EDIDA

Maker Project

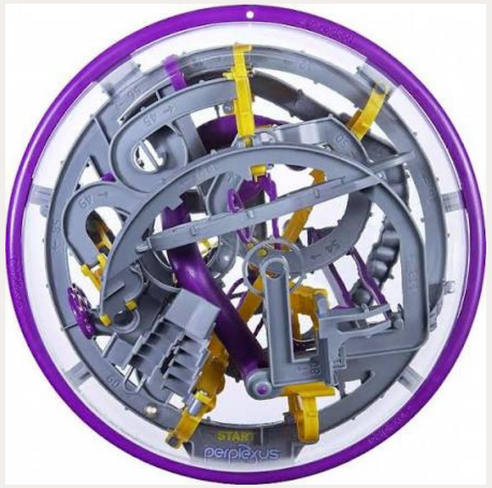
5 RINGS PUZZLE

CARTER WHITE

INSPIRATION

For this project, I wanted to create something that could not only be visually appealing, but also moveable and something that could challenge student dexterity and critical thinking

The Perplexus maze ball came to mind but nothing significant to relate to EDIDA came to mind



So, I sat and pondered. Then came a tought. I started doing a lot of woodworking projects in the summer before this semester and wanted to challenge myself to hone my skills and have fun while doing it

I built backyard games like cornhole, this was one of my templates but the finished set is at our cabin at th lake and I did not have any photos

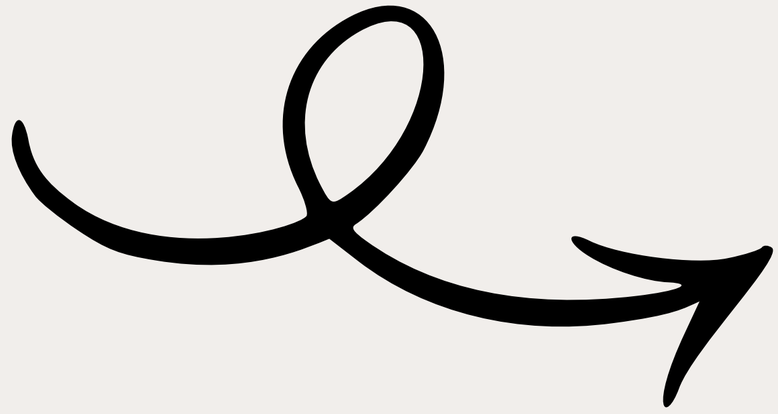


INSPIRATION

After lots of thinking and bouncing ideas back and forth on what to do with my family, friends, and classmates, I decided to make a puzzle. But not a normal one. A puzzle that could be solved many ways, and is accessible for anyone to try, as well as having that deeper meaning to connect with the EDIDA framework

Equity - Diversity - Inclusive - Decolonization - Anti Racism

So, without further adieu, here it is. My own 5 Rings Puzzle



BUILDING PROCESS



1. Selection



2. Initial Cuts



3. Drilling



4. Sanding

BUILDING PROCESS



5. Notching/Gluing



6. Experimenting



7. Ta-Da!



8. Painting

BUILDING PROCESS



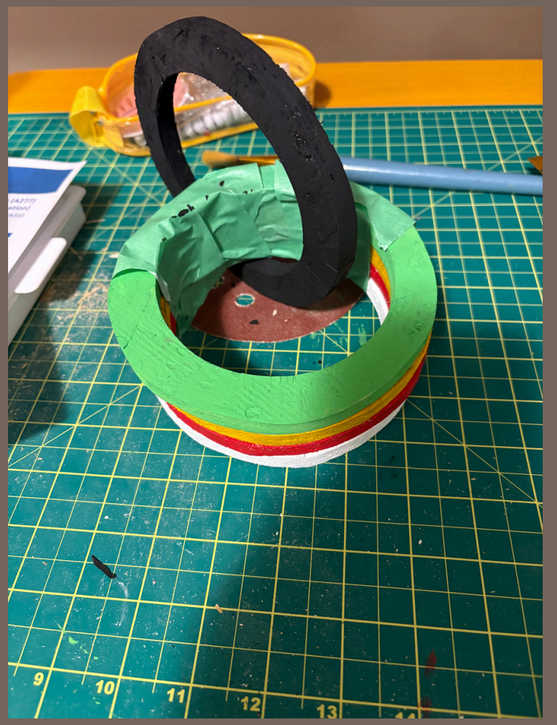
9. Playing it safe



10. Anger



11. More Painting



12. Patience!



VOILA!



