

# GAME USER RESEARCH AND DESIGN ANALYSIS: I EXPECT YOU TO DIE

## OVERVIEW OF THE GAME

I Expect You to Die (IEYTD) is a single player, escape room, puzzle, VR game from Indie game studio Schell Games. The game was released in late 2016 to critical acclaim for Oculus Rift and PSVR, with the title later coming to SteamVR. The game was being created during the development of initial modern VR headsets and was released shortly after the first commercially available modern VR headsets.

In the game the player takes on the role of an elite secret agent who must take on a series of dangerous missions to thwart the plans of the evil Zoraxis corporation headed by the infamous Dr. Zor. In each level the player is seated in a new and dangerous location, in which complete their mission. This is done by interacting with various objects in the player's environment and combining them together to solve the puzzle. This mimics many escape room puzzles (both in video games and as real world experiences) as the player is left alone in the environment with an ultimate goal that they can achieve through many sub goals. Sometimes this goal is to literally escape the room, but other times it could be to retrieve some intel or to destroy a dangerous device. The game keeps the player physically and virtually seated in a single spot throughout each level allow for all of the level to be in the players view and all objects to be in their reach through a telekinesis power the player has. As with most escape room puzzle, all of the solutions only require the player to have limited outside knowledge (such as a car being started by a turnkey, put into drive and step on the accelerator) and all other knowledge required is explained to the player. Due to the virtual nature of the game players also have a chance to play with objects in the game to see how they interact and test ideas they have, if it fails they can simply reset the level and try again. As the title of the game suggests, if the player fails they die and then the level can be restarted from the beginning, this allows for the puzzle to provide tension to the player by adding a failure state and prevents the player from simply trying all combinations to solve the puzzle.

## ANALYSIS OF THE GAME DESIGN: CORE MECHANIC AND CHOICES

In IEYTD the core mechanic is about interacting with objects in your environment, through a mixture of picking up, moving and using the objects with each other or on other things in the environment. In a GDC talk about the game, studio head Jesse Schell said that "we are finding more and more is traditional video games about exploration of space, virtual reality games are about manipulation of objects"<sup>1</sup>. This idea shows how the designers have intentionally thought about how the interaction between the micro and macro choices can create meaningful play. When talking about the games controls, this report will be from the perspective of using the HTC Vive controller instead of the mouse controls which is the other option.

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<sup>1</sup> [https://youtu.be/X3Ad\\_OA7\\_SQ?t=294](https://youtu.be/X3Ad_OA7_SQ?t=294)

## Vignette

This vignette comes from the 3<sup>rd</sup> level where the player is trying to use a notoriously faulty escape pod to escape a submarine. During your escape you find that Dr. Zor anticipated you using the pod and has left you a grenade with the pin removed. The grenade is delicately placed in between the belts of escape pod engine, creating a problem where the engine can't start as it is jammed but removing the grenade means the player has to keep hold of the grenade or disarm it to prevent an explosion.

When the player first notices the grenade is jamming the engine they pick it up and place it on one side amongst other objects they had deemed potentially useful. Upon letting go of the grenade a ticking sound begins and shortly after an explosion happens killing the player. The game over screen identifies the cause of death as a grenade explosion to the player and at this point the player has identified the problem, the grenade needs to be moved to start the engine but letting go of the grenade causes instant death. Upon restarting the level, the player decides a trivial solution would be to simply never let go of the grenade. They tried to complete the remainder of the level while clasping the grenade in one hand but ultimately the ramping pressure to solve tasks quickly and efficiently is too difficult with one hand. The player ends up dropping the grenade and once again loses the level. While the player commented that they believe it would be possible to complete the level like this after enough practice, they wanted to find a less tedious and more satisfactory solution to the problem. Upon the next try they test the interactions between the environment and the grenade trying to find "A safe place for it to explode", the cramped environment of the escape pod means that the grenade can't be moved a safe distance from the player. They try hiding it in various containers such as a tool box to their right, while it seems sturdy and rugged it doesn't prove to be strong enough to protect the player from the resulting explosion. At this point the player looks for another object in the environment that they can use, although after a while they can't solve this issue so they decide to try and solve another problem before returning to the grenade problem. A minute or so later they find a fire extinguisher which they note will be useful later on when the main computer sparks and sets alight, they begin preparing for this situation by priming the fire extinguisher and placing it close by. To prime the fire extinguisher they need to remove the safety pin at which point the player exclaims "the pin!", at this point they have solved the puzzle. They pick up the pin from the fire extinguisher and use it as the safety pin for the grenade.

