I'm sure I put people off very quickly by "Dave did something really quickly. I don't know what it was.".

This approach appears to be influenced by Dan's experience as a software engineer and volunteer at Coder Dojo (Glossary). Interview extracts (included as appendices) show a direction to support the novices direction as a facilitator where possible.

This extract from interview data indicates a priority to support the learner to develop independently but to still be very present in the support process.

Toby and Dan's pair process of accessing professional documentation also illustrated an aspect of their family learning culture. The pair's process is more guided and focused than many other participants. In several interchanges the father starts as a facilitator taking a lead from the direction of the child. As the child reaches the limits of their ability he begins to be more directive, by asking leading questions and testing existing knowledge. Finally, in order to complete the programming or research tasks beyond of the child's knowledge, the father is more direct in instruction, directing the research and proposing a coding solution for their new game design pattern.

# Vignette 8 - .alien - Transcription of the introducing a drama process in P3

The participants have entered the room and chosen a laptop to work on. Some of the children play web-based games or reviewing the games that they have made previously. The session progresses with a warm-up game which includes many false starts, changes of rules, development of tactics, appeals to be serious, full throated laughter and many restarts and which ends in good hearted failure. The transcript below picks up at this point.

Mick: Ok. So I've got a surprise. I don't know if you know but as part of our Home Ed club we did a page of different games. So it's on glitch.com and it's called Glitch Game Club and it's on there, there's one for Home Ed Winter 2019 and here are all the games that we made. We made a lot of games. 15 games. This has not gone unnoticed because I got a message through this account. This is kind of a story now. We are entering a story. You have to use your imagination. We got a message and it was an audio message. If you guys take your fingers off your keyboards and have a listen to this audio message which is quite unusual as I don't think it was from anyone on … this ... Earth.

Greetings Earthlings, we have an important message for the Glitch Game Makers.

We are the Weean. You would call us an alien lifeforce. We like to think of ourselves as friendly space cousins.

We can see your Internet from space. We are contacting you because we know you are making games on the Internet.

We are on our way to the Planet Earth, and we have an important mission for you. We are an Intergalactic Rescue team. We know you have problems on your planet. We can help.

But we need to find out one thing first. Are you worth it? After we are gone will you also be able to help yourselves? Or are you already doomed to make the same mistakes again?

You must pass this challenge. Make some games showing problems you have on earth. In the games also include ideas for how to solve them.

We have some guidelines:

- Make a game about a big or small problem for your planet to solve. If you can let us play it each week as you go along.
- Give us an update each week by recording a group update.
- Show you can work on your own but also work as part of a team.
- We will also send you text messages with some mini-missions sometimes. Be sure to tell us how you do.

Please now get started and come up with a new game about solving a problem on Earth.

Mick: I couldn't understand all of it but I tried to write it down as best as I can. So from what I've work out they've looked at our games and they've come up with a challenge for us. They are coming to Earth so they need to find out if we are worth saving. And the way that they are going to decide is by playing the games that we come up with. And they are going to set us little challenges. So. yeah, that's the story. (with heavy irony) I'm pretty sure it's true. (Mick and others laugh).

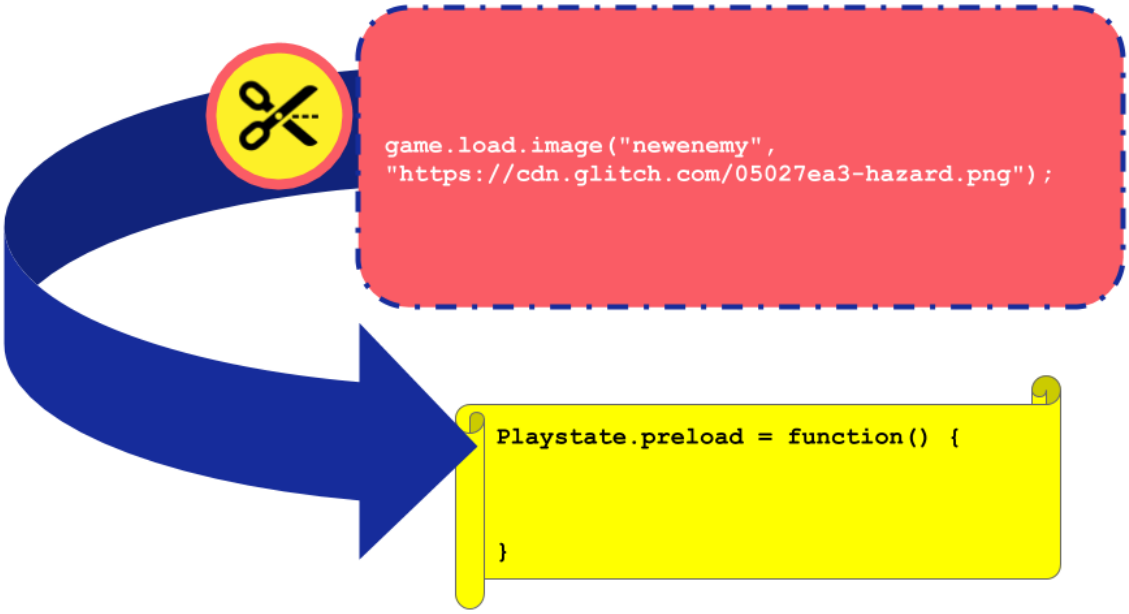
Mick: So all they're asking us to do is to come up with a game. We've got four sessions. They want a new game because they've already played our old games. It's got to be something about the problems of the world. I've got a lot of problems. It could be big problem or a small problem. It could be about your problems. But also ideas on how to solve them.
And yeah. That we can work by ourselves but also work as part of a team. So we've got to give them a report by the end of each session as well. That's our mission.