EDIDA

Connections

1

WOOD SELECTION

OSB Board

- an engineered wood panel made by compressing layers of wood strands (such as aspen, poplar, or pine) with waterproof adhesives under heat and pressure

Why choose it over more durable pieces?

2

COLOURS

Colours were chosen to represent the 4 core Ktunaxa nation colours as well and added green as the 5th.

3

5 RINGS

5 rings were created to symbolize the 5 values of EDIDA. If we remove one ring, it cannot support itself. If one value is removed from my classroom, I have failed to support my students

4

CONSTRUCTIVISM

I had to solve problems as they appeared, and this is a artifact that will allow all students the chance for active participation and cooperative problem solving

COURSE READING CONNECTIONS

CRP:

Kye (2020) emphasizes that maker education cant be treated as culture neutral. It requires CRP to explicitly incorporate diversity, knowledge, and non dominant cultural perspectives. BY grounding my artifact in Ktunaxa symbolism, it shows Indigenous heritage as an essential pillar of educational equity and inclusion

Constructionism:

Cohen (2016) defines Makification as infusing core maker principles into formal education. Distinguishing meaningful makified learning from a standalone craft requires physical making be integrated with deliberate pedagogical learning goals. Creating my 5 rings achieves this by tying in woodwork to the EDIDA values.

COURSE READING CONNECTIONS

Dexterity:

Peleg & Levy (2026) highlight how early childhood makerspaces build technical thinking, problem solving, and confidence through tool manipulation. Young learners require scaffolding to engage with physical materials. The puzzle phycially models this idea in inclusion and self-efficacy. Each ring (student/value) is structually required to support the system so it can stand by itself. Removing one collapses the system.

Syntonic Learning:

Papert (2000) critiqued traditional schooling for “disempowering big ideas by reducing them to abstract, contextless routines.” Re-empowering ideas through digital and physical construction enables learners to form syntonic connections. My puzzle takes it from abstract concepts, to re-empower into a tactile interactive tool

REFLECTION

I had a really fun time getting to create this and try to make it work. There are many different ways to make it stand and many ways to make it fall. I built this using Connor’s tools as he built his EDIDA project. Many iterations went into this from using a skill saw to ending up with a drill and sandpaper. it broke a few times but there was enough board to build another. I am very proud of how it turned out and could see this being brought into my future classroom. I think it would be cool to come up with 5 classroom values with a class and create another one that each student would get a chance to put a design or name around a ring to accompany this one. All in all, I learned a lot about EDIDA framework, myself, and got to spend time with Connor which I would not have done if not for the project. I ama hands on learner and this has been one of my favourite projects in this program. I cant wait to share it with the class.

REFERENCES

- Cohen, J. D., Jones, W. M., Smith, S., & Calandra, B. (2016). Makification: Towards a framework for leveraging the maker movement in formal education. In Society for Information Technology & Teacher Education International Conference (pp. 129–135). Association for the Advancement of Computing in Education (AACE).
- Kye, H. (2020). Who is welcome here? A culturally responsive content analysis of makerspace websites. Journal of Pre-College Engineering Education Research (J-PEER), 10(2), Article 1 (pp. 1–16). https://doi.org/10.7771/2157-9288.1190
- Papert, S. (2000). What’s the big idea? Toward a pedagogy of idea power. IBM Systems Journal, 39(3.4), 720–729.
- Peleg, A., & Levy, S. T. (2026). The impact of makerspaces in early childhood education on children’s creativity and self-efficacy. Journal of Research in Childhood Education, 40(3), 544–562. https://doi.org/10.1080/02568543.2025.2468489

I hope you enjoyed!

Thanks for watching :)