

# Promoting Engagement in Informal STEM Learning as a Path to Employment for Autistic Adolescents

AWARD #2005772  
#2005729

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**Evaluation Team:** Ariana Riccio & Wendy Martin (EDC)

## Project Description

Increasingly guided by a participatory team of Autistic students and scholars, we designed, delivered, and assessed Game Design and Employment Workshops for Autistic youth. We seek to empower Autistic youth to succeed in careers that match their skills and interests by:

- 1) Developing and sharing strategies that effectively engage Autistic youth in informal STEM learning opportunities;
- 2) Promoting key employment skills including self-determination and self-efficacy.

## Audience & Settings

**Audience:** Neurodivergent Stakeholders, Informal STEM Educators, Public Participation in Scientific Research Practitioners.

**Learning environments:** Online workshops, informal STEM education, community outreach and engagement in research.

## Key Achievements

- Guided by a participatory team, we developed 5 increasingly advocacy-centered workshops across 3 summers (See [Year 2](#) and [Year 3](#) websites).
- Improvements in video game design self-efficacy were often observed, with some improvements in self-determination, planning, and career decision-making self-efficacy.
- To address conflicting values in Year 2, two neurodivergent staff created neurodiversity-affirmative principles that guided staff training and curriculum development in Year 3.

## Access and Inclusion

- Autistic community members lead project decision-making via our participatory team and hold leadership positions on our advisory board, research and workshop teams.
- To address representation issues in autism research, we prioritized recruiting underserved Autistic youth (e.g., low-income; people of colour; co-occurring learning/communication challenges).

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Table highlighting areas where Autistic and other neurodivergent voices shaped the game design and employment workshops.

	Staff Training/ Resources	Curriculum Development	In-Workshop Adjustments
<b>YEAR 1</b>			
<b>Participatory Team</b>	No input. Created by non-neurodivergent leadership team	Provided guidance on teaching approaches and lesson topics	Provided guidance on adjustments between workshop 1 and 2
<b>Workshop Students</b>	No direct input. Used pre-workshop data to make student 'diversity profiles' for staff	No input. Created by non-neurodivergent leadership team	No direct input. Curriculum adjusted using students' engagement ratings
<b>Workshop Staff</b>	No input. Created by non-neurodivergent leadership team	No input. Created by non-neurodivergent leadership team	Curriculum adjusted by neurodivergent and non-neurodivergent workshop staff
<b>YEAR 2</b>			
<b>Participatory Team</b>	No input on resources and training	Rated importance of workshop learning objectives (LOs). One member created a module and two delivered two modules.	No input. Carried out by workshop leadership team
<b>Workshop Students</b>	No direct input. Pre-workshop data used to make student 'diversity profiles'	Rated interest in workshop LOs; highly rated LOs were prioritized in curriculum	Reflected and provided feedback on their average engagement ratings for workshop activities
<b>Workshop Staff</b>	One neurodivergent team member co-delivered a training session	Neurodivergent staff co-developed, co-refined, and co-delivered workshop curriculum	Neurodivergent staff co-adjusted curriculum in response to student feedback
<b>YEAR 3</b>			
<b>Participatory Team</b>	Rated a list of LOs to guide development of staff training	Rated importance of workshop LOs. One member refined a module and two delivered two modules.	No input. Carried out by workshop leadership team
<b>Workshop Students</b>	Students communicated information they wanted shared with staff in diversity profiles	Rated importance of workshop LOs; highly rated LOs were prioritized in curriculum	Reflected and provided feedback on their average engagement ratings for workshop activities
<b>Workshop Staff</b>	Neurodivergent staff co-designed and co-delivered staff training modules	Neurodivergent staff co-developed, co-refined, and co-delivered workshop curriculum	Neurodivergent staff co-adjusted curriculum in response to student feedback

**LEGEND**

No Neurodivergent voices included

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