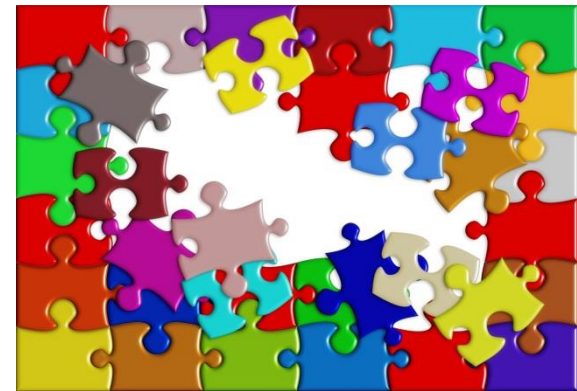
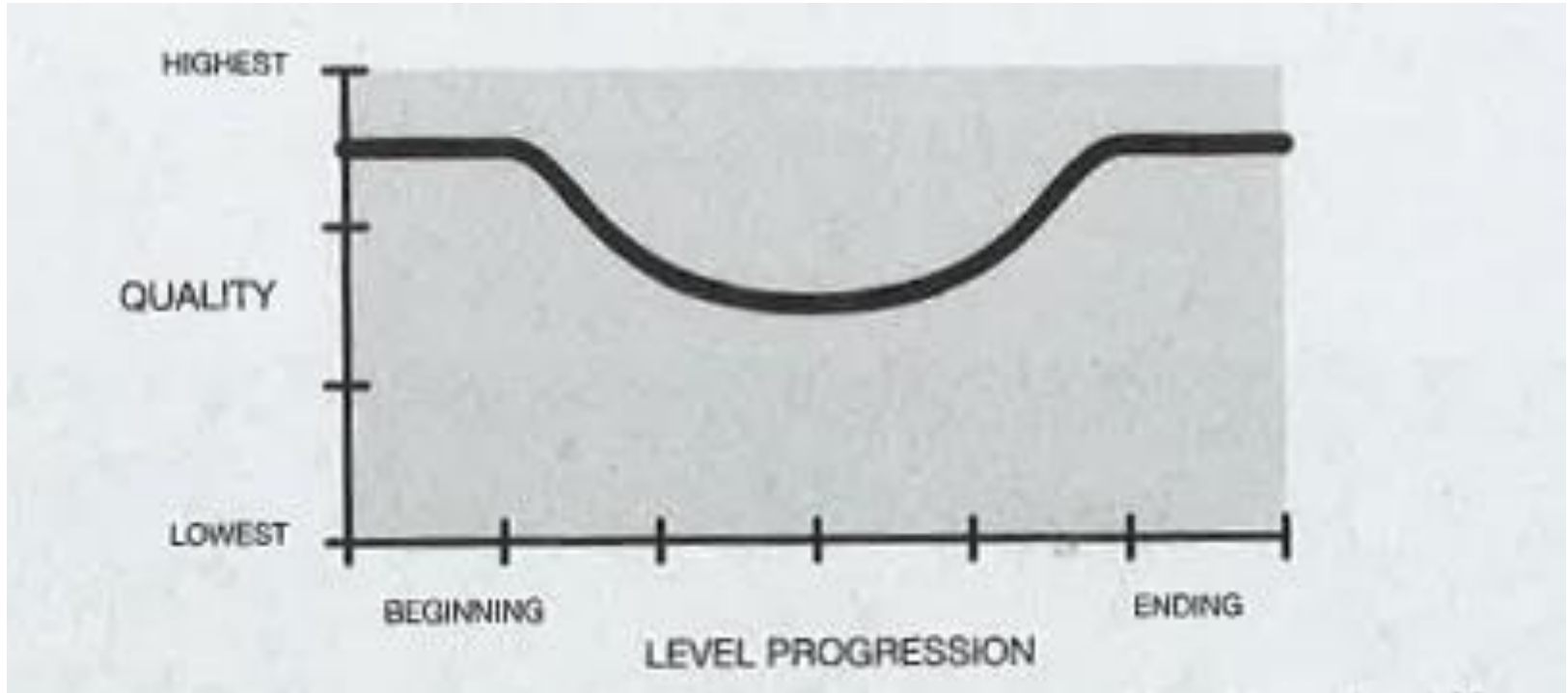


