

Ian Zang

Business Development Specialist – Educator – Game Designer

1034 Autumn Park Trail, Howell, MI 48843

izang88@gmail.com

810-407-4913

Profile

Experienced professional development trainer and public speaker with thousands of hours developing and delivering classes, workshops, and lectures that incorporate human-centered design. Specialized in team-based development, strategic planning, and delegation of tasks. Expert in game development, bringing products to a publishable and marketable state through effective project management. Extensive experience working remotely with diverse teams.

Education

Michigan State University – East Lansing, MI - 2013

Masters of Arts – Teaching and Curriculum

Michigan State University – East Lansing, MI - 2011

Bachelors of Science – Human Biology

Work Experience

Senior Training Specialist

DealerOn - Remote

January 2021 to Present

- Write high-impact training modules for company-wide product adoption.
- Train new hire waves that begin every month, consisting of 6-20 people.
- Deliver monthly video and document detailing all new changes to our Content Management System and other integrated systems.
- Coordinated with a large group of product managers to create tutorials of existing products.
- Provide feedback and constructive criticism for Training Specialists in their roles.

Training and Performance Coordinator

Michigan State University, Planning Design and Construction Department – East Lansing, MI

January 2020 to August 2020 (Furloughed due to COVID-19)

- Audit and report on upwards of nine-figure Capital Project jobs for the Infrastructure, Planning, and Facilities Department.
- Coordinate training and support for Michigan State University's online construction and process management platforms. (Unifier, PlanGrid, ProMapp and PlanOn)
- Create internal mass email communications to facilitate knowledge transfer.
- Collaborate with project managers to ensure strong data integrity for reporting to the Board of Trustees and other stakeholder groups on campus.
- Work remotely using Microsoft Suite since COVID-19 lockdown began and facilitate the department's transition with the Learning and Development Team.

STEM Professional Development Coordinator

Carnegie Science Center – Pittsburgh, PA

August 2014 to December 2019

- Write and develop materials for the nationally recognized Carnegie STEM Excellence Pathway. Travel and deliver professional development training across the United States to Providers of the Pathway, who deliver high impact strategic planning workshops for schools and districts in their area.
- Create and deliver over a dozen unique hands-on workshops locally and nationally at least twice a month to groups of 20 to 100 educators on topics such as integrated curriculum, inquiry education, and project-based learning.
- Represent the science center at professional conferences as a lead presenter.
- Increase effectiveness of programs through data mapping and analysis utilizing geographic information system (GIS) tools.
- Aid in grant-writing and development of programs within the department.

Tabletop Game Designer

Ian Zang Design

January 2015 to Present

Hobby Game Design

- Designer of Constellations (Mensa Select Winner 2018), Curio: The Lost Temple, Genotype: A Mendelian Genetics Game (Mensa Select Winner 2022), and several upcoming titles.
- Freelance developer, contracted to recognize game design problems, develop and iteratively test solutions. Collaborate with internal teams to maintain original vision.
- CEO and co-owner of Gravitation Games, tabletop game publishing company. Involved in business management, game design and development.

Deep Water Games

- Manage game designers, providing direction for their projects to ensure that the result maintains their original vision, while producing a viable product for the company.
- Scout new designs at conferences, acting as game designer liaison.
- Playtest and iterate on internal designs.

Corporate Training Game Design

- Design interactive physical games for use in corporate trainings and development, implementing the goals of training into the game mechanics.
- Design game components for ease of learning using Adobe Creative Suite.
- Write technical guides for facilitators to run training on their own.

Science Teacher

Kensington Woods High School – Howell, MI

August 2012 to June 2014

- Teach five preps during each school year: Biology, Chemistry, Anatomy and Physiology, Concepts of Science, and Middle School Science.
- Implement project-based learning, cross-curricular integration, and 21st century skills.
- Sponsor biweekly tutoring sessions and several extracurricular activities.
- Advisor to the senior class, which involved teaching students life skills needed for the transition into college or the workforce, such as personal finance, interpersonal relationship skills, and job applications.

Skills

Workshop Design and Training (6 years)

Team Building and Management (6 years)

Project Management and Auditing (2 years)

Public Speaking (8 years)

Graphic Design and Adobe Suite (4 years)

Human-Centered Design (3 years)

Game Design and Development (6 years)

Teaching and Curriculum (7 years)

Letters of Recommendation – <https://tinyurl.com/lanZangLoR>

Ian Zang Design – <https://ianzangdesign.com>

Gravitation Games – <https://gravitation.games>

Professional Development Attended

Portal to the Public

Seattle Science Center, Franklin Institute, Philadelphia, PA – April 18-20, 2016

Learn how to teach effective science communication for industry professionals, a.k.a. “train the trainer”.

Project Based Group Learning

Avonworth School District, Pittsburgh, PA – July 19-21, 2016

3-day intensive training on implementing PBL in the classroom and in trainings to increase participant engagement.

Increasing Capacity for Professional Development

Museum of Science and Industry, Chicago, IL – August 18-21, 2016; November 31-December 3, 2016

Learn funding models, effective assessment, and best practices of professional development. Second meeting for reflection on practice and implementation

Learn and Connect

Carnegie Museums of Pittsburgh, Pittsburgh, PA – January 9, 2018
Internal training for inter-museum collaboration.

LUMA Institute Training

Carnegie Science Center, Pittsburgh, PA – January 17-18, 2018
Human-centered design training using the LUMA Institutes methodology.

Equity and Inclusion Training

Science Museum of Minnesota, Carnegie Science Center, Pittsburgh, PA – January 2019 - August 2019
Training designed by the IPAGE institute as part of an NSF grant. Carnegie Science Center developed and ran a series of 90-minute workshops to train its staff on this methodology.

Project Management for Beginners

Project Management Institute – June 2020
Course covering the basic concepts of project management in order to better serve Michigan State University's Project Managers

Presentations Given

Conference Presentations

Using Game Design for Learning

Douglas County Education Conference, Castle Rock, CO – June 6-10, 2016

Using Non-digital Play for Facilitation of Learning Goals

Meaningful Play Conference, Michigan State University, East Lansing, MI – October 21, 2016

Using Game Design for Museum Educators

Association of Science and Technology Centers (ASTC) National Convening, San Jose, CA – October 21, 2017

Carnegie STEM Excellence Pathway Informational Session

International Science and Engineering Fair, Pittsburgh, PA – May 16, 2018
STEM Leadership Alliance Summit, Orlando, FL – July 9, 2019

Using Analog Game Design for Museum Educators

Association of Science and Technology Centers (ASTC) National Convening, Hartford, CT – September 29, 2018

Experience-Based Design

Bethany College, Bethany, WV – March 27, 2018
UnPub Prime, Hunt Valley, MD – March 22, 2019

Carnegie Science Center Workshops

Carnegie STEM Excellence Pathway Workshops

Deliver and facilitate workshops to schools/districts in this strategic planning tool:

- September 7-9, 2016 Allegheny Cohort – Carnegie Science Center (CSC), Pittsburgh, PA
- September 15, 2016 St. Joseph High School – Natrona Heights, PA
- September 29, 2016 WV Education Alliance – Charleston, WV
- November 16, 2016 Beaver County Cohort – Aliquippa High School, Aliquippa, PA
- January 11-12, 2017 Allegheny Cohort – CSC, Pittsburgh, PA
- March 8, 2017 Beaver County Cohort – Central Valley High School, Monaca, PA
- April 26, 2017 St. Joseph High School – Natrona Heights, PA
- May 10-11, 2017 Allegheny Cohort – CSC, Pittsburgh, PA
- May 31-June 1, 2017 Tucker County Schools – Hambleton, WV
- January 7, 2018 Raleigh County Schools – Beckley, WV
- September 23-25, 2019 Raleigh County Schools – Beckley, WV

Carnegie STEM Excellence Pathway Provider Training Institutes

Deliver train-the-trainer workshop for organizations to deliver workshops in the Carnegie STEM Excellence Pathway.

- June 6-7, 2017 CSC – Pittsburgh, PA
- September 12-13, 2017 PA Department of Education (PDE) Intermediate Unit (IU) – Allentown, PA
- September 25-26, 2017 PDE IU – Philadelphia, PA
- September 28-29, 2017 PDE IU – Harrisburg, PA
- November 1-2, 2017 PDE IU – Westmoreland, PA
- May 8-9, 2018 CSC – Pittsburgh, PA
- August 27-28, 2018 CSC – Pittsburgh, PA
- April 30-May 1, 2019 Western Michigan MiSTEM – Kalamazoo, MI
- May 13-14, 2019 CSC – Pittsburgh, PA
- August 6-7, 2019 CSC – Pittsburgh, PA

Teaching Excellence Academy Workshops

Create and deliver the following workshops of the Teaching Excellence Academy. (* indicates workshops that are my primary creation)

Building Your PBL Classroom

How to use PBL in the classroom effectively. Provides several hands-on examples during the workshop.

- September 27, 2016 Norwin High School – Norwin, PA
- February 20, 2017 Deer Lakes High School – Deer Lakes, PA
- June 5, 2018 Rosarian Academy – West Palm Beach, FL
- June 20, 2018 Tunkhannock School District – Tunkhannock, PA
- February 19, 2019 (Part 2) Rosarian Academy – West Palm Beach, FL

Game Design in Education *

How to use meaningful play in the classroom. Uses analog game design theory and hands-on activities.

Highest rated workshop in the Teaching Excellence Academy.

- September 30, 2016 CSC – Pittsburgh, PA
- December 10, 2016 CSC – Pittsburgh, PA
- March 3, 2017 CSC – Pittsburgh, PA
- October 14, 2017 CSC – Pittsburgh, PA
- April 10, 2017 Hong Kong Teacher Conference – Hong Kong
- October 14, 2017 CSC – Pittsburgh, PA
- May 12, 2017 Baggaley Elementary – Latrobe, PA
- March 29, 2019 CSC – Pittsburgh, PA

What is STEM? *

An introductory level workshop about STEM Education. Provides common definitions that participants can utilize while speaking with the public and gives participants examples of how to implement strong STEM curriculum in their schools/districts.

- September 30, 2016 CSC – Pittsburgh, PA
- August 23, 2017 Peters Township School District – Pittsburgh, PA
- September 8, 2017 CSC – Pittsburgh, PA
- October 26, 2017 St. Bede School – Pittsburgh, PA
- June 11, 2018 Palmyra School District – Harrisburg, PA
- September 20, 2018 Raleigh County Schools – Beckley, WV
- October 23, 2018 New Kensington School District – New Kensington, PA
- August 21, 2019 New Castle School District – New Castle, PA

Using Puzzle Solving as an Instructional Tool *

How to make and use the popular “escape room” type puzzles in a classroom to enhance engagement.

- March 24, 2017 CSC – Pittsburgh, PA
- April 11, 2017 Hong Kong Teacher Conference – Hong Kong

STEM Up Your Science

Provides interactive ways to engage students in science classes. Participants leave with three pre-prepared activities that can immediately be put into practice and skills needed to create further activities on their own.

- August 25, 2017 Boyce Middle School – Upper St. Clair, PA

Critical Thinking through Storytelling *

Provides teachers who might not be comfortable with the ideation process of storytelling (which is a powerful engagement tool) with the tools to feel confident in its delivery.

- November 6, 2017 CSC – Pittsburgh, PA
- January 25, 2018 St. Bede School – Pittsburgh, PA

Inquiry-Based Education

Provide teachers with strategies to implement inquiry lessons in their classroom. A hands-on activity is utilized to illustrate the processes involved.

- November 22, 2017 Peters Township Schools – Pittsburgh, PA
- February 16, 2018 St. Bede School – Pittsburgh, PA
- March 7, 2018 Toronto City Schools – Toronto, OH

STEM Up Your Library *

Developed specifically for the Pennsylvania Library Association, this workshop was a combination of the “What is STEM” and “Critical Thinking through Storytelling” workshops above.

- April 16-17, 2018 Hollidaysburg and Harrisburg, PA
- April 23, 2018 Grove City, PA
- April 25, 2018 Greensburg, PA
- April 30-May 2, 2018 Williamsport, Wilkes-Barre, and Easton, PA
- May 24, 2018 Smethport, PA

STEM Up your Classroom *

Version of the “STEM Up Your Library” workshop that specifically targets K-12 teachers of any subject.

- June 1, 2018 CSC – Pittsburgh, PA
- September 5, 2018 Toronto School District – Toronto, OH
- September 14, 2018 CSC – Pittsburgh, PA
- October 15, 2018 Tioga County School District – Wellsboro, PA
- December 4, 2018 New Kensington School District – New Kensington, PA
- April 1, 2019 Coudersport School District – Coudersport, PA

Create and Integrate *

Workshop created due to identified need through the Carnegie STEM Excellence Pathway. Facilitate discussion amongst teachers of different disciplines to find common ground. Participants leave the workshop with at least one integrated lesson plan and tools to create further collaborations.

- June 21, 2018 Tunkhannock School District – Tunkhannock, PA

Using Digital Fabrication and Game Design*

Using some material from the Game Design in Education workshop, I collaborated with Carnegie Science Center’s Fab Lab to create a high impact workshop that teaches digital fabrication techniques for use in game design activities.

- April 8, 2019 CSC – Pittsburgh, PA
- May 10, 2019 CSC – Pittsburgh, PA

Project Management

CompSci Challenge

April 6, 2018

Coordinated with Carnegie Mellon University (CMU) to co-create a computer science based “puzzle hunt”. Facilitated professional development for the CMU staff and students involving puzzle creation and science content. Coordinated the building schedule for Carnegie Science Center and was the point of contact for the entire event.

Constellations Board Game

Q3-4 2017

While co-designing Constellations, played large role in organizing playtests, coordinating graphics and art design, and collaborating with the publisher to ensure a viable product.

Deep Water Games

2018-2020

Acted as de-facto project manager to ensure that projects were on track. Developed project management system using Trello to ensure timely completion of deliverables.

Gravitation Games

2020-Present

I am the prime decision maker to bring high-quality games to market. We successfully self-funded Please Fix the Teleporter, our first game, and are planning to launch our next game in November 2022.

Coaching Sessions

As part of the Carnegie STEM Excellence Pathway, after a school has identified weak points in their STEM Education Plan, there is some trepidation about what to do next. The coaching sessions that I developed have a common skeleton: 1) Discussion, 2) Collaboration Activity, 3) Debrief, 4) Action Planning. Each session is custom designed for the client based on their needs.

Date	Topic	Client
November 6-7, 2018	PBL Based Learning	Tunkhannock School District, Tinkhannock, PA
November 15, 2018	Technology Integration	New Kensington School District, New Kensington, PA
January 8, 2018	STEM Activity Assessment	Raleigh County Schools, Beckley, WV
February 20, 2019	PBL Based Learning	Rosarian Academy, West Palm Beach, FL

Convention Work

Convention Booth Management

At the following conventions: manage booth staff and ran point of sale for named companies. (* indicates I scouted games for potential publication.)

Convention	Location	Year	Company
Origins Game Fair	Columbus, OH	2016	IDW Games
Gen Con	Indianapolis, IN	2016	IDW Games
Board Game Geek Con	Dallas-Forth Worth, TX	2016	R and R Games
Origins Game Fair *	Columbus, OH	2017	IDW Games
Gen Con	Indianapolis, IN	2017	Pandasaurus Games
Origins Game Fair *	Columbus, OH	2018	Deep Water Games
Gen Con *	Indianapolis, OH	2018	Deep Water Games
PAX Unplugged *	Philadelphia, OH	2018	Deep Water Games
Origins Game Fair *	Columbus, OH	2019	Deep Water Games
Gen Con *	Indianapolis, IN	2019	Deep Water Games

Convention Judging

I was an invited judge for the following events.

CinCityCon October 7, 2017

Panelist representing Deep Water Games for the "Shark Tank" style event for unpublished board games.

Technology Student Association April 11, 2019

Judge for over 60 board games developed by high school students from across Pennsylvania.

Board Game Development

Game	Year	Company	Role
Ashes: Rise of the Phoenixborn	2013	Plaid Hat Games	Data management and analysis, playtester
Xtronaut	2014	Xtronaut Enterprises	Rules layout and editor
AssassinCon	2015	Mayday Games	Rules rewrite and layout
Expedition: The Adventure Card Game	2015	Expedition LLC.	Game development and redesign
Categorise (Corporate Training Game)	2015	Denali Corporation	Game design and development
Seafall	2015	Plaid Hat Games	Editor and writer
Escape from 100 Million B.C.	2016	IDW Games	Rules editor
Bed, Wed, Dead	2016	IDW Games	Copywriter
Rayguns and Rocketships	2016	IDW Games	Rules writer and editor
Mine All Mines	2017	IDW Games	Rules editor
Curio: The Lost Temple	2017	Wizkids Games	Game designer
Constellations	2017	Xtronaut Enterprises	Game designer
Welcome To...	2018	Deep Water Games	Developer
Sovereign Skies	2019	Deep Water Games	Lead developer; expansion designer

Dracula vs. Van Helsing	2019	Deep Water Games	Lead developer
Genotype: A Mendelian Genetics Game	2019	Genius Games	Game redesign and development
Please Fix the Teleporter	2020	Gravitation Games	Game designer and project manager
Kingdoms of the Deep	2020	Galactic Raptor Games	Game design
Aloha Earth	2022	Gravitation Games	Product Manager