

Esports Course Design: Balancing Multiplayer Gameplay within Structured Curriculum









Written by: D. R. Hunter





Course Description

Course began in 2017, updated by me Summer 2021

Esports: A specific genre of Video Game that reflects the skills of a Competitive Sport

A video game can be considered an Esport if it has:

- Human Player vs Human Player aspect
- Balanced either team has the potential to win based on calculated decisions and mechanics.

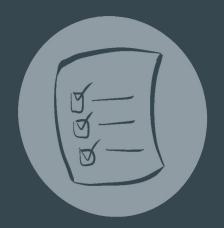


Week 1, Day 1 Students enrolled at the start of the study in Fall 2021, Utah State University

Study Overview



Surmountable student interest in enrollment with uncapped potential to be measured



Goal-related assignments pertaining to

- Individualized improvement in a team-based format
- Publicized Evaluation of personal improvements



Evaluation of course content involving "Theorycrafting" and "Metagaming"

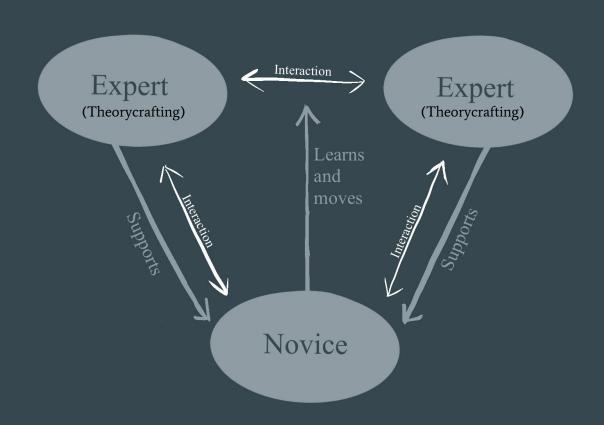
Literature Review

Situated Learning Theory

Paul Duguid, John Seely Brown, and Allan Collins

Learning connected to an activity, content, and culture.

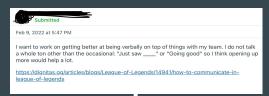
New knowledge is achieved socially, as well as other factored surroundings.



Homework Format

Goal-based Curriculum

Week 1







Repeat (x5)

GOAL TOPICS:

Goal 1:

"Attitude and Health"

Goal 2:

"Communication"

Goals 3, 4, and 5:

"Positioning and Game Mechanics"

Goal 1: Attitude/Health

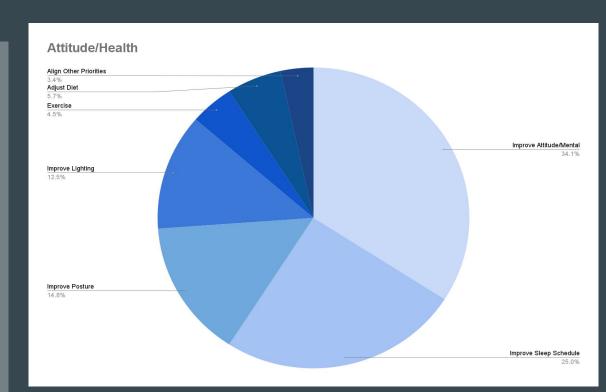
Given Examples:

Good Sleep Schedule - "Practice not playing late into the night"

<u>Attitude</u> - "Leave the game after a loss streak (especially if playing often back-to-back)"

<u>Health</u>- "Carpal Tunnel Prevention or Bad Posture Prevention"

<u>Lighting</u>- "Damage to eyes while playing"



Goal 2: Communication

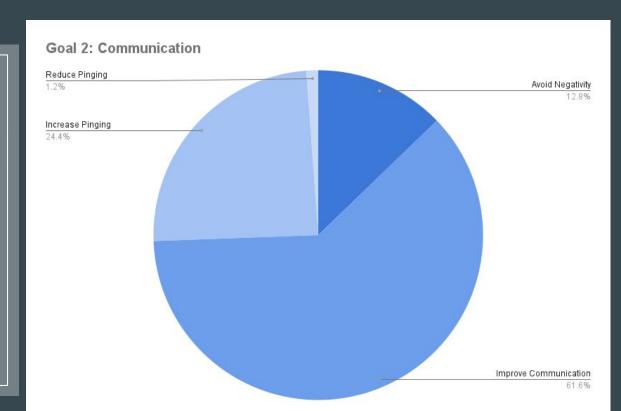
Given Examples:

<u>Avoiding Negatives</u> - "Refrain from raging in chat and instead type positive feedback"

