



Minding the Gap

Lessons Learned From a K-12 – Higher Ed Collaboration in STEAM

From K-12 to Higher Ed



- Matt is qualified as HS teacher (NB).
- Has worked in higher ed for almost entire career (college; university).
- Is now Coordinator, Educational Technologies at TRU.
- Elizabeth is the District Coordinator, Technology-School District No. 73.

Mind the Gap



- A collaboration between TRU and SD 73.
- Centre for Excellence in Learning and Teaching (CELT)
- Faculty of Education and Social Work.
- School District #73 (Kamloops/Thompson)

"To support idea sharing between faculty and teachers, and in the development of collaborative projects"

Info, Resources



http://bit.ly/MTG-Collab

https://mindthegap.trubox.ca/

https://learningtech.trubox.ca/open-doors-steam-2019/

Initial Goals



- To provide SD73 students the opportunity to engage with TRU faculty, staff, students, and others within the community on career opportunities in Science Technology Engineering Arts and Math (STEAM).
- Over the duration of the project this became focused on secondary level girls— specifically girls in grade ten.

Why STEAM?



- STEM is important.
- TRU and SD 73--- and our local community--place high emphasis on Arts as well.
- Broaden offerings, level of interest.
- Next year: STEAMD ?

Why Girls?



- We felt that girls often do not see themselves in technical or scientific roles.
- We wanted highlight what women are achieving in these areas and what girls can aspire to.

... And to highlight the possibilities for rewarding, dynamic careers in a wide range of areas.

Why Grade 10?



- Narrow the scope of the initial offering (logistics).
- Did not want to overlap with other programming on campus:
- i.e., A Day of Arts and Science (grade 11 students)
- To speak to the point that it is never to early to become involved in higher ed.

Initial Process



- Meeting in September 2018 to plan K-16 STEM / STEAM collaboration.
- Met throughout fall 2018 to refine concept, plan further.
- Logistics planning: rooms, food orders, student enrollment, parent permissions, transportation, teacher release for supervision, speaker participation, event promotion all took place in late 2018 and early 2019.

Open Learning



- In addition to the MTG initiative, TRU's Open Learning division was a major sponsor.
 - Financial support
 - Graphic design, web support
 - Logistics
 - Volunteers

Moral support and creative suggestions



What does K-12/HE collaboration look like within your local context?

Open Doors in STEAM



- The event took place on May 3, 2019.
- 65 students registered from throughout SD 73. This was close to the maximum number that could be accommodated by TRU in a single room in AE Building.
- A full day of interactive discussions and learning activities facilitated by TRU faculty, staff, and students; also including professionals, entrepreneurs, executives, and leaders from a wide range of private and public sector organizations.

High Achieving Presenters



Our presenters were awesome

https://learningtech.trubox.ca/open-doors-steam-2019/

Learning Technology



- Google apps: registration and feedback
 - SD 73 has G-Suite throughout
 - Some G-Suite capability at TRU
- Some use of WordPress (TRUBox)
- Video presentation (podium) from BC Advanced Education, Skills and Training Minister Honourable Melanie Mark
- Classroom / podium technology

This suite of applications may be expanded as part of 2020 offering



How can learning technology help improve the quality of the transition between K-12 and HE?

Participant Feedback



It was all perfect. I feel so empowered and inspired.

The whole day was great.

Great range of presenters.

Suggestions for Improvement



- Bus scheduling obviously.
- More variety of careers .
- An optometrist should come in.
- Maybe something interactive or physical.

Lessons Learned



- The interest in this event— students and the wider community— was surprising.
- With more resources, this event could easily be "scaled up";
 i.e., to include larger numbers of students.
- Apply for MTG and/or other funding well in advance.
- Confirm all elements of student involvement, particularly with permissions and transportation, well in advance.

STEAM (or STEAMD) 2020



- Preparations are under way.
- Looking to scale up the event: 100+
- Mindful of logistics challenges.
- Engage with a wide range of presenters.
- Enhanced learning technology component: particularly web conferencing.



What platforms and/or pedagogies would be supportive of this kind of programming?

Future Involvement?



- We are aiming for mid-Feb 2020 (reading week).
- Visit Kamloops! Attend or present at STEAM and also Teaching Practices Colloquium (TPC) on February 18.

https://www.tru.ca/tpc.html



Thank you!!

Questions, comments, further discussion welcome!

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