

# 2022-2023

## Gambling in Gaming Prevention Curriculum Program Evaluation



**Prepared by**

Dr. Stephanie Diez-Morel, PhD, LCSW, IGDC. BACC

# About the program



The North Carolina Problem Gambling Program integrated the Gambling in Gaming curriculum as a supplement to their statewide prevention program. The curriculum was administered to middle and high school aged youth throughout the state.

The Gambling in Gaming curriculum is an evidence-based prevention intervention and was developed to be delivered via two separate methods of teaching and learning.

1. Autonomous learning approach: Students engages in self-learning via a learning management system (LMS). Students viewed a video recording integrated into a LMS with a combination of materials and gamified knowledge interactive knowledge assessments throughout
2. Teacher-led approach: Instructors/teachers received training and materials that were adapted for instructor led teaching of the Gambling in Gaming curriculum. Instructors/teachers were also provided with opportunities to increase interaction and engagement with learning via open-ended questions and activities throughout the materials to increase students knowledge, attitudes, and beliefs.



# Overview



## **TEACHER LED-MODALITY**

A total of 944 youth received the teacher-led modality of the Gambling in Gaming prevention curriculum. They completed a pre and post survey on gambling and gaming knowledge, attitudes, and beliefs. As well as pre and post data on their engagement with gambling in gaming.

Of these, 53% identified as male and 47% identified as female. Ages of the participants ranged from 10-18 years old.



## **LMS MODALITY**

A total of 476 participants received the Learning Management System (LMS) modality of the Gambling in Gaming prevention curriculum. They completed a pre and post survey on gambling and gaming knowledge, attitudes, and beliefs. As well as pre and post data on their engagement with gambling in gaming.

Of these, 54% identified as male and 46% identified as female. Ages of the participants ranged from 12-18 years old.



# Gambling in gaming activities



Youth were asked open-ended questions regarding their experiences in activities and behaviors surrounding problematic gaming and gambling in gaming. Below are verbatim highlights of the most common youth experiences and behaviors surrounding problematic gaming and gambling in gaming.

Youth reported the following ways they gamble in video games:

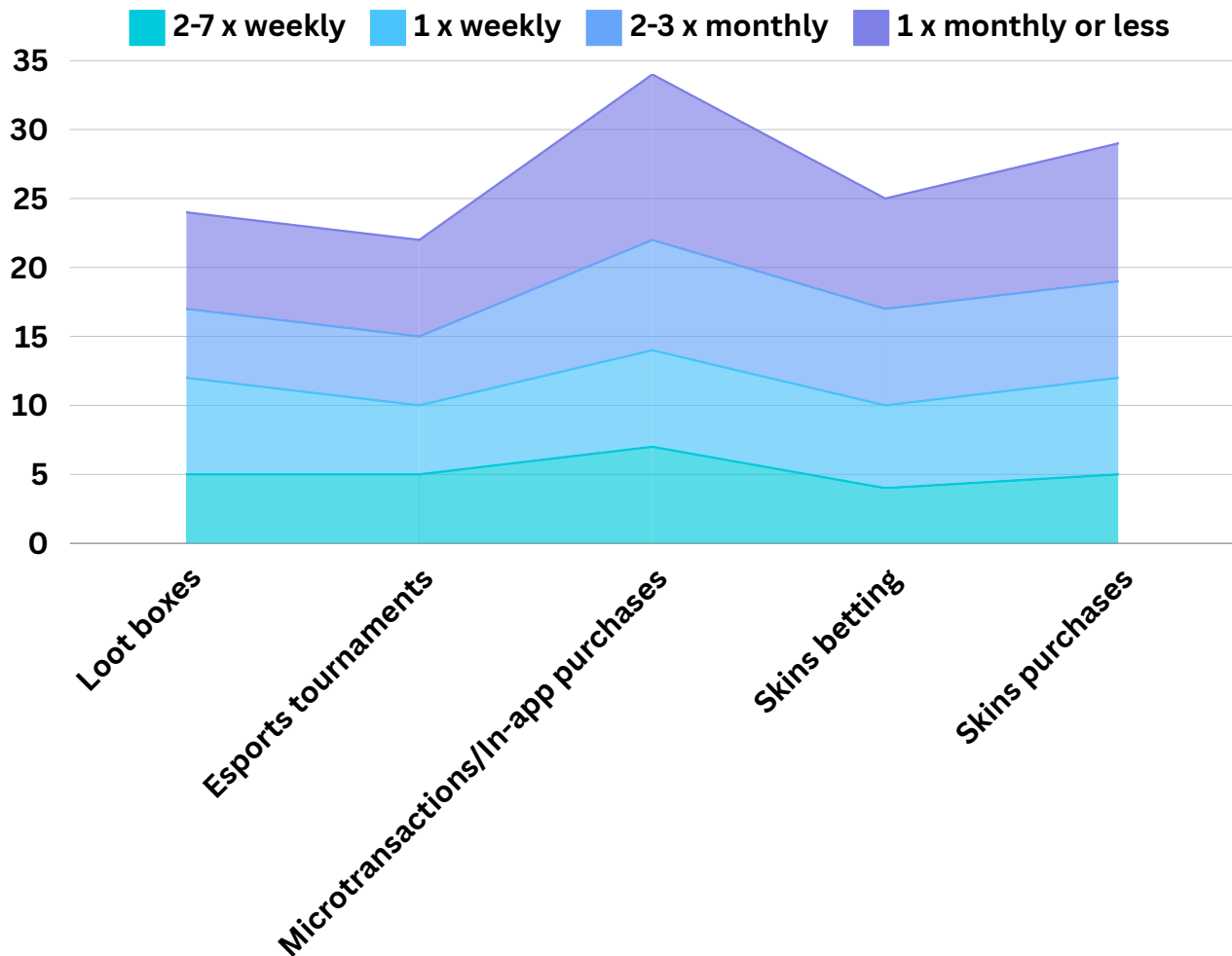
- “Buying in-game purchases, skins, or loot”
- “Buying things without knowing and leaving it all up to chance”
- “I go to the casinos inside video games, like in GTA 5, and spend money”
- “I bet my friends that I will win”
- “Depending on the game, some games whole point is to have a point system which you use for boxes and randomly pick items”
- “I don’t spend real money but I do take risks”
- “Sometimes I bet money or rare items on blackjack or dice”
- “Taking chances on RNG”
- “I bet with in game currency”

