10 principles for Good Level Design GDC talks

**1. Good level design is fun to navigate**  
Observational - the act of surveying ones surrounding  
Strategic - the act of processing your observations as a plan   
Navigational - the act of traversing the level itself   
  
Visual language - Player always should know where they are going to go   
e.g. light, geometry, colour and animation

Mirror's Edge - Red items is what you can be on

**Clarity and Flow**

The difference here is between intuitive to navigate and fun to navigate   
What the player doesn't notice is equally important - messenger bags, speed parts to review achievements  
Encourage exploration - Freestyle Navigation   
Adds Depth and Replayability of your level

Sometimes it's good to throw in a little confusion   
Modern Warfare 2 (Favela Level) - not easy to navigate but it's fun! Creates dramatic tension   
  
**2. Good Level Design does not rely on words to tell a story**

**The Broken Circle** - Down to the player to fill in the gap

if you make the gap too big - the player will get confused and will not be able to fill in the gap  
if it's too small, they'll fill it in easily and will be bored  
  
**3 Narrative types:**  
Explicit - Cutscenes or texts, written content (This creates a circle)   
Implicit - Anything the player figures out themselves by looking into the environment   
Emergent - The story the player thinks up in their head   
  
Mise-En-Scene technique  
= The art of telling the story through the environment   
=Environmental narrative   
  
e.g. Bioshock 9:10   
1 hour

Emergent narrative - doesn't create it but allows it by giving the player choice

- too much choice or not enough choice affects how players play your game

**3. Good Level Design Tells the Player What to do but not how**

- Provide clear objectives e.g. waypoints

**-** **Nebulous objectives** - keep your guidance concise and clear

- Only the right amount of information

- It's important not to punish the player for improvisation in exploration

- encourage for improvisation

- Parallel missions - concurrent objectives - that can be completed in any order the player wishes

- The player receives a reward in one of the objectives to make other objectives easier

**4. Good Level Design Constantly Teaches**  
- The theory of fun book - Raph Koster

- pattern analysis = the human mind enjoys processing patterns for storage and retrieval later

- If this pattern analysis ends too soon, the process stops and enjoyment ends

- each level in your game should introduce, showcase or subvert a key mechanic

- pace it out throughout entire game

- Constant teaching  - One massive tutorial e.g. Zelda game - in a dungeon,  you get a weapon or equipment; each room in the dungeon teaches you different ways to use that equipment and then you have a boss level tests your mastery on the equipment

- Learn new ways to access new areas

- Game's final boss make the player use all their equipment in different ways

**- Learn - Play - Challenge - Surprise**

- Same as the Mario 3D world

**5. Good Level Design is Surprising**

- Rollercoasting method

- however it can become pretty predictable fast

- Fun is created through uncertainty

- Constantly putting the player out of their comfort zone, you can make it fun

- take an existing game paradigm and flip it

-**Disrupt Paradigms** - e.g. Dead Space 2, taking away from the routine, the silence before a storm, making the player uncomfortable, not see what's going to happen next

- Restrictive design

- Taking risks is important if you want to stand out

**6. Good Level Design Empowers The Player**

- "Dream no small dreams, for they have no power to move the hearts of men"  Johann Wolfgang von Goethe  
  
- Go Big or Go Home

- Video games are escapism

- Real-life sucks

- Deliver the Fantasy - to be a badass   
- Visible Influence - Infamous - you can be good or evil

- subtle ways to show the consequences of your choices

**7. Good Level Design is Easy, Medium and Hard**

- the choice at the start of easy, average and difficult

- Risk vs. Reward

- Dynamic e.g. Burnout game - uses narrow shortcuts, call out - bright yellow barricade - visual language - no difficulty select screen

- **Layered Approach** - puzzle; an object that can be seen but the route to that object is hidden (Doom) Visual Cues

- Dishonoured - fill the level with multiple paths, extend the replayability of levels

**8. Good Level Design is Efficient**   
-  **Modular design** - they don't create a level, they a series of modular mechanic driven encounters that can be string together to make a level... and another level

- maximise the use of resources, using it more than once

- **Bi-directional Gameplay** - Reuse nice artwork from your level   
- Gameplay on the way there and gameplay on the way back! e.g. Halo

- **Non-Linear** - Non-linear exploration and extends gameplay. Provide implicit objectives that provide intuition and exploration to complete.

- Relevant - needs to stay relevant, tie the objectives into the main narrative thread

- massage the player into playing the game twice

**9. Good Level Design Creates Emotion**

- Video games are legally art - US Supreme Court declared

- Art is the quality, production, expression or realm according to aesthetic principles of what is beautiful, appealing or more than ordinary significance  - dictionary

- Something created to provoke an emotional response

-**Architectural Theory** - windows that are below knee height to elicit the emotion of empowerment, a window high above suggest the emotions of imprisonment

- **Spatial Empathy** - tight corners to limit players pov, tense, suspicious and claustrophobic. You can make a labyrinth and twisty to create confusion and panic. Wide open - to create isolation and epic scale

- Switching from Narrow to Large space to allow the player to feel a sense of wonder. looking over a vista

- Verticality - creates the feeling of persecution by attacking character from above

- **Work Backwards** - the desired emotional response you want from the player

- player to feel persecuted - enemy AI that constantly hunts your character

- to feel exhilarated - high-speed chase on the open road

- urgency - put a time limit

- desperation and save them at the last minute - lies to the player - can add intensity

**10. Good Level Design is Driven By Mechanics**

"books let you imagine extraordinary things, movies let you see extraordinary things, but video games let you actually do extraordinary things"

- **Metaphysical Medium** through which the gameplay is delivered.

- videogame as a painting -

the subject is the gameplay mechanics

composition - gives the subject its context - narrative and graphics

the medium - oil and canvas - game's level

- **Showcase Mechanics**

- get a mechanic to show something "cool"

- Showcase stealth and combat mechanics - Deus Ex

- Areas to use bionic arm to go through walls, unexpecting enemies on a tall building

- **Creative Re-use of game's mechanic** - find creative ways to modify these mechanics to keep them fresh -   
Batman Arkham city -the player has to use his equipment in different ways to unlock puzzles

extends play time and keeps the player learning

- the worlds greatest detective.