COSC 419:
Mobile Educational Game Development

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Goals

- Want to present goals that *seduce* players into pursuing them
  - "I'll just keep playing until I …"

- Goal attainment based on player decisions
  - What if I did … back when …?

- Consequences not predictable (boring)
  - Design a large possibility space
  - e.g. Conquer that city

Overlapping Goals

- Develop short, medium, long term goals
  - Short is ~1-2 min
  - Long is ~3-4 hours

- Overlap long and short term goals
- e.g.: G1: sail into town to get instructions
  - G2: attack ship (short)
  - G3: visit another town (short)
  - G4: earn riches (long)

- G2 supports G4
- G2 competes with G3

Mutually Exclusive Goals

- Incorporate into the big picture story

- Force player to choose

- Live with different consequences

- e.g.: Do I spend resources on …
  building farmers to get more population?
  vs.
  military units to protect my coast from raids?

Common Goals

- Capture/destroy.

- Control territory.

- Collect.

- Solve.

- Chase/race/escape.

- Align.

- Build.

Figure 6.1 What if your avatar had to tediously jump over a long series of walls?
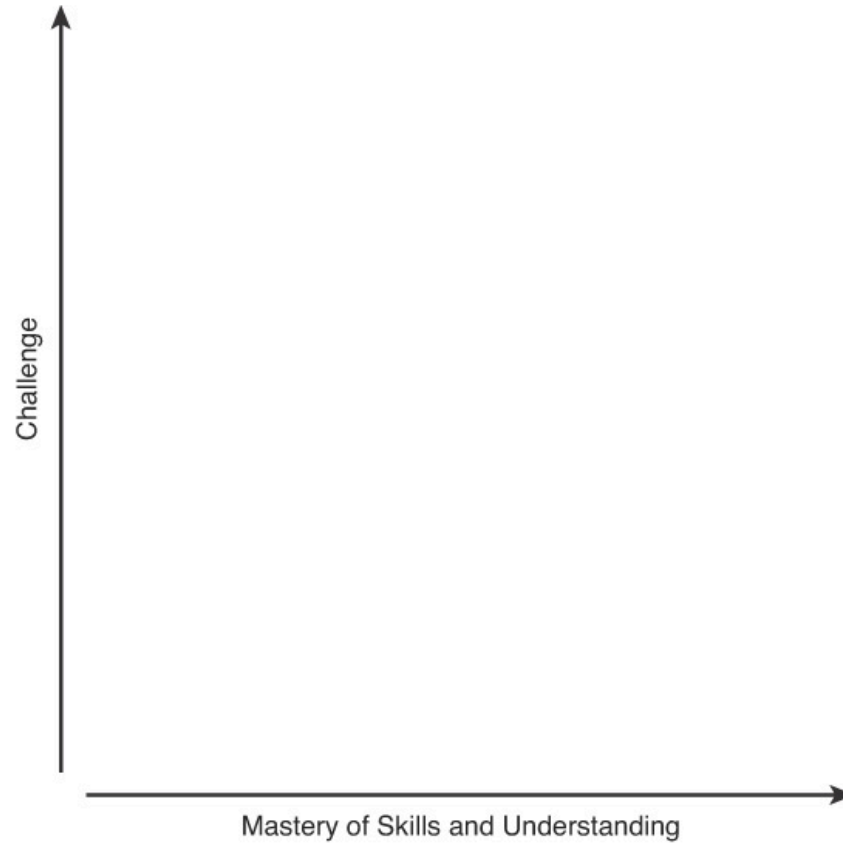
Keeping Players Engaged

- What to consider over time?

Keeping Players Engaged

- What to consider over time?
  - Variation in task
    - "Flavour" (e.g. setting, story, etc.)
    - Difficulty
  - Player's changing skills
- How to keep players in a flow?

Flow State

Challenge (vertical axis)

Mastery of Skills and Understanding (horizontal axis)

Figure 6.2 For some game creators, the ideal experience involves staying in the zone between boredom and frustration as the player's skills improve.

