

May 2, 2020

Research Highlights

The Association of Alberta Public Charter Schools supports and is actively engaged in innovation, research, and knowledge mobilization that occurs in our member schools and with our stakeholders across Alberta. <http://www.taapcs.ca/research/>

Research Support and Promotion Committee

TAAPCS has established a standing committee on research support, sharing, and promotion comprised of charter school administrators, practitioners, and researchers, as well as post-secondary and Alberta Education representatives that currently includes:

- ❖ Dr. Eugene Kowch, Leadership Chair, Werklund School of Education, University of Calgary
- ❖ Dr. Damien Cormier, Faculty of Education, University of Alberta
- ❖ Dr. Belina Caissie, Senior Manager, Research, Alberta Education
- ❖ Dr. Paul Wozny, Aurora Academic Charter School
- ❖ Kurtis Lienweber, Foundations for the Future Charter Academy

The Research Support and Promotion Committee's mandate is to provide support to charter schools endeavoring to do high quality educational research, and review and assist with the dissemination of charter school research within the broader educational community and stakeholders across Alberta.

Alberta Research Partnership Program Projects with Alberta Education

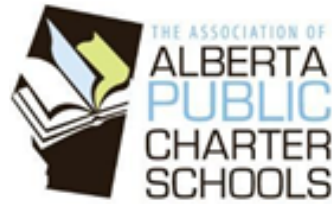
Two TAAPCS member schools are successfully engaged in collaborative multi-stakeholder research projects as part of the Alberta Research Partnership Program.

- ❖ Aurora Academic Public Charter School is engaged in a participatory qualitative research project involving analysis of parents' perspectives on social connectedness as lived through their experiences in parent/teacher interview processes in multicultural school contexts. This research project includes partners from Simon Fraser University, University of Alberta, Edmonton Public Schools along with Aurora Elementary and Middle Schools. The final research report can be accessed online at: <https://www.auraschool.ca/research-publications>
- ❖ Foundations for the Future Charter Academy (FFCA) is engaged in a project entitled *Exploring the Global Competence (GC) of Teachers and Students: The Impact of Diversity, Classroom Pedagogies and Teacher Professional Learning*. This project is being completed in partnership with Golden Hills School Division, the International School of Macau, Calgary Regional Consortium, University of Calgary Werklund School of Education, and University of Alberta.

Additional Research Projects occurring in Alberta Public Charter Schools

Almadina Language Charter School:

- ❖ University of Calgary partnership: *Optimum Learning for All Students: Implementing Alberta's 2018 Professional Practice Standards; A*



May 2, 2020

Longitudinal, Mixed Methods Research Study. Our leadership team is participating in a research study led by Dr. Jim Brandon, which has been designed to assess, deepen, and extend the implementation process for Alberta's three professional practice standards.

- ❖ Partnered with Dr. Hetty Roessingh, University of Calgary, on several projects relating to, efficacy of intervention strategies with ESL students.

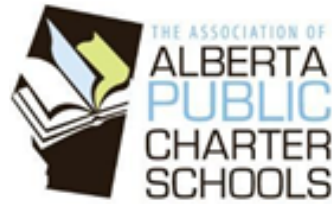
Aurora Academic Public Charter School:

- ❖ Established an Action Research program with staff that has led to the recent publication of 14 research projects in two volumes of *Action Research - Community of Practice*, research journal compilations of Aurora and partner organizations research projects. <https://www.auroraschool.ca/research>
- ❖ Partnered with the University of Alberta and six Alberta School jurisdictions to compare *mathematics provincial achievement test (PAT) results and related longitudinal trajectories for 3 cohorts of students with a goal of identifying curriculum outcome achievement trends and analysis* that can be shared with other colleagues and stakeholders for the improvement of numeracy learning.
- ❖ Partnered with University of Alberta, University of British Columbia, and 10 schools in Vancouver and Edmonton investigating language and literacy skills

of English Language Learners (ELL) in middle school (grades 7 – 9) in comparison to monolingual peers. This project was funded by the Social Sciences and Humanities Research Council of Canada. Accessible online: <https://www.auroraschool.ca/research-publications>

