



Autism Meets Steampunk

In 2013 Bruce Rosenbaum (Steampunk Guru/ReImagineer/Founder of [ModVic](#)) and Ashleigh Hillier, Ph.D. (Psychology Professor) came together to offer **Steampunkinetics**, an Art / Technology program for adolescents and young adults with autism spectrum disorder (ASD). The mission of Steampunkinetics was to provide those with autism with the resources, skills, and support needed to create a unique, innovative and collaborative project fusing history + art + technology.

How Did You Set Up Steampunkinetics?

We enrolled 15 autistic young adults, 3 female/12 male aged from 14-23 years old. (Please note: we have chosen to use person-first language “those with autism”, and identity-first language “autistic” interchangeably to reflect the preferences of multiple stake-holders).

The program ran for 9-weeks at UMass Lowell during which participants worked in groups to create a “room in a house” using salvaged items, programming lights and buzzers, and pinball-like tracks and ball. Each room then became a vertical Steampunk “house” and the pinball rolled through each groups’ room from the “attic” to the “basement” then back up again.

Why Would Those With Autism Be Into This?

We capitalized on the strengths of those on the autism spectrum including how they often excel with tasks centered on technology, mechanics, and understanding how things work.

What is Steampunk?

- ☞ Steampunk is a cultural & aesthetic movement that began in the 1980s and continues to grow throughout the world
- ☞ Steampunk includes art, books, movies, fashion, gaming, etc. and blends the themes found in Victorian Science Fiction with modern technology and invention
- ☞ Steampunk honors innovation & ingenuity, and has audiences & artists asking 'what if'?



Research has also shown a cognitive processing style (weak central coherence) perfect for the detail oriented work called for in the design and creation of these sorts of projects.

Steampunk requires highly creative minds capable of divergent thinking which pulls together previously unrelated forms and ideas. Those with autism are known to have highly creative minds that generate unique, divergent ideas. The Steampunk culture itself may also appeal to those with ASD who sometimes also find themselves on the outside of the mainstream.

Did It Work?

“Hands on. Something that focused on their strengths. I think it’s very important for kids like our kids to realize that they have strengths. Because at school they are all focused on their weaknesses and that’s what they work on. And nobody talks about their strengths.”

*Steampunkinetics
Parent.*

A pre-post research design showed that stress and anxiety were significantly reduced at the end of the program. Group members reported that they enjoyed the program, were interested, and made friends. These outcomes were supported by comments parents made during a focus group where they also discussed the uniqueness of the program, the opportunity to collaborate with others, and how Steampunkinetics focused on their strengths, rather than their challenges – a refreshing approach.

What Was Involved?

Steampunkinetics took a whole team. We had financial support from the UMass Lowell Department of Psychology and a Joseph P. Healey grant (UMass Lowell), and consultancy from Adam Norton (UMass Lowell Robot Design and Test Center), Abe Shultz and Fred Martin, Ph.D. (UMass Lowell, Computer Science).

Also, critical were Hannah Johnson, MA (UMass Lowell, Department of Psychology) who oversaw the entire program, and a team of undergraduate Psychology students who facilitated the sessions.

For more info – contact Bruce Rosenbaum bruce@modvic.com or call 781.784.0250

Steampunkinetics

Young adults with autism worked together on a Rube Goldberg-like project incorporating art, history, technology and engineering—all within the Steampunk Victorian and Industrial aesthetic:

