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Psychologists as Change Agents

Impacting the system

Policy, collaboration, consultation



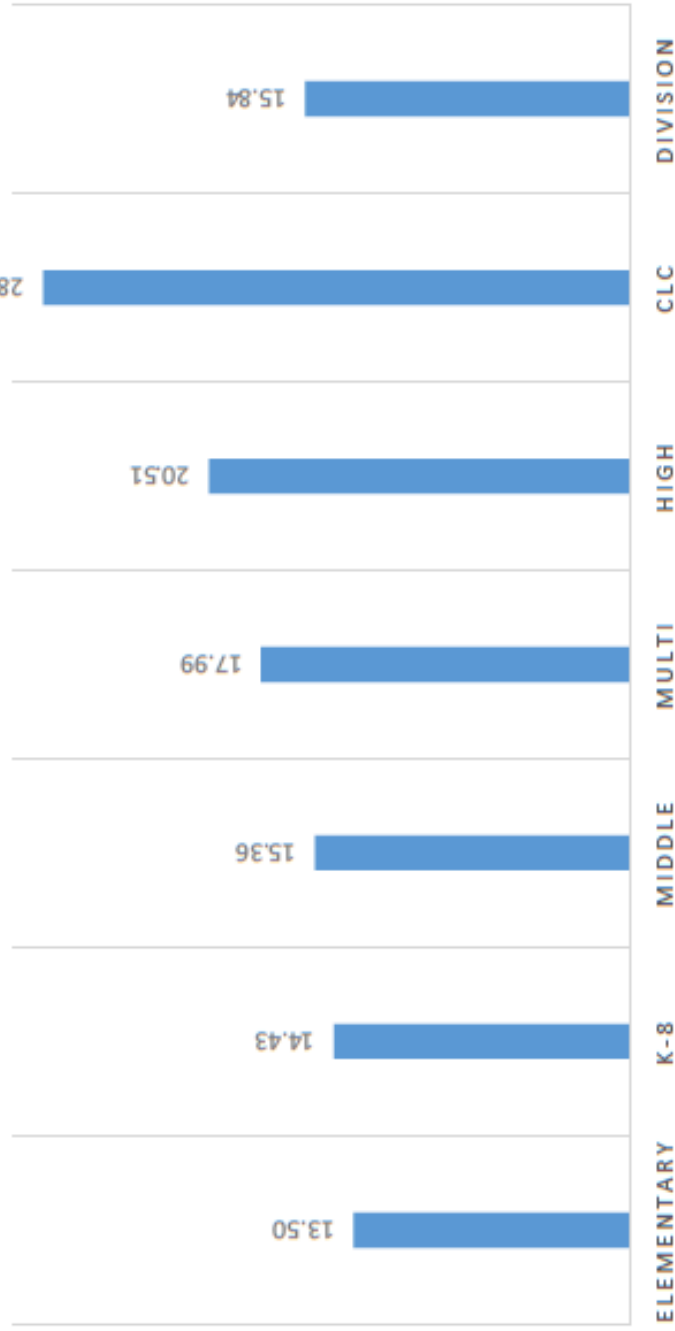
Rocky View Schools

- 5th largest jurisdiction Alberta, Canada:
 - 22,000 public students
 - 49 schools
 - 2,200 staff
- Rocky View Schools inspires a love of learning and community, by engaging all learners through meaningful and challenging experiences, preparing them to understand, adapt and successfully contribute to the changing global community.
- Our goal is to offer stimulating, flexible programming that makes learning relevant and exciting to today's 21st Century learner.

The 21st C Learner is . . .