Boyle Street Education Centre

- ❖ BSEC and University of Alberta interdisciplinary scholarly team has secured grant funding to explore the following research question beginning in the 2019-2020 school year and extending to three years in length: Research questions: *The objective of this research project is to explore how to define and measure the successes and strengths of students put at risk in culturally sensitive ways, with a focus on social-emotional strengths.*
- ❖ BSEC has also entered into a partnership with the University of Alberta Aboriginal Teacher Education Program and will be taking part in a pre-service teacher mentoring research project. The goals of this Project are to develop a mentorship relationship between Pre-Service Teachers and Mentor Teachers in secondary schools and to engage in research to understand the process. This project will investigate and document, Aboriginal Teacher Education Program (University of Alberta) pre-service teachers' and partner school mentor teachers' readiness for implementing foundational knowledge about First Nations, Metis and Inuit in secondary schools.



May 2, 2020

Calgary Arts Academy:

- ❖ Literacy in the Green Room: A Phenomenological Inquiry into what it is like to Experience literacy within a Theatrical Space. This study created a theatrical space in which students will communicate their experience of literacy and learn new ways of approaching literacy learning.
- ❖ *Design for learning through a complexity perspective.* This research has focused on creating learning environments to support students' construction of their own knowledge and skills, through a game design project-based learning approach.
- ❖ *Social Justice as Citizenship: Understanding Youth Participation in School-Sponsored Student Groups.* The focus of this research is on how youth understand social justice and how young people work within their school social justice and/or citizenship groups to make improvements in their schools, communities, and society more generally.
- ❖ *Identifying Formative Instructional and Assessment Strategies for Academic and Personal Excellence: Application of the LEAFF Model in K-6.* This is a five-year collaborative project with Suzuki Charter School that explores the relationships between teachers and students within the context of teacher feedback. The Learning Errors and Formative Assessment (LEAFF) model is a learning and assessment model that provides simple and inclusive teaching practices to improve student-teacher engagement.

Calgary Girls School:

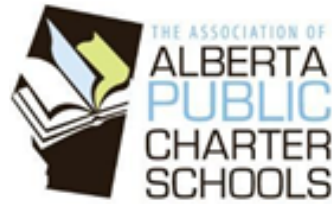
- ❖ Undertaking an empirical study to explore *how integrating coding into the K-12 curriculum, using gender-responsive pedagogy and a design for use approach, can attract and keep girls in STEM related studies.*

Centre for Academic and Personal Excellence (CAPE):

- ❖ CAPE has completed a 3-year research project that investigated the *effectiveness of four types of mentoring strategies used by administration to increase teacher confidence and efficacy* in developing and delivering integrated learning experiences for students.

Connect Charter School:

- ❖ Student understanding of geospatial technology, in partnership with Mount Royal University: The purpose of this research is to contribute to understanding what geospatial knowledge and skills are required of learners to maximize their ability to use, and make meaning from, a geospatial technology. This research is also intended to explore how the use of a digital earth product compares when learners look at a known place and when learners look at an unfamiliar place, and to uncover if meaningful learning can be made from both. Students in Australia and Canada will be surveyed for specific geospatial skills and abilities. Students will participate in an activity for one class with a physical



May 2, 2020

model of digital earth datasets. Some may participate in an eye tracker study while they use PYXIS Globe, a digital earth product like Google Earth, to see how they use the program and to monitor their focus on the interface as they complete exercises with the data and the digital globe. The findings of this research will help inform understandings of child development of geospatial skills, especially with regard to their ability to apply their skills to unfamiliar geographic locations. It will help inform geography curriculum creation and adaptation. It will also help inform the development of more user-friendly and intuitive digital earth programs for use in schools.