## Vignette 9 - Vignette.documentation - Introducing documentation in drama frame

Do you know what I also wanted to share with you? Last time we were doing different sheets and everything. You were getting good at working through the sheets. And also looking at this page (show splash page on screen of menu of game design patterns) which is at ggc-examples.glitch.me . And I've done some changes to it. There are two different parts. I want to make this better for you guys, I want to make this somewhere you can go so you can click to find out the help that you need. Any ideas you have for making this better would be really good.

One thing I can think. You see here (points to moving enemies as an example on screen). If you want moving enemies. If you click on it, it opens an example with the code to make moving enemies but it's not really obvious how you would to put that into your game. So to find that you'd have to click on this here link to tutorials. (Mick points to the link to tutorials text/link). Which tells you how you put it in the game. And then you'd scroll down this bit (demonstrates navigating the tutorials menu) and select add moving enemies here. So, I was showing this to some people yesterday and they couldn't really work that out.
So what they suggested is. why don't I put it so there's a link so right to the chapter for how to do it right next to that image.
So that makes sense really so I'm going to to do that.

So if you click on that (referring to tutorial link) if you want to add a moving enemy.
I've tried to put a bit like that (referring to illustration below on code patching). What that means is, you're looking for that bit of code at the top. And you're going to copy it and paste it into that bit at the bottom. Where it says Playstate.preload. That's the part of the code that you need to put it into. Just to make it a bit clearer.




![Figure 5.1. Code Patching](./Pictures/vign_5_1.png){ width=80% }

Molly: So you're not cutting the bit at the top out, in red. You're using that bit instead of the yellow bit.

Mick: Well actually, you're putting it inside of it. So here you would copy it and in your code example. You then  look for that bit where it says preload. You then put it inside of it at the bottom of that.

Molly: So just insert it somewhere.

Mick. Yeah insert it. So here we've got different parts of our game. We've got preload. We've got create. And we get used, we start to get used to finding them. In this one it's preload that's the one that its saying we should put it inside of. And then this  next bit. It's saying, ah, you should put that into your create function.
So we're moving in the right direction. But any other things where you think. Ah that could be easier. Let me know and I'll try to make these resources much easier.

Mick: It's almost like this is our control panel. (you decide) what do you want to do next and we jump off from there.
And I've put it down on a bit of paper.  It's just gcc-examples.glitch.com

So, I’m going to now leave it to you guys. What do you want your game to be about? What are your characters going to be?
What do you want to put in your new game what wasn’t in your old game? Yeah, you can start thinking about it.

## Vignette 10 -  Session reflections and secret missions in P3

This second extract comes from the following session in phase four. In three of the four session the last 10 minutes of each session involved giving a progress update to the aliens.

In my journal notes for phases prior to using the drama process, I documented that the occasional end of session debriefs as _go-rounds_ had limited success in terms of amount and quality of participation compared to these sessions. The video and audio recordings document rich feedback from individuals and pair teams, near complete participation and productive elements of interaction as the feedback progresses.

In previous iterations, my omission of end-reflection in sessions stemmed fomr a lack of time in sessions and reluctance to shift learners away from making activities to reflective activities. I found the need to maintain the drama narrative served as a high motivation factor to complete reflection activities.

To begin the reflection session I ask participants to gather around a particular computer which the aliens are monitoring which helped moving participants closer to each other and stop their coding activity. It is of value to review the grouping of participants in the still image in the vignette above in Fig 5.x.

The simple clustering of participants so they were side by side and talking to a disembodied audience via a computer seemed to make the feedback process less daunting for students. One of the younger participants Richie is participating on the margins but clearly following proceedings as his facial reactions to ongoing contents of feedback. He later participates more actively when reflecting on his process than in previous sessions. Even participants that were initially reluctant to share back and had never shared back publicly before in sessions, chipped in after other family member had started the process for them.

Mick: Ok are you guys ready to share back if you could come to this side of the room we are going to get Mark and Edward to share back first. Everyone can share back using this computer that the Weean are watching if that’s alright.
organiser

<!-- ![](./Pictures/2019-05-15-alien_feedback_1.png){width=90%} -->

Mark: All we've done today is just get a background in and then we were just working on the one that the Weean had sent us about  dropping the coins in. Now that the Weean have sent us the code we need for basically dropping stuff.

