

Learning Ecosystems: Improving K-12 Education Through Learner-Centered Pedagogy

Amirah Azmi – BSc. Health Science Student, Catamount Fellow, April 2022

Acknowledgements • AnneMarie Dorland, Faculty Mentor • John Taylor, Community Partner

Research Question: How might we improve K-12 education through learning ecosystems?



Institute for
Community Prosperity

Learning ecosystems are webs of interconnected relationships organizing lifelong learning. They are diverse, dynamic and evolving, connecting learners and community to foster individual and collective capacity. They have three purposes dedicated to co-creating thriving futures for people, places, and our planet.

Learning Ecosystems: An Emerging Praxis for the Future of Education

Project Background

The rural community of Crowsnest Pass hidden in the mountains of Southern Alberta has launched an initiative known as “**The School as Basecamp – Community as Classroom**”. This initiative has the potential to become a robust learning ecosystem that would allow for students to feel a sense of belonging and value to their communities.

Methodology

This project was conducted through the Catamount Fellowship offered by the Institute for Community Prosperity at Mount Royal University in partnership with the Livingstone Range School Division in the Crowsnest Pass. The Catamount Fellowship is designed to give undergraduate students an opportunity to dive into the ideas of social innovation, experiential learning, and systems thinking. The aim of this report is to explore the idea of learning ecosystems on a system-level as an alternative to formal K-12 education.

The Need For A New Form of Learning

As technology and society continue to evolve and the learning landscape changes, educational stakeholders have recognized the need for a new form of learning.

- As explained in Gütl and Chang (2008), modern instructional design and learning processes are moving towards supporting the development of society and all of its components, which includes the learner.
- Educational approaches are shifting from traditional school models towards allowing learners to be more independent in their own learning processes (Gütl & Chang, 2008).

Key Aspects of a Learning Ecosystem

1 The idea that individual learners take charge of their own futures in conjunction with their learning environments (e.g. school, outside, etc.)¹

2 Creating a system that is self-renewable and organizes both individual and collective learning for the betterment of the whole community²

3 Mobilizing the resources available in the community while bringing in aspects of a learner’s life (i.e. family, workplace, and community)³