Flow State
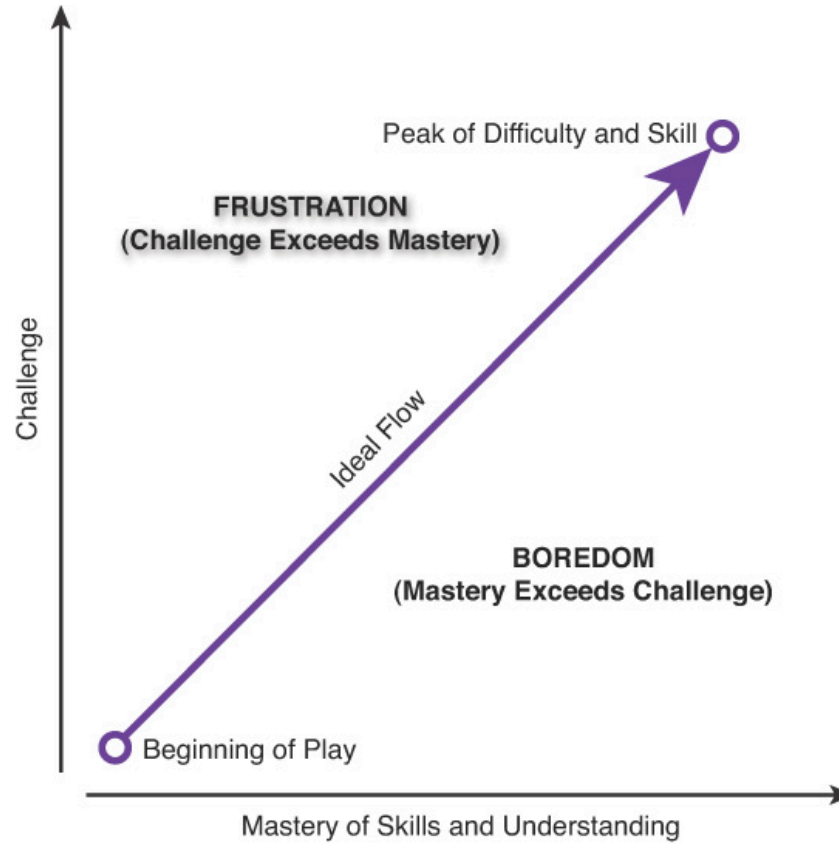
Figure 6.2 For some game creators, the ideal experience involves staying in the zone between boredom and frustration as the player's skills improve.
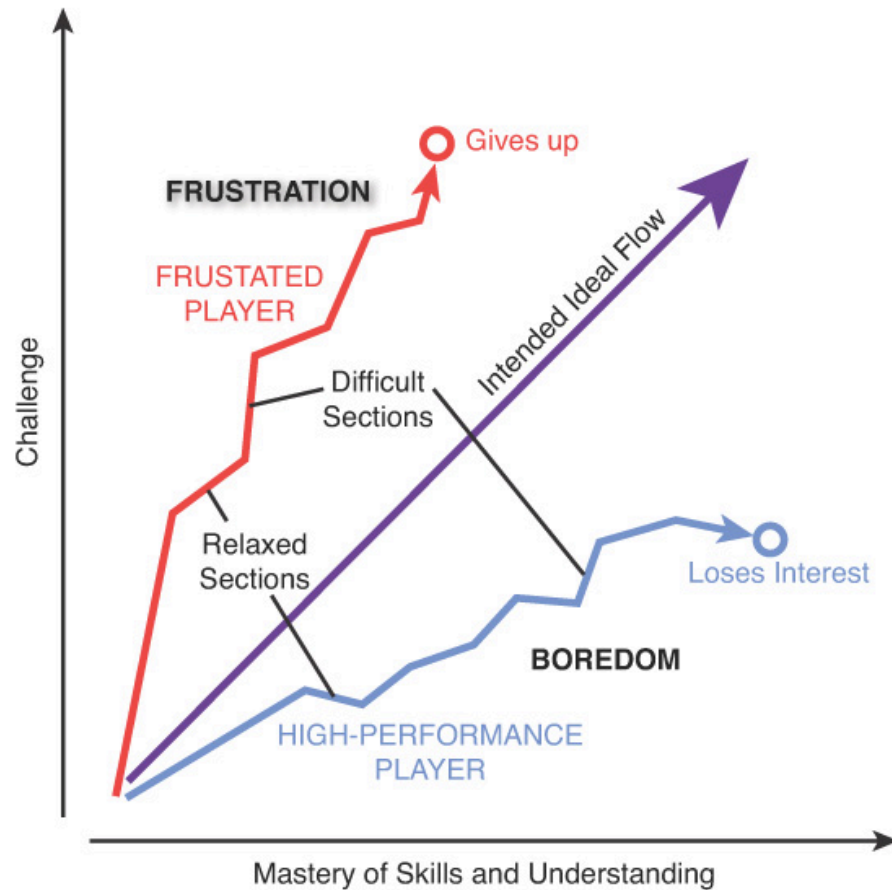
Different Paths

Figure 6.5 Same flow diagram but with zigzag lines for different players.