<u>Talking more</u> - "Focus on stronger game communication in voice-calls or in-person with teammates"

<u>Pinging tactics</u> - "Find opportunity to send more pings to teammates"

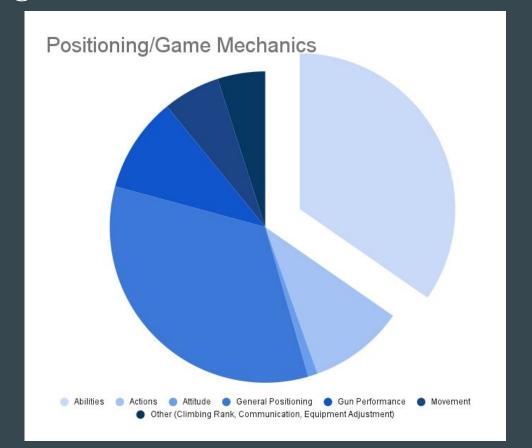
<u>Leadership</u> - "Successfully perform as the lead coordinator through a match"



Goals 3, 4, and 5: Positioning/Game Mechanics

Given Examples:

- → "Utilize a certain structure to your advantage in a <u>FPS</u> (give details)"
- → "Perform a MOBA chamion's ability in ways that only higher elo players do"
- → "Focus on shield timing in a Fighting Game"
- → "Analyze and perform <u>Rocket</u>
 <u>League</u> maneuvers that are
 foreign to you"



Analysis of Student Perspective

This class was a really big step when it comes to carrying a growing personal hobby of mine and I really felt as though I was honestly enjoying the course, She really cares about all of the people taking the class and always did her best to having things work out

Fantastic course! A sense of community was cultivated in the course and that can be attributed to your efforts. The course was very fun and the coursework was both relevant and engaging.

Very little. I think this class would only benefit from more assignments.

At the end of the Fall 2021 semester, students were given access to an open ended "evaluation of the course" for extra credit, as well as access to the IDEA Evaluation Survey.

When asked about overall workload, a **portion of students** requested "more assignments" rather than less.

The Fall 2021 course received an IDEA Evaluation score of

The goal assignments were well done

4.5 / 5

Conclusion

Through a course based upon Multiplayer

Gaming and Situated Learning, students
showed self directed learning through a variety
of goal topics, with a number requesting more
assignments by the end of the course.

Conclusion - what's next?

Multiplayer Game-based Curriculum allows a platform for the study of:

- **♦** Community
- ◆ Esports Culture/Stereotypes

 Gender, race, foreign language, toxicity, age, stress, etc
- Metagame structure

Beginner vs Pro level goals

Exploration on these topics will lead to greater findings for other schools to develop their programs, as well as finding foundations for healthy esports community/gameplay.



Works Cited

Scott Donaldson, 2015, mechanics and Metagame Exploring Binary Expertise in League of Legends, In Games and Culture 2015.

Debuts, M. S. (2017, August), Metagames: on the ontology of games outside of games. In Proceedings of the 12th International Conference on the Foundations of Digital Games (pp. 1-9).

Salen K., Zimmerman E. (2003). Rules of play: Game design fundamentals. Cambridge, MA:
MIT Press.

Christopher A. Paul. 2011. Optimizing play: How theorycraft changes gameplay and design. In Game Studies 11, 2 (May 2011)

Karin Wenz. 2013, THEORYCRAFTING: Knowledge production and surveillance. In Information, Communication, & Society 16, 2 (2013), 178 - 193

T. L. Taylor 2009, Play between worlds: Exploring online game culture, MIT Press, Cambridge.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. Educational Researcher, 18 (1), 32-42. Richard, G. T., McKinley, Z. A., & Ashley, R. W. (2018). Collegiate eSports as Learning Ecologies: Investigating Collaborative Learning and Cognition During Competitions. In DiGRA Conference.

Steinkuehler, C. (2020). Esports research: Critical, empirical, and historical studies of competitive videogame play. Games and Culture, 15(1), 3-8.

Kou, Y., & Gui, X. (2018). Entangled with numbers: Quantified self and others in a team-based online game. Proceedings of the ACM on Human-Computer Interaction, 2(CSCW), 1-25.

Egliston, B. (2020). Quantified play: Self-tracking in videogames. Games and Culture, 15(6), 707-729.

Wagner, M. G. (2006, June). On the Scientific Relevance of eSports. In International conference on internet computing (pp. 437-442).

Reitman, J. G., Anderson-Coto, M. J., Wu, M., Lee, J. S., & Steinkuehler, C. (2020). Esports research: A literature review. Games and Culture, 15(1), 32-50.