2016-2017 PERCENT OF STUDENTS WITH CODES



Flexible Pathways to Success: Technology to Design for Diversity

Kristy McConnell
Project Lead
Psychologist

ISCI 2017
June 30, 2017
Montreal, QC



Participants



Rocky View Schools



Greater St. Albert
Catholic Schools



Prairie Land Regional
School Division



Fort Vermilion
School Division



Lakeland Catholic
School District

5 School Authorities

8 Schools

- Chestermere Lake Middle School

- Muriel Clayton Middle School

- R.S. Fowler School

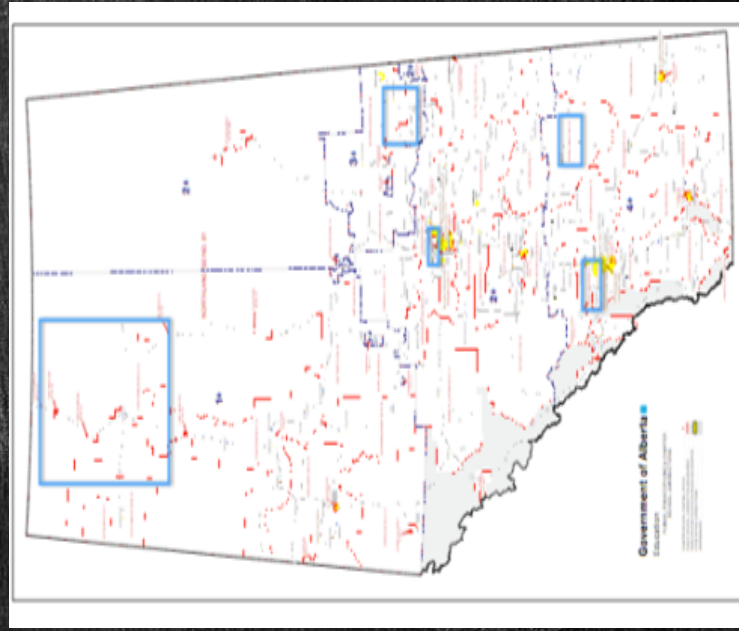
- G.H. Primeau Middle School

- Delia School

- J.C.C. School

- Fort Vermilion Public School

- Dr. Bernard Broseau School



Flexible Pathways to Success

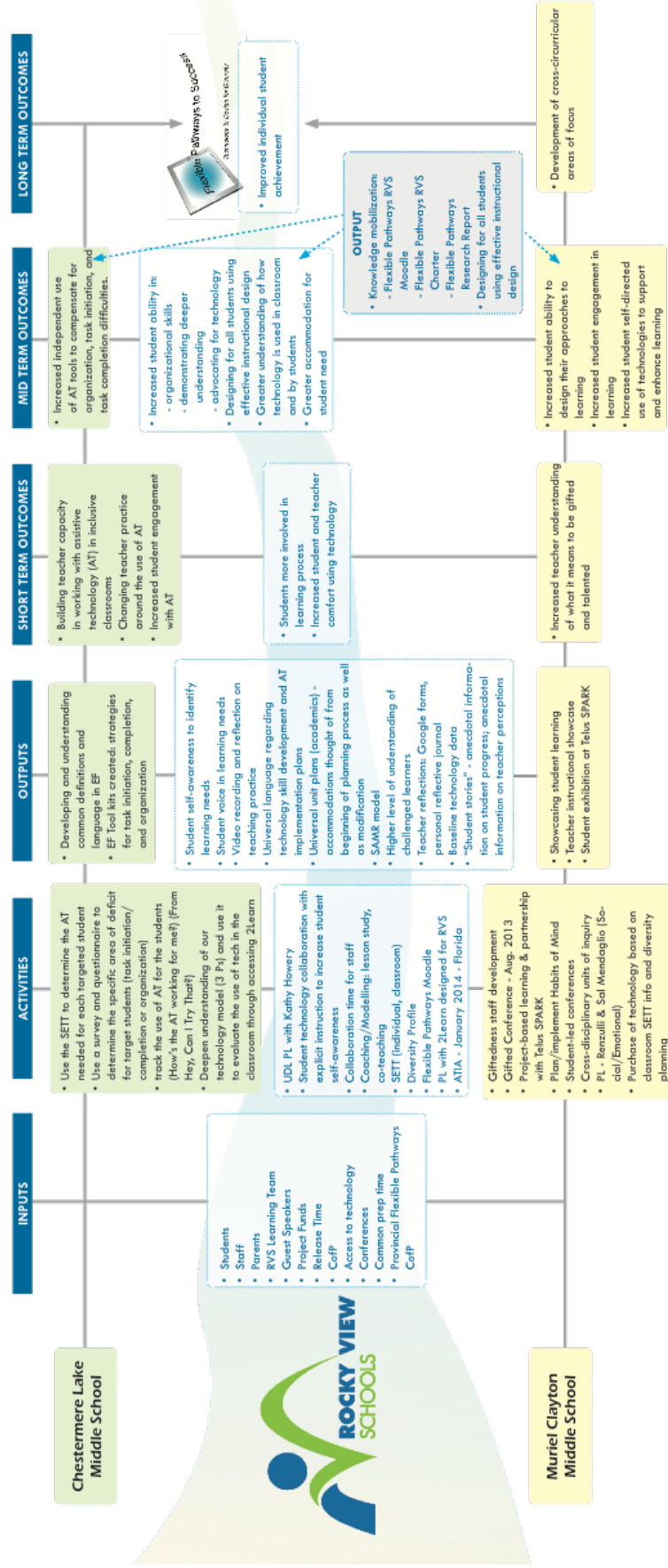
Exploring the Impact of Technology on Student Learning in Inclusive Learning Environments

November 2014

Flexible Pathways to Success is an Alberta Education initiative involving five K-12 school jurisdictions that are building and sharing expertise around the design of inclusive, innovative 'learning spaces' at the Junior High level where technology is leveraged to create flexible pathways to success. Of special interest is the role technology can play in supporting learners' increased participation and achievement in inclusive environments where there are diverse cognitive abilities (including students diagnosed with intellectual disabilities and students diagnosed as gifted). The program was initiated as one strategy to address Alberta Education's Business Plan (2012-2015) Priority Initiative 1.3 - to "continue the implementation of an inclusive education system". Flexible Pathways is part of a broader effort to implement practices that support inclusion in Alberta schools. For more information on inclusion: <http://www.education.alberta.ca/department/jpr/inclusion.aspx>.

Research Questions:

1. Alberta Education: To what extent does the use of technology in inclusive classroom environments support students with intellectual exceptionalities?
2. Rocky View Schools: What can be learned from the Flexible Pathways project that can inform the development and improvement of Universal Learning Environments in RVS?
3. Participating schools:
 - Chestermere Lake Middle School: To what extent does the intentional use of Assistive Technology support students with intellectual disabilities compensate for deficits in executive function learning in the inclusive classroom (to increase academic achievement)?
 - Muriel Clayton: To what extent can the use of technology within cross-curricular and inquiry approaches improve the achievement and engagement of highly-abled learners?



Primary Partners: Alberta Education, the University of Alberta, and Learning Teams from 5 school jurisdictions (teachers, learning and technology support staff, school and central office leadership staff). As well, the parents and students involved are key.



Researchers from the University of Alberta adopted a “responsive” evaluation model:

An evaluation is said to be “responsive” if it orients more directly to program activities than to program intents, if it responds to audience requirements for information, and if the different value-perspectives present are referred to in frequent reporting.

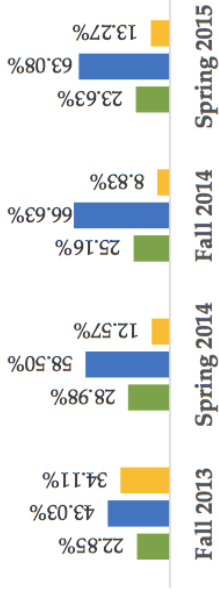
Research Question	Aim	Data Source
1. Understand Context Factors (Q1)	Create a picture of the school and classroom contexts where the study took place	Teacher /administrator surveys Focus groups / interviews
2. Identify Processes that Support the Implementation of Technology (Q1)	Examine the activities and interactions that supported the use of technology	Focus groups / interviews Teacher survey Classroom observations
4. Outcome Analysis (Q2)	Describe the changes in teacher practices and student outcomes observed over the term of the project	Classroom observations Teacher and student surveys Writing Samples Focus groups and interviews



Technology Coding Rubric

	Low (1, 2)	Mid (3, 4, 5)	High (6, 7)
Opportunities	Students have no or limited opportunities to learn with or use technology	Students have some opportunities to learn with or use technology	Students have ongoing opportunities to learn with or use technology
Tasks (SAMR Model; Puentedura, 2010)	No, or limited technology is used. Technology may be used to only support teacher productivity (e.g., attendance; i.e., use of tech by teacher will not impact on learning)	Technology is used as a substitution for non-digital elements (e.g. a smart board as a projector instead of an overhead) or to augment non-digital elements (e.g. cut and paste elements in a word processor)	Technology is used in a way that modifies or allows a redefinition of the tasks (i.e., by using technology the learning objectives are extended or modified)
Multiple Means to Represent and to Facilitate Learning	Teacher uses no, or limited technology to facilitate learning	Teacher uses technology to facilitate learning in one way or for only a small portion of the lesson	Teacher uses multiple digital technologies to facilitate learning
Personalization of Student Expression of Learning via Digital Technology	No or off task use of technology (e.g. texting and gaming not related to the lesson)	All students are expected to use the same digital technologies to express their learning (e.g. all laptops; all same software)	Students have choice in the digital technology they use to express their learning (e.g. some laptops, some iPads,)

Summative Data on the Amount of Time Technology was used in Classrooms for Educational Purposes



We observed a slight increase in the teachers' general active use of technology.

- The SMART Board was the most popular device across the districts.
- Teachers primarily used technology to show PowerPoint slides or Word documents, stream online videos mainly from YouTube, show websites related to the lesson, and access LMS such as Moodle and/or Google Tools.

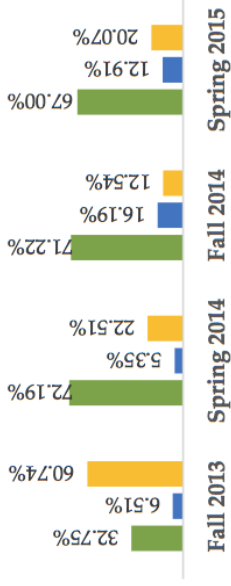
There was a significant increase in the presence of technology used in passive ways to support lessons.

- Teachers were usually acting as facilitators while the students were actively engaged with their one to one technological devices.

There was an important reduction of the overall class time with no technological devices.

ACTIVE USE

Active involvement of technology for educational purposes.



The students' total active use of technology revealed a significant increase.

- There were a variety of devices, especially mobile devices such as tablets, laptops, and smartphones.
- Apple products were the most popular.
- Students used technology to access LMS, complete assignments, play educational games, create presentations and documents, explore the Web, and create video animations using a variety of apps.

When students were not using their devices, they were generally listening to a group lesson directed by the teacher.

- The time having access but not using devices remained fairly static over the two years of the project.

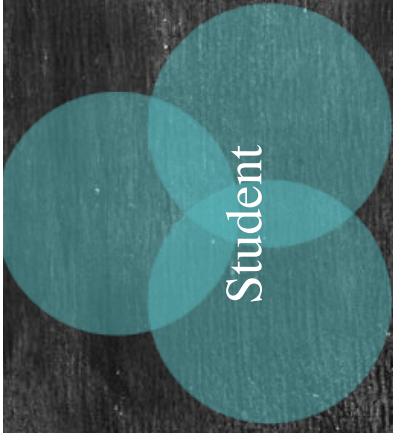
The students' overall amount of class time with no technological devices showed a significant decrease over the term of the project.

TECH PRESENCE

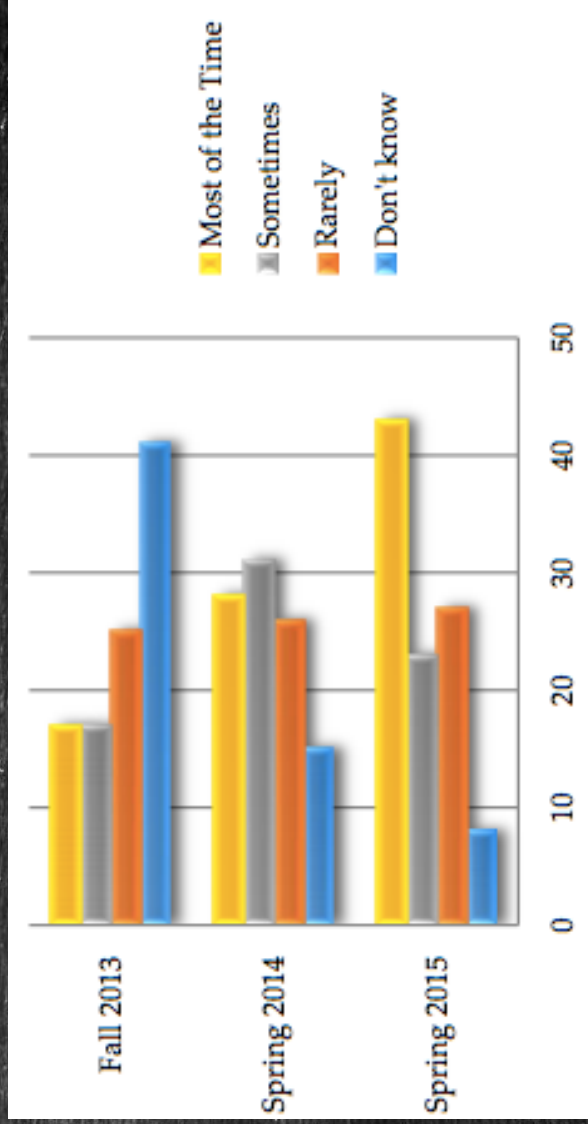
Technology use for support or not in a direct way.