Figure 1 Screenshots showing the various objects used in the puzzle described in the vignette<sup>2</sup>



<sup>2</sup> I Expect You to Die Press Kit <https://www.schellgames.com/i-expect-you-to-die-press-kit>

## Meaningful Play

This vignette effectively shows how the game has been carefully designed to integrate the core mechanic into all choices the player can make (both micro and macro), and how this creates meaningful play for all choices the player makes. Meaningful play was defined by Salen and Zimmerman as an emergent property of the relationship between actions and system outcomes.<sup>3</sup> In particular they mention how if this relationship is discernible and integrated then the player is more likely to experience meaningful play.

## DISCERNIBILITY

In IEYTD discernibility is achieved as all of the objects in the game are common/ well known things with simple interactivity. In the vignette, the engine is discernible as it is a common object, it is understood that a pull chord can start it and that will produce movement. When this fails the player begins to investigate and sees a door to the engine the door opens when moved reviling some cogs and belts. Although the player may not be a mechanic they understand, through real world knowledge, that these components want to move and that the grenade is blocking that. All choices made from starting the engine to moving the controller while holding a handle have a discernible outcome.

The best example of IEYTD's discernibility comes from the end of the vignette, where the player notices the fire extinguisher pin and exclaims with success. In this moment it can be seen that the player has not only been able to discern what an individual object does but how the macro choice of combining 2 objects together forms a relationship that the system will resolve to a desirable outcome. In this moment the player believes they have solved the puzzle because they can discern the outcome of the macro and micro choices before performing them. The ability for the player to understand the games interactions without prior knowledge can only arise when the game has discernible choices.

## INTEGRATION

Salen and Zimmerman say that the relationship between action and outcome is integrated if "an action a player takes not only has immediate significance in the game, but also affects the play experience at a later point in the game." In IEYTD many actions have both immediate significance and significance at a later point. The key example of this in the vignette is the significance of the grenade, as this object has a strong outcome through a failure state. When the object is first encountered the player moves it and it explodes, a simple example of how some of the in game objects have immediate significance to the player.

Deeper integration across a longer time period can be seen in the vignette too, when the player makes the macro choice to hold onto the grenade for the remainder of the level to avoid the consequences. In this instance the macro choice for the player to give up the use of one of their hands significantly impacted their ability to complete the level. While it is not clear, this solution and outcome were probably not explicitly designed by the developers but was a result of the games system which created this emergent gameplay. By following some elements of systemic game design (implementing a series of systems that can interact with each other rather than explicitly designing interactions), the game can allow integration to emerge from the interaction between systems. By making long term integration

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<sup>3</sup> Rules of Play: Game Design Fundamentals. Katie Salen and Eric Zimmerman (2003)

an emergent property of systems cascading into each other it creates a very high chance that every choice the player makes will have both short and long term integration allowing for more meaningful play.

One way that IEYTD fails with integration is that actions don't have outcomes between levels and resets in levels due to failure. Although the lack of integration makes sense between level resets, it created frustration in the player shown when they said "I wish everything didn't take so long", after a long spew of failures. As the actions weren't integrated between level resets the player became frustrated as their actions began to lose meaning.

## Conclusions

In IEYTD, Schell Games tries to create meaningful play for all choices to effectively engage the player and create an enjoyable experience. Upon analysing the game through Salen and Zimmerman's lens for meaningful play it can be seen that not only is it created at all levels of choices but these choices are deeply connected to create strong meaning between the micro and macro choices. Discernible choices are comprised of other smaller discernible choices. Choices are also integrated on the short and long term simultaneously. On top of this all the choices are centred on the core mechanic of the game, interacting with objects, by ensuring the core mechanic of a game produces meaningful play means the player is going to be using the mechanic often and experiencing meaningful play throughout the game.