COMP09095 Level Design

Week 08 Lecture – Putting It All Together



The Quality Curve



- Used to concentrate effort where it has the most effect
- Beginning and ending of the level should have the highest priority
- More details, more unique models/textures, more complex geometry, more visual and audio effects

Adding Visual Layers

- Reference materials and concept art essential at this stage
- Replace simple template geometry/textures with more complex geometry/textures
- Improve the use of lighting
- Place props to add complex details
- Use primitives for efficiency
- Break up repetitive surfaces with different textures
- Remember that in real life nothing is perfect – imperfection can add to a sense of interest and reality

Adding Functional Layers

- These make your level feel more complete
- Audio effects:
 - Sound effects
 - Ambient sounds
 - Music
- Special effects:
 - Particle systems
 - Area effects (e.g. weather)
 - Ambient animated objects
- Scripted sequences

Level Optimisation

- What is your minimum target spec?
- Ideal frames per second (fps) rate is >30
- If less, you need to think about optimisation
- Options:
 - Reduce AI, e.g. number of enemies
 - Reduce visual content, e.g. props, complex geometry
 - Zoning the level
- Need to playtest after each step

Ten Principles of Good Level Design

A Well-Designed Game Level:

- 1. Is fun to navigate** – It uses a clear visual language to guide the player along the primary path, and creates interest through verticality, secondary paths, hidden areas and maze elements.

Ten Principles of Good Level Design

A Well-Designed Game Level:

- 2. Does not rely on words to tell a story** – Aside from the explicit narrative called out by story and objectives, good level design delivers implicit narrative through the environment, and provides players with gameplay choice from which to create their own emergent narrative.

Ten Principles of Good Level Design

A Well-Designed Game Level:

- 3. Tells the player what to do, but not how to do it**
 - It makes sure mission objectives are clearly communicated, but lets players complete them any way they like, and, where feasible, in any order.

Ten Principles of Good Level Design

A Well-Designed Game Level:

- 4. Constantly teaches the player something new –**
It keeps the player engaged by continuously introducing new mechanics all the way through the game, and prevents old mechanics from becoming stale by applying modifiers or reusing them in unusual ways.

Ten Principles of Good Level Design

A Well-Designed Game Level:

5. **Is surprising** – Classic Aristotelian pacing is not always appropriate for an interactive medium, and it is not enough to simply pace all your levels to the standard “rollercoaster” model. Good level design is not afraid to take risks with the pace, aesthetics, locale and other elements to create an experience that is fresh.

Ten Principles of Good Level Design

A Well-Designed Game Level:

6. **Empowers the player** – Videogames are escapism and, as such, should eschew the mundane. Furthermore, good level design reinforces players' empowerment by allowing them to experience the consequences of their actions, in both the immediate, moment-to-moment gameplay, and in the long term, through the holistic design of all levels.

Ten Principles of Good Level Design

A Well-Designed Game Level:

- 7. Allows the player to control the difficulty** – It gears the main path toward players of basic ability, presenting advanced players with optional challenge through clearly communicated opportunities of risk and reward.

Ten Principles of Good Level Design

A Well-Designed Game Level:

8. **Is efficient** – Resources are finite. Good level design creates efficiencies through modularity, bi-directional gameplay and integrated, exploratory bonus objectives that make use of the whole play-space.

Ten Principles of Good Level Design

A Well-Designed Game Level:

9. **Creates emotion** – it begins at the end, with the desired emotional response, and works backwards, selecting the appropriate mechanics, spatial metrics and narrative devices to elicit that response.

Ten Principles of Good Level Design

A Well-Designed Game Level:

10. Is driven by the game's mechanics – above all, it showcases the game's mechanics through the medium of the level, to reinforce the uniquely interactive nature of videogames.