TECH ABSENCE

No use of any kind of technology.



Percentage of Time SETT is Used to Make Student Planning Decisions



Student
 quiet guy → likes to work
 → quiet areas and minimize
 → instructions → sports → debate
 → classes to see about → debate
 → perfect → perfect → perfect → perfect → perfect
 → perfectionistic, cautious work
 → instructions → perfect → perfect → perfect → perfect
 → instructions → perfect → perfect → perfect → perfect
 → instructions → perfect → perfect → perfect → perfect

Environment
 → quiet → quiet → quiet → quiet → quiet → quiet → quiet → quiet
 → quiet → quiet → quiet → quiet → quiet → quiet → quiet → quiet
 → quiet → quiet → quiet → quiet → quiet → quiet → quiet → quiet
 → quiet → quiet → quiet → quiet → quiet → quiet → quiet → quiet
 → quiet → quiet → quiet → quiet → quiet → quiet → quiet → quiet

Tasks
 → projects → projects → projects → projects → projects → projects → projects → projects
 → projects → projects → projects → projects → projects → projects → projects → projects
 → projects → projects → projects → projects → projects → projects → projects → projects
 → projects → projects → projects → projects → projects → projects → projects → projects

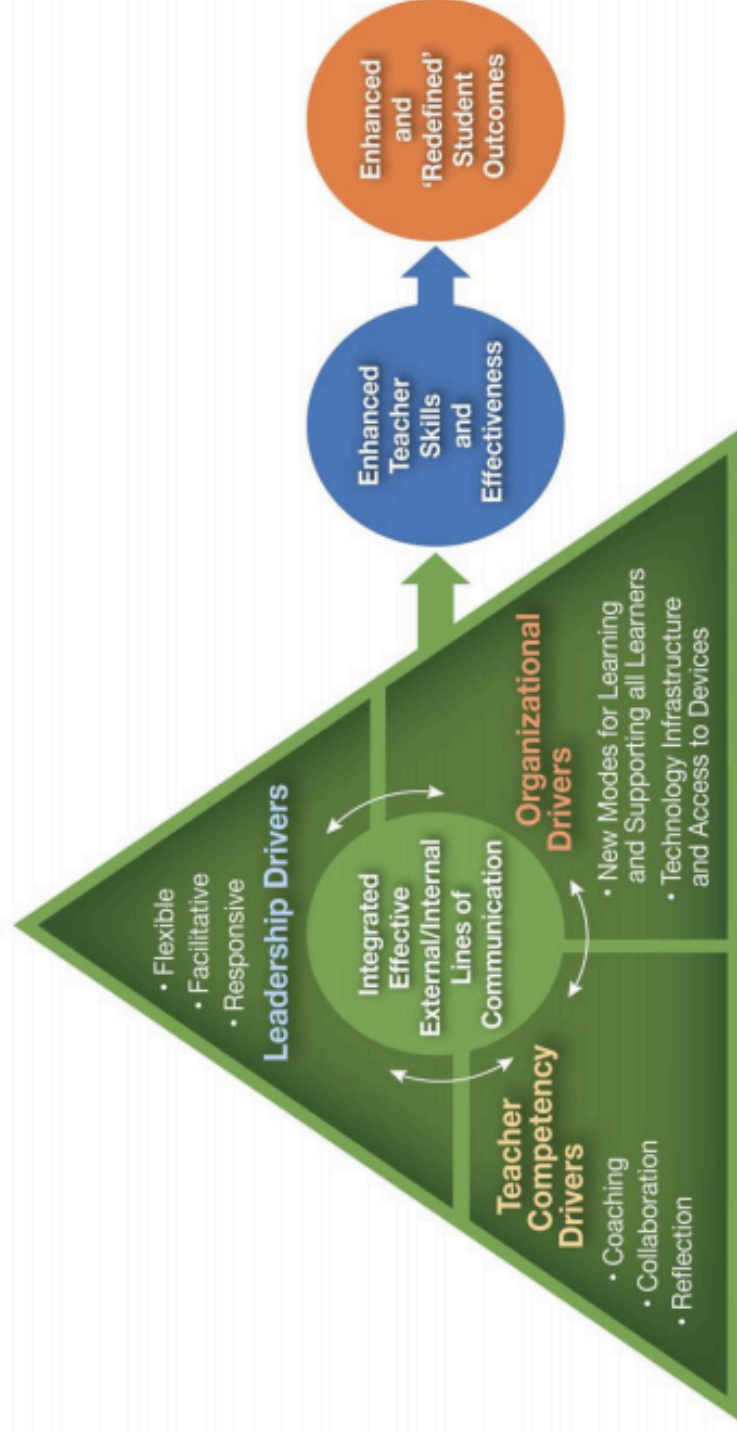
Tools
 → use → use → use → use → use → use → use → use
 → use → use → use → use → use → use → use → use
 → use → use → use → use → use → use → use → use
 → use → use → use → use → use → use → use → use