Mark: The idea is planting trees. about dropping seeds. So we want to drop those and have some enemies that are tweening randomly around and also taking them away. The idea is to have a timer to drop a certain amount in a certain time frame or you can't go through to the next level. And the next level would be you go around and water all the trees. And the third one is you have to look after them all making sure they are not getting chopped down again by that tweening enemy. So we've got the concept and everything now and we've got the code So we should be able to make a bit of a jump forward now this week.  It doesn't look like we've got any where but we have. (Mark laughs and others follow). So we've got the the background in and we know what we need to do about scrolling as well because we want to scroll across.

Mick: That's great.  Is there anything that you think you definitely want to be able to do for next time that you might want help with?

Mark: Oh yeah. We'll we've got a bit of space where we can work on it before we next come in so we'd like to ask the Weean some more questions. Is that the best way to do it?

Mick: Yeah for sure and I can see that you guys have been talking to the Weean, Here this project here in your home page called Talking to the Weean allows you to talk to the Weean. So you can go in there, click on Edit Project and if you click on this bit here that says WEEAN and then Markdown you can actually just ask questions in here.

(Mick reads out the following extract the organiser screen containting a text chat with the fictional alien audience)

Ed: Weean what's it like up there?

Weean: It's cold and very big but quite tranquil.

Ed: What is your name?

Weean: We are are the Weean we have no name, we are all the same.

Ed:  That must be hard at xmas. (Mark and others laugh and smile.)

Weean: It is. It sure is.

>Mark: That's tickled me that.

Mick: So there you go. You can have a conversation there with the Weean in there using mark up code you can copy what's there. Nadine can you talk through what you have added to your game? Is yours called "No Toby Allowed" now.
(Laughs from all)

Nadine: I've not really done much today as I was busy doing stuff with Toby's

Dan:  We noticed.

Nadine: We'll I've changed the platform a bit.

Molly : You had a secret mission though didn't you?

Nadine: Oh my secret mission was to change someone's game, their character  or something and see if they noticed. And I think they did notice.

Dan: We did. We did notice.

Molly : You couldn't not notice.

Mick: It feels like you took the spirit of the mischievous thing and just turned up the volume.
(All laugh.)

Molly: Sprite!

Mark: We also had a secret mission.

Mick: What was that?

Mark: Ours was to change the sound on somebodies game.

Nadine: Oh was it?

Mark: Did you notice?

Molly: Did you notice?

Nadine: No (laughing)
(Incomprehensible many people talking or laughing at same time)

Mark: Play it now!

Richie: You definitely noticed. (Points to Mark and Ed) You definitely noticed my bit.

(Nadine  goes to the keyboard and starts to play her game)

Nadine: I can't hear anything different
(Everyone laughs)

Mark: I thought you were going to go- Aaahgh! But you didn't say anything.

Mick: So that's interesting. some people notice some people didn't.

## Vignette 11 - .map  - Dialogue of use of physical maps at the start of session X

| Transcript | Description |
|---|---|
| Mick(f): I'm putting the ones that are hardest further away from our home island. So, because keys and doors is quite tricky, I'm going to put that one over there in the corner, if that's one that you're working on. | Mick cuts a out an image from [^4] representing a GDP of key and doors. |
| Olivia(c): So I've gone really far away on the map. | Olivia(c) quickly places her marker on that image and grins. Other parents and children to the right and left of her look at her marker. |
| Mick(f): Yeah. | Mick smiles too whilst walking to get and glue another cut out. |
| Olivia(c): Heh! | Olivia walks back to her mother and stretches out her arms to her mother who picks her up. Olivia whispers in her mother's ear |
| Mick(f): There should be some blue tack if you are struggling to make your character stand up. | Mick walks around the back of the group and sticks another GDP pattern on a different pre-drawn island. Roxanne(p) notices Agnes's(c) falling character and passes the child blue tack to help. |
| Rozanne(p): Oh that's something you were wanting to do | Roxanne points at a cut out that Mick has just stuck down |
| Richie(c): I like the idea of making the enemies move | |
| Roxanne(p): Ok, there's a worksheet here about that. So you don't want to any any heath meter? | |

| Transcript | Description |
| --- | --- |
| Richie(c): No. | |
| Roxanne(p): At least not right now. You want to to do this, on a sheet, right here, here you go. | Roxanne waves sheet and smiles at Mick and laughs. |
| Mick(f): Great that's good. We've got some sheets that I would recommend. That are almost like gateways to other places. One is to make your character move when it moves around the screen. | Mick moves hands when saying make your character move, indicating animation. |
| Mick(f): Another is to make your enemies move around the screen to make it a bit harder. I know you guys have done that. | Mick moves a pointed hand to indicate an enemy moving on the screen and then points to Clive and Pearl to indicate "you guys". |