Experiences in Flow State

- Flow: The Psychology of Optimal Experience (Csikszentmihalyi 1990)
  - Extreme focus on task
  - Sense of active control
  - Merging of action and awareness
  - Loss of self-awareness (zone)
  - Distortion of experience of time
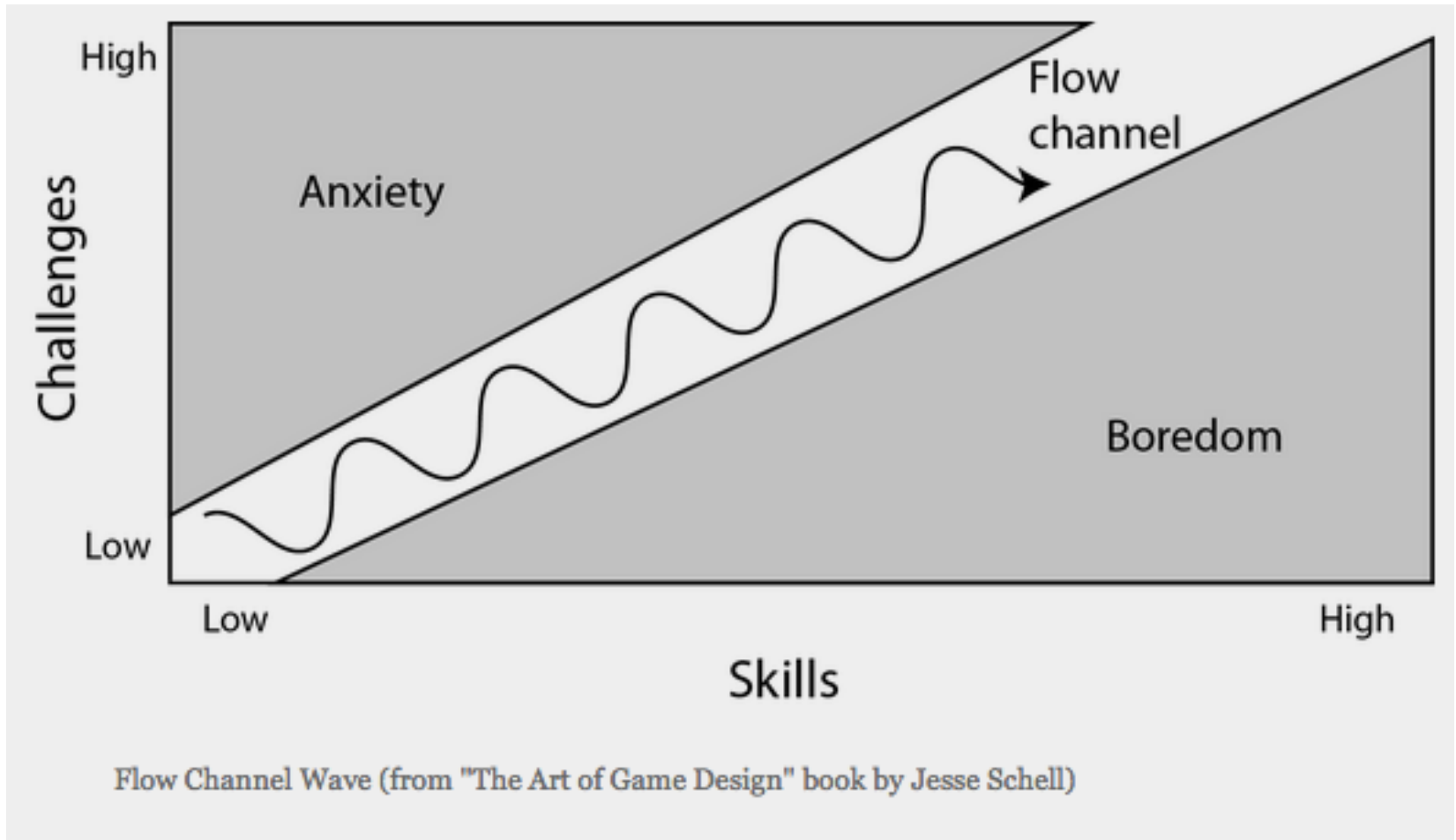 - Experience of task being the only necessary justification for continuing

Another Ideal

Flow Channel Wave (from "The Art of Game Design" book by Jesse Schell)

Image taken from www.gamasutra.com

Possible Techniques

How?