Foundations for the Future Charter Academy (FFCA):

- ❖ Partnering with the University of New South Wales to examine Central Office Leadership that Works: Examining *how a common focus on collaborative inquiry facilitated the development of a cohesive central office leadership team and impacted school leadership* across our campuses.
- ❖ Partnered with Mount Royal University to examine physical literacy development including a published study on *Enhanced Object Manipulative Skills Programming for Girls in Elementary School*.
- ❖ Funded by Alberta Education and partnered with both the University of Calgary and the University of Alberta for the study "*Exploring the Global*

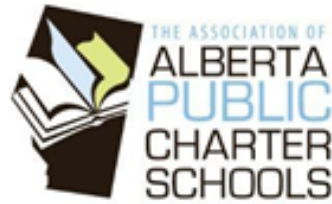
Competence of Teachers and Students: The Impact of Diversity, Classroom Pedagogies and Teacher Professional Learning. To date over 1400 staff and Grade 9 students in FFCA, Golden Hills School Division and the International School of Macao have completed the standardized Global Competence Aptitude Assessment (GCAA) with results broken down for variables such as gender, nationality, age, time spent abroad and years teaching/learning in an ethnically diverse setting.

New Horizons Charter School:

- ❖ Undertaking a study examining how teachers might change individualized student learning to more collaborative student learning in a project-based learning context.
- ❖ Undertaking a study examining the PAT performance of students who have been accelerated up to two grades ahead in mathematics to see if gaps in their understanding exist at the time of writing which may be connected to their accelerated program.

Suzuki Charter School:

- ❖ In collaboration with the University of Alberta and in partnership with Calgary Arts Academy a major five year research project is underway. The project is supported by a Social Humanities and Research Council Canada grant, with lead researcher, Dr. Jackie Leighton, to pursue an examination of formative instructional and assessment strategies for academic



May 2, 2020

and personal excellence. The study examines the role of social and emotional factors such as student-teacher trust, attitudes towards mistakes, and beliefs about learning guided by learning errors and formative feedback (LEAFF) model. Students, parents and faculty in both participant schools are involved. A regular newsletter and update are provided on the project website.

Valhalla Community Charter School:

- ❖ Examining the *impact of implementing the Writing and Thinking Road to Reading* and Spelling program measuring the impact on the number of phonograms and words kindergarten to grade 3 students are able to read and write from dictation, and the volume and clarity of writing in personal stories, subject reports and written responses to questions about text.
- ❖ Examining the *impact of the implementation of a cursive writing program in lower grades exploring the links between handwriting and reading* as well as the written expression of ideas with the intention of developing measures of note-taking effectiveness and capacity for immediate written expression of ideas in students in upper grades.

Westmount Charter School:

- ❖ Purpose of the Study: To include autistic student voice in research related to inclusive education in Canada. Participants include high school boys

from Westmount. Researchers: Gabriela Alonzo-Yanez, PhD (Supervisor), Werklund School of Education, U of C, Chandra Lebenhagen (Doctoral Candidate).

- ❖ Title of Project: School-based leader perspectives of preservice teacher field experiences in their school community: lived stories. Researchers: Dr. Amy Burns (Supervisor), Werklund School of Education, U of C, Kathryn Crawford (Doctoral Candidate).
- ❖ Title of Project: Executive Function Action Research. Teachers Heather Lai and Ley-Anne Folks studied strategies to support executive functions in grades 5 and 6 students. Their research was presented at the Social Emotional Needs of Gifted conference in Houston, Texas in July 2019 followed by presentation at the World Council for Gifted and Talented Children conference in Nashville, Tennessee in July 2019. They subsequently presented at the 2eBright Children conference in California in October 2019.
- ❖ Researching an *Anxiety-based Psychological Intervention to Examine its Efficacy and Applicability with Gifted Children*: The purpose of this study is to better understand anxiety struggles in gifted students. This study will focus on application of mindfulness-based cognitive therapy to determine its efficacy in reducing anxiety symptoms in grades 4-7 gifted children.