When asked how gaming may lead to problems in their life, youth responded:

- “Can cause you to be addicted to gaming”
- “Can cause you to be addicted to it/obsessed. My grandpa is obsessed and can’t stop gambling”
- “If you play games too much, you may not want to do other stuff”
- “It can lead to depression, drug abuse, anxiety, and severe debt”
- “It could affect your mental health, and relationships if you game too much. It could even lead to disorders anxiety, depression, etc.”
- “They can be addicting and lead you to playing them can make you do it every day and cause you to lose days of getting to do things”
- “They can affect your mental health in ways and may cause problems with friends or family”
- “You could spend all your money and start stealing money from family members”
- “You get lazy and don’t want to go to work. This an experience from someone I know”
- “You’re spending money that you most likely need and gaining less. Your family needs that money you need that money. It causes stress and making you wanting to do it over and over again, like a drug”

# Gambling in gaming

Prior to completing the Gambling in Gaming curriculum, youth reported high frequency in activities associated with gambling in video games. This chart demonstrates the percentage they reported engaging in these behaviors.



**After completing the supplemental lesson on Gambling in Gaming and Problematic Internet Use, youth reported the following positive changes:**

- **12% reduction in purchasing Loot boxes**
- **16% reduction in engaging with Esports tournaments**
- **20% reduction in chance based microtransactions**
- **12% reduction in skins betting**
- **16% reduction in skins purchasing**

# Knowledge, attitudes, & beliefs: Gaming



Questions designed to examine youth’s knowledge, attitudes, and beliefs in gaming were asked to assess changes after youth completed the Stacked Deck Curriculum and two supplemental lessons on Gambling in Gaming and Building Resiliency. The two tables below summarize the changes.

Knowledge Content Area	Question	Pre-Correct Response	Post Correct Response	Change in Pre- & Post
Gaming Knowledge Questions	Gaming can impact the brain by	44%	59%	15%
	What is problematic gaming?	55%	79%	24%
	What does the spectrum of gaming behavior mean?	49%	77%	28%
	How does gambling appear in video games?	47%	70%	23%
	Gaming can release hormone on our brain that can impact our moods	73%	94%	21%

Knowledge Content Area	Question	Pre-Responded Yes	Pre-Responded No	Post-Responded Yes	Post-Responded No
Gaming Beliefs Questions	Do you think gaming leads to any problems in your life?	22%	68%	30%	70%
	Do you gamble when playing video games?	8%	92%	10%	90%
	Do you think what you see on the internet impacts how you feel?	18%	72%	23%	77%
Gaming Attitudes Questions	Over the past three months, I felt the need to play games more often or for longer periods of time	29%	61%	19%	81%
	Over the past three months, I have been able to recognize forms of gambling in games which I have previously not thought of gambling.	36%	54%	57%	43%
	Do you plan to gamble on any game in the next three months?	26%	74%	10%	90%

**Overall, there was a positive increase in youth’s gaming knowledge, attitudes, and beliefs after completing the prevention program and supplemental Gambling in Gaming and Problematic Internet Media Use lesson.**

# Summary



Research shows that prevention is effective for strengthening protective factors while reducing risk factors. Thus, in an effort to achieve this the North Carolina Problem Gambling Program intentionally and purposefully included the Gambling in Gaming evidence based prevention curriculum delivered within middle and high schools.

Overall, the program evaluation results demonstrated that the Gambling in Gaming Prevention curriculum was found to be an effective prevention intervention for :

- Positively impacting knowledge, attitudes, and beliefs about gambling in gaming
- Decreasing associated risk factors for problem gambling in gaming

## Teaching approach

Both the LMS modality and instructor-led approaches demonstrated a positive change in youth's knowledge, attitudes, and beliefs regarding gambling and gaming behaviors.

**However, the instructor-led approach had overall higher positive changes in youth's knowledge, attitudes, and beliefs, demonstrating that it is the more effective approach.**

**Thus it would be recommended to deliver the Gambling in Gaming prevention curriculum via an instructor-led modality.**

Noting that the LMS modality is a good alternative as well as it provides a reduction in risky and problematic behaviors while increasing knowledge related to gambling and gaming.



# Contact info

Dr. Stephanie Diez-Morel



[information@rebootandrecover.org](mailto:information@rebootandrecover.org)



[rebootandrecover.org/prevention](http://rebootandrecover.org/prevention)

**Thank you to all who contributed to the success piloting and beta testing of the Gambling in Gaming and Problematic Internet Media Use prevention curriculum.**

**This program evaluation demonstrated that this is an effective prevention program for Gambling in Gaming amongst youth ages 10-18 years old in the state of North Carolina.**

**Additional thanks to all the educators, community members, youth, families, staff, and caregivers who have been a part of these efforts.**