POTENTIAL NEW TOOLS
 → use → use → use → use → use → use → use → use
 → use → use → use → use → use → use → use → use
 → use → use → use → use → use → use → use → use
 → use → use → use → use → use → use → use → use



The SETT Framework, developed by Joy Zabala, is a tool that helps teams gather and organize information that can be used to guide collaborative decisions about services that foster the educational success of students with disabilities.

Model for Successful Technology Implementation in Inclusive School Settings



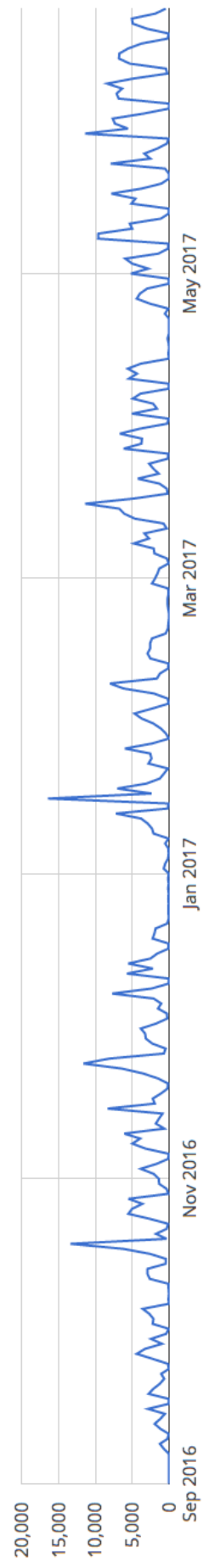
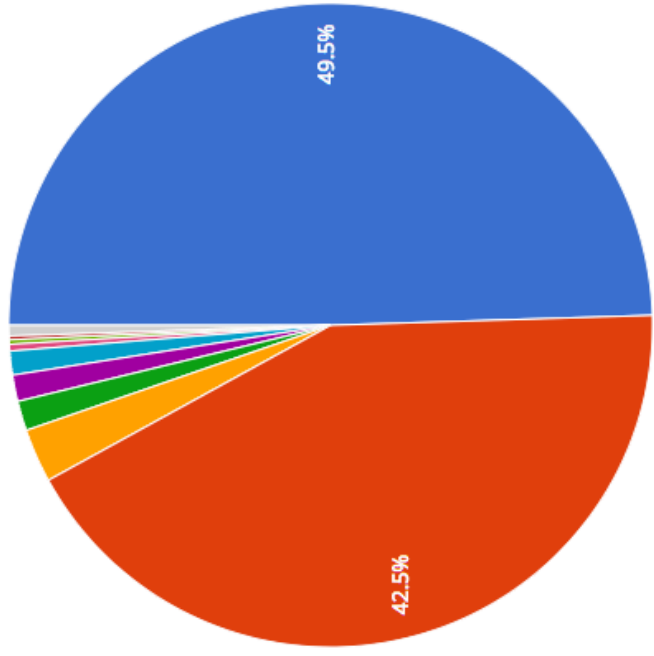
Where are we now...

