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Manager, Education at MindFuel (Science Alberta Foundation)

Non-Profit Organization: K-12 Science/STEM Education



- Limited resources as non-profit organization
- Sustainability (\$) for programs
- Differing paces of NPO vs government, corporate, post-secondary, etc.
- Authentically creating inter/transdisciplinary learning experiences with expertise: science > STEM > STEAM

Challenges

Strengths & Opportunities

- Fostering partnerships with diverse stakeholders (government, non-profits, industry, education)
- Creating engaging, high-quality content for youth
- Work with academia to conduct supporting research
- Taking smart risks - openness to innovation and sharing learning with others

## Areas of Future Interest

- Localisation of learning resources (multi-lingual, multi-national)
- Creating or aligning learning resources to international curricula
- Creating transdisciplinary programming for youth
- Understanding and melding international approaches to STEM/STEAM education; breaking down barriers for young people
- Learning Spanish!

## Current Projects

### Alberta Curriculum Redesign

- Science Expert Working Group
- All subjects, all grades; interdisciplinary
- Collaboration with Alberta Education (government), Alberta Teachers' Association, other educators

### Inter/Transdisciplinary Games for Learning

- Game creation project for middle school; combining learning outcomes from four core subject areas
- Researching impact of playing games and game design to enhance student learning and engagement

### Innovation Exchange

- Understanding importance and impact of innovation and entrepreneurship education
- Integrating entrepreneurial skills (empathy, risk-taking, failing faster, creative problem solving, collaboration) & design thinking
- Future longitudinal research study

### Wonderville - International Online & Classroom Learning

- Creating interdisciplinary resources (games, videos, project-based learning activities, assessments, etc.) for K-12 education
- Currently aligned with Next Generation Science Standards (NGSS, USA) and Alberta Program of Studies
- Bridging gap between digital and hands-on learning environments

### Learning Styles & Physics Engagement

- Understanding diverse learning styles at high school level to maximize engagement in physics content
- Goal: increased enrolment (particularly females) in both high school and post-secondary physics, engineering courses

## Streams of Interest

- Science, Technology, Engineering & Math (STEM)
- Youth engagement
- K-12 education
- Diverse learning styles
- Informal learning
- Program creation for youth
- Collaboration & making connections...



## contact me

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