Possible Techniques

- Match goals with player's skills
  - Design game for target audience
  - Build adaptive game and learn about your players through observations

How?

Possible Techniques

- Match goals with player's skills
- Provide clear and timely feedback
  - Good job, try harder, 9/10, …
  - Constructive feedback for guidance
  - Like hints

How?

Possible Techniques

- Match goals with player's skills
- Provide clear and timely feedback
- Develop levels
  - Allow flexible entrance model
  - Not necessarily "levels": can be cities on a map

How?

Possible Techniques

- Match goals with player's skills
- Provide clear and timely feedback
- Develop levels
- Create assessments
  - e.g., bosses as tests

How?

Exceptions Exist (Rare)

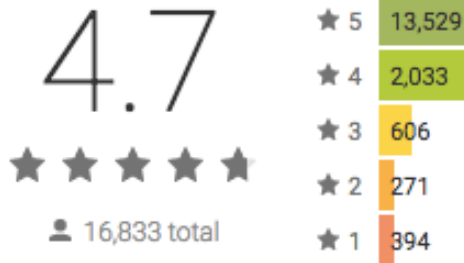# Exceptions Exist (Rare)

REVIEWS

✏ Write a Review

4.7
★★★★✩
👤 16,833 total

★ 5	13,529	
★ 4	2,033	
★ 3	606	
★ 2	271	
★ 1	394	

100,000-500,000 installs

Tyler Buehner ★★★★✩
Wow Hyper modes are impossible on the mobile. Especially hyper hexagonest.

Umair Nafee ★★★★★
You will hear "Game Over" a lot It's a REALLY hard game, and with no easy mode, beginners

charlie watson ★★★★★
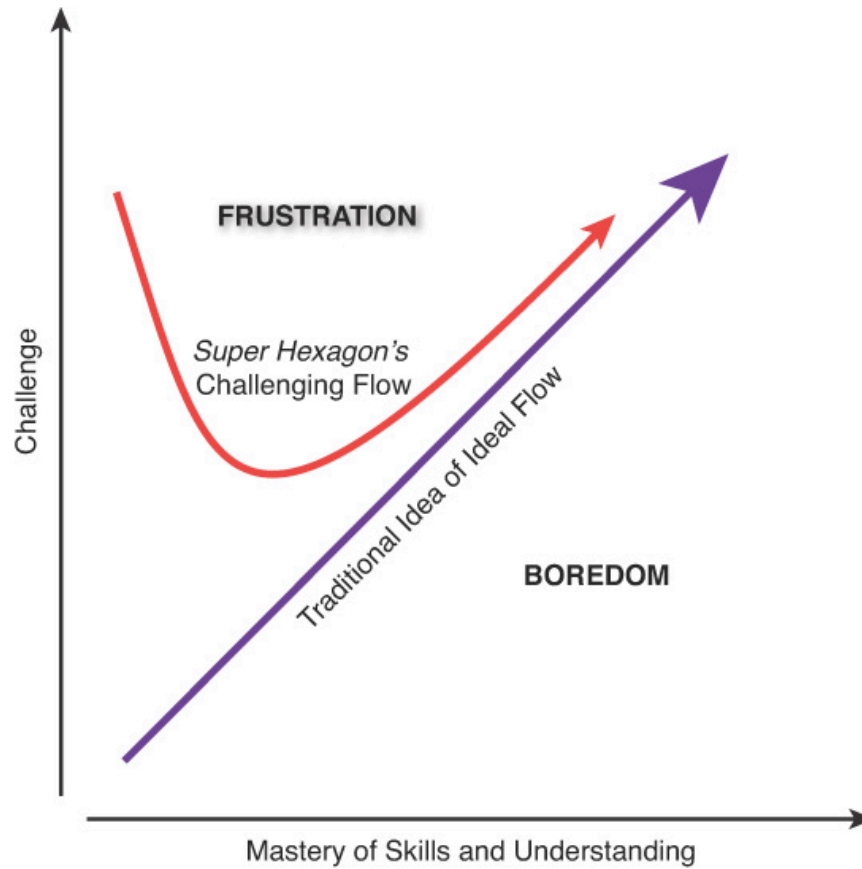*I really like this game I love this game on desktop so I bought it on mobile. On desktop I have*

Ryan Karagozian ★★★★★
Amazing Game I finally just beat hexagonestest and it was so amazingly satisfying. This

Image taken from https://play.google.com

Super Hexagon's Flow

Figure 6.4 If a player isn't put off by the difficult beginning, finding the flow of *Super Hexagon* can be a thrilling ride.