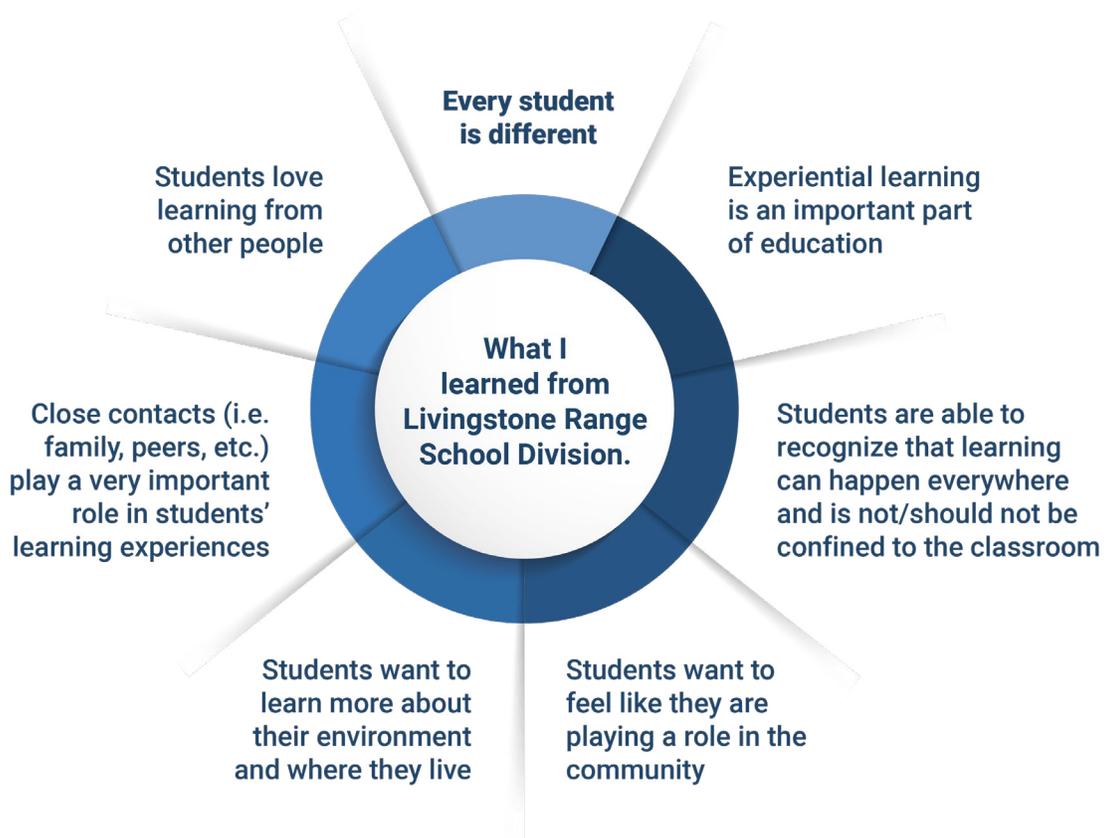
Benefits of a Learning Ecosystem

- **Equitable Learning**
 - Learning ecosystems have the opportunity to provide a more equitable learning experience where each learner has their needs met
- **Learner-centric Education**
 - Putting the learner at the forefront of education would let students know that they are seen and heard
- **Learner Autonomy**
 - Allowing for learners to take control of their own learning would provide different opportunities for growth

Engaging Learners in the Livingstone Range School Division

To engage directly with learners who are currently in the system, I posed three questions to elementary/middle school students and three questions to high school students in the LRSD. I received almost 200 responses in total.

Elementary/Middle School <ul style="list-style-type: none">• If school didn't exist, how would you learn? What would you learn about?• Outside of school, where do you learn the most?• Other than your teacher, who teaches you?	High School <ul style="list-style-type: none">• If school didn't exist, how would you learn? What would you learn about?• What learning experiences could you have in the community to give you a greater sense of connection and belonging to the Crowsnest Pass?• Who do you wish you could learn from in your community and what would they teach you?
--	--



What Can Out-of-School Learning Provide?

Experiential Learning Opportunities <ul style="list-style-type: none">• This could include workshops with and exposure to industry professionals, local business owners, Fish and Wildlife, etc.	Recognizing Different Educators <ul style="list-style-type: none">• The role of parents, grandparents, guardians, and friends in a student's learning is just as important as their primary teacher	Emphasizing Community <ul style="list-style-type: none">• Volunteer and shadowing opportunities can allow students to feel that they are an active and valued part of the community
---	--	--

References

- Cisco Systems, Inc. (2010). *The Learning Society*. https://www.cisco.com/c/dam/en_us/about/citizenship/socio-economic/docs/LearningSociety_WhitePaper.pdf
- Erete, S., Dickinson, J., Martin, C., Bethune, A., & Pinkard, N. (2020). Community Conversations: A Model for Community-Driven Design of Learning Ecosystems with Geospatial Technologies. In Gresalfi, M. and Horn, I. S. (Eds.), *The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences*, 3, 1629-1632. Nashville, Tennessee: International Society of the Learning Sciences.
- Faris, R. (2010). Learning Community by Community: Preparing for a Knowledge-based Society. *Education Canada*, 43(1), 4-43. <https://www.edcan.ca/wp-content/uploads/EdCan-2003-v43-n1-Faris.pdf>
- Guetl, C., & Chang, V. (2008). Ecosystem-based Theoretical Models for Learning in Environments of the 21st Century. *International Journal of Emerging Technologies in Learning (IJET)*, 3(2008), 50-60. <http://dx.doi.org/10.3991/ijet.v3s3.742>
- Smitsman, A., Laszlo, A., & Luksha, P. (2020). Evolutionary Learning Ecosystems for Thrivable Futures: Crafting and Curating the Conditions for Future-Fit Education. *World Futures: The Journal of New Paradigm Research*, 76(4), 214-239. <https://doi.org/10.1080/02604027.2020.1740075>
- Spencer-Keyse, J., Luksha, P., & Cubista, J. (2019). Learning Ecosystems: An Emerging Praxis For The Future Of Education. *Moscow School of Management SKOLKOVO & Global Education Futures*. <https://learningecosystems2020.globaledufutures.org/>