

Innovate Days

Connecting students to expertise in sustainable development, technological trends, citizenship and to discover what's possible for our shared future!

The following document provides a basic outline for the Innovate Days Program. This is a work in progress and is expected to develop through collaboration with schools, students, interest groups and post-secondary institutions.

Goal:

Innovate Days will provide students with opportunities to learn specific topics around sustainable development, technological trends and active citizenship at the post-secondary level. The purpose is to teach students sets of skills and knowledge in these areas that become transferable to their lives in school and community. Students will be connected to experts through a series of hands on workshops. Each event will consist of several sessions that run for one day in a university or college. Students will gain a window into the post-secondary experience to help make transitions easier to these institutions after high school.

Rationale

The world is changing rapidly from technological development and the pressures of climate change. In recent years, the Albertan economy has been challenged with the drop in oil prices and increasing demand for clean energy. Alberta needs innovation that contributes to the diversification and resiliency of the economy. Participation in this global transformation requires people to develop new skills and competencies and to become capable problem solvers. Education must respond and adapt to help students partake in and shape the world around them.

Currently, traditional education is not able to meet the demands of the new world because it is embedded as a traditional institution which is cautiously slow to change and automated to a predictable standard with fragmented disciplines. This pedagogical model perpetuates an old way of doing things based on the individual and does not always work with today's connected and interactive world. The internet is democratizing information and is being accessed by more and more people each day. Education must employ new models to adapt to the changing tides. Innovate Days supports the educational model of andragogy, a student-centred approach, where students have a choice to engage in many different learning experiences. This model supports the adage that "it takes a community to help raise a student".

Humanity is becoming more and more connected through technology. New imagined learning spaces are creating possibilities for synergizing ideas across differences in communities, cultures, subjects, ages, and so on. Such connectivity has unforeseen learning potential and can increase our capacity to problem solve global issues.

Communities of people, focused on solutions, emerge when people come together and share their experiences, knowledge, ideas and dreams. Post-secondary institutions are extended places of thought, and skill development that provide citizens with resources and spaces they need to succeed.

The rise of social innovation hubs and makerspaces support learning that extends beyond the four walls of the school. Social Innovation Hubs (SIH) are designed to bring people together who share ideas, offer mentorship and create collaborative communities. They are designed to address social and environmental challenges facing our communities and the world.

Makerspaces connect people to emerging technologies that are being integrated into our world so that we can utilize these tools and integrate them into our lives more readily. The more these spaces are used, the more applications we can find for technologies in benefiting our world.

Edmonton Public schools defines makerspaces as venues for:

...design thinking, tinkering, and play to make their way into the mainstream of lesson activities. When working towards achieving Policy Direction One of the Learning and Technology Policy Framework, Student-Centred Learning, the whole notion of design thinking situates learning

directly in the hands of the learner, who grapples with challenges to solve emergent problems. <https://sites.google.com/a/share.epsb.ca/student-portal-project/research/current-project/s/maker-spaces>

Learning activities can be enhanced through workshops resulting from social innovation hubs and makerspaces. According to “The Community Tool Box”, workshops:

...bring people together to engage in a discussion or activity around a particular topic. Workshops are educational programs designed to teach or introduce to participant’s practical skills, techniques, or ideas which they can then use in their work or their daily lives... participants explore topics, ask questions directly to experts and then apply their learning and research the topic in more depth after the experience and can create a community or common purpose.

(<http://ctb.ku.edu/en/table-of-contents/structure/training-and-technical-assistance/workshops/main>)

Benefits:

Innovate Days benefit students, interest groups and educational institutions.

Students will get first hand experiences in post-secondary schools and gain windows into university and college life for easier transitions. Innovate Days exposes them to ideas that can be transferable to enriching their lives in school and community and that can help shape career interests.

School Boards: Career Pathways are priorities of Albertan school districts and aim to help students transitions to post-secondary education, training or directly to the world of work. A goal of the Edmonton Public School Board’s Career Pathways is to

...help all students think about, explore and plan what their life might look like beyond school. In partnership with parents and the community, students from Kindergarten through Grade 12 can discover their interests through innovative learning opportunities. (<https://www.epsb.ca/ourdistrict/topics/careerpathways/>)

Universities and colleges are looking for ways to engage youth who may become their students after high school. Currently, post-secondary institutions send representatives to high school career/post-secondary fairs in hopes of attracting new clientele to enroll in their programs. Students can directly ask questions and get firsthand information about programming and take home pamphlets. This traditional approach does not offer a vision into student life at these institutions. Innovate Days will allow instructors to connect their areas of expertise to youth and advertise their schools through unique experiences on their campuses.

“The idea of Innovate Days for students is not only compelling, but the logical next step in a young person’s development. Young people are looking to apply their learning and find purpose in the greater community. Innovate Days would be a perfect springboard to launch students into an environment where they can see themselves making a positive impact in the world.” Leo Wong, Ph.D., Director: Grant MacEwan University Social Enterprise and Innovation Hub.

What might an event look like?

Events are organized and schedules sent to schools that are enrolled. Event begins at a central location within the post-secondary institution such as a Social Innovation Hub. Staff provide a key-note speaker on the topic of innovation, STEM, etc... Instructions for the day are given. Students use their schedules with maps and head out to their workshops rooms. Students are greeted, everyone introduces themselves and the workshops begins. At the end of the workshops, students will have a new set of knowledge, skills, attitudes, etc... that they can expand upon at home, in their communities and at school. Students, workshop presenters and volunteers are invited to complete a questionnaire to evaluate their experience. Data is collected and becomes informative to organize another event.

Partnerships

Many partnerships are developing to support and co-create this program. The *Innovate Program* with the Argyll Centre (Edmonton Public Schools) reaches out to students and schools across the province. They have the capacity to engage multi-stakeholders. *Grant MacEwan University* in Edmonton will use their Social Innovation Hub and makerspace to connect with high school students across the city. *NAIT* college has an interest in seeing more high school students visiting their work spaces and labs. MindFuel, formerly known as the Science Alberta Foundation, objective is:

We inspire students to discover their creative potential in classrooms and beyond. MindFuel's educational programs prepare new generations to solve the problems of tomorrow. As a result, we are an agent of change helping to diversify the economy by training knowledge-based workers. <https://mindfuel.ca/about-us/>

The Association of Professional Engineers and Geoscientists (APEGA) provides volunteers who support education and teach about careers in their fields. Many of these volunteers are professors and instructors at post-secondary institutions. *The City of Edmonton's Energy Transitions Unit* is looking for ways to involve youth in civic-strategies around climate change. Edmonton is hosting the International Panel on Climate Change conference in March of 2018 and students will have a voice and an opportunity to learn from experts.