Having a deep connection between all choices has shown success in other games, particularly those developed by Nintendo. When discussing the design of Mario 64 in an interview, game director Shigeru Miyamoto said "That's how we make games at Nintendo, though: we get the fundamentals solid first, then do as much with that core concept"<sup>4</sup> In Mario the micro choices are button presses corresponding to jumping and moving. These micro actions are built upon to inform what macro choices the player should have. All macro interactions in the game happen via the core mechanic jumping, from dispatching enemies to collecting rewards even as far as completing a level requiring Mario to jump onto the flag pole as it is one block off the ground as shown in figure 2<sup>5</sup>.

Figure 2 Screenshot from Super Mario Bros. (1985) showing the flag pole



In both IEYTD and Mario, micro choices feed into macro choices which in turn create a system outcome. With this relationship it suggests all choices in the game create meaningful play for the player. While meaningful play can be described as being as actions being both discernible and integrated as has been shown, Salen and Zimmerman also say that meaningful play can come from an evaluative perspective. To show that the player experienced meaningful play, elements of the Game Experience

<sup>4</sup> <http://shmuplations.com/mario64/>

<sup>5</sup> [https://mario.fandom.com/wiki/Goal\\_Pole](https://mario.fandom.com/wiki/Goal_Pole)

Questionnaire<sup>6</sup> can be used. While a full breakdown of the players answers are in the appendix, a high score of 3 in the flow component is a strong indicator that the player was experiencing meaningful play. This backs up the analysis of the game design and mechanics presented previously.

Ultimately Salen and Zimmerman say “Creating meaningful play is the goal of successful game design”, this can be seen as the player enjoyed the game (positive affect score of 3.2 in the GEQ) and the games critical and commercial success. By ensuring the core mechanic and all player choices are connected, IEYTD creates meaningful play at all levels of game play. While this is not the only way to design a game this methodology has shown success in IEYTD and other games like the Super Mario Bros. series.

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<sup>6</sup> Poels, K., de Kort, Y. A. W., & IJsselsteijn, W. A. (2007). *D3.3 : Game Experience Questionnaire: development of a self-report measure to assess the psychological impact of digital games*.

## APPENDIX

### GEQ Answers - Core Module

No.	Question	Response
1	I felt content	4
2	I felt skilful	3
3	I was interested in the game's story	2
4	I thought it was fun	3
5	I was fully occupied with the game	4
6	I felt happy	3
7	It gave me a bad mood	1
8	I thought about other things	1
9	I found it tiresome	2
10	I felt competent	3
11	I thought it was hard	3
12	It was aesthetically pleasing	3
13	I forgot everything around me	3
14	I felt good	3
15	I was good at it	3
16	I felt bored	2
17	I felt successful	3
18	I felt imaginative	2
19	I felt that I could explore things	1
20	I enjoyed it	3
21	I was fast at reaching the game's targets	2
22	I felt annoyed	3
23	I felt pressured	1
24	I felt irritable	2
25	I lost track of time	2
26	I felt challenged	1
27	I found it impressive	2
28	I was deeply concentrated in the game	3
29	I felt frustrated	3
30	It felt like a rich experience	2
31	I lost connection with the outside world	3
32	I felt time pressure	3
33	I had to put a lot of effort into it	2

### GEQ Answers - Post-Game Module

No.	Question	Response
1	I felt revived	0
2	I felt bad	0
3	I found it hard to get back to reality	0
4	I felt guilty	0
5	It felt like a victory	2
6	I found it a waste of time	0
7	I felt energised	0
8	I felt satisfied	2
9	I felt disoriented	0
10	I felt exhausted	0
11	I felt that I could have done more useful things	1
12	I felt powerful	0
13	I felt weary	1
14	I felt regret	0
15	I felt ashamed	0
16	I felt proud	2
17	I had a sense that I had returned from a journey	0

### GEQ Component Score - Core Module

Component	Score
Competence	2.8
Sensory and Imaginative Immersion	2
Flow	3
Tension/ Annoyance	2.667
Challenge	2
Negative Affect	1.5
Positive Affect	3.2

### GEQ Component Score - Post-Game Module

Component	Score
Positive Experience	1
Negative Experience	0.167
Tiredness	0.5
Returning to Reality	0