- Continuation of project in 6 more schools
- BYOD (bring your own device) established in all high schools, and most middle schools
- Use of SETT Framework for all students who are a part of our Multidisciplinary Support Team, as well as other students with identified needs: Specific Learning Disorder, ADHD, Intellectual Disability, Deaf and Hard of Hearing, Visually Impaired
- Every Learning Support Teacher has received training in facilitating SETT framework meetings
- Division-wide license for Read, Write for Google so that ALL students have access to assistive technology supports including word prediction, text-to-speech, speech-to-text, highlighters, etc.



Docs Tools	Description	Symbol	User Notes
Text to Speech	Reads text aloud with dual color highlighting using natural-sounding male and female voices.		Place your cursor (or highlight) where you wish the text to be spoken. Click this Play button to hear it read aloud.
Talking Dictionary	Provides definitions which can be speech enabled to improve comprehension and writing.		Highlight a word to look up in the dictionary and click on this icon. Click on the definition to have it read.
Picture Dictionary	Displays images from Wdigit® Symbols for selected words to help support fluency & understanding.		Click on the Picture Dictionary icon and then select a word or vice versa. An image of the word will be displayed.
Word Prediction	Predicts the word being typed and the next word to be typed. Develops writing skills and helps construct sentences easily.		Click icon to open or close prediction window. As you type, words will be predicted. Hover over word to hear aloud. Click on word or press ctrl + the number next to the word you would like to insert.
Fact Finder	Helps users to research information quickly by searching the web for relevant information about a topic.		Highlight a word or phrase, then click the Fact Finder icon to do a quick Google web search to find background info while reading.
Translator	Allows single words to be translated into Spanish or French and spoken in that language.		Click this button to open the translator, and select a word to have it translated or vice versa. Select language in Settings.
Highlighters	Users can highlight and extract text to a new Google document. These tools facilitate summarizing, categorizing and higher order skills.		Highlight the word or text desired and then choose color by clicking on corresponding highlight color icon.

- predictions
- speech
- highlighters
- picture dictionary
- speech input
- dictionary
- speech maker
- screen mask
- screenshot reader
- Other



Impacts of FLEXIBLE PATHWAYS TO SUCCESS

Students:

Inclusion + Engagement = Student Success:

- Students become engaged when they have the opportunity to demonstrate understanding in a variety of different modalities, which often results in similar outcomes.
- The majority of students took quickly to utilizing technology as this is already a part of their everyday lives.



School/District:

Providing support and leadership to students, staff, school, district and community:

- Improving the integration of technology infrastructure, such as networks, school devices for the entire class, and allow student personal devices and developing school policies to match.
- This is all linked to continuous improvement of the school and enabling/encouraging pedagogy for the 21st century.



Teachers:

Major shift to pedagogy for the 21st century:

- The integration of technology led to a new pedagogical approach for teachers.
- There has been a shift more towards student centered learning and a move away from traditional lecture style format.
- Allowing students to demonstrate their understanding of a concept in multiple ways allowed for more teaching flexibility.

- Many teachers were learning alongside students, allowing for a more collaborative relationship to be built between students and teachers, and for students to take initiative and be more engaged in learning.



SPILL-OVER: The effect of this project on the rest of the school in terms of technology in the school, other students and teacher interest in integrating technology.

Research Community of Practice Participants (RCoP):

Instrumental for collaboration, and a support system:

- These gatherings were an integral part of the learning process for staff and districts.
- Many (i.e. teachers and school leadership) relied heavily on this venue for sharing challenges and for gaining validation of work.





Advancing Education by Innovating School Attendance Practices



@RVSAttendance



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RVS Attendance



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Why does absenteeism matter?

What is absenteeism?

- Absenteeism refers to the *excused* or *unexcused* absences of students from school.





Why don't students come to school?

- Students do not come to school for many reasons and it is often helpful to categorize them into the following domains:





What are the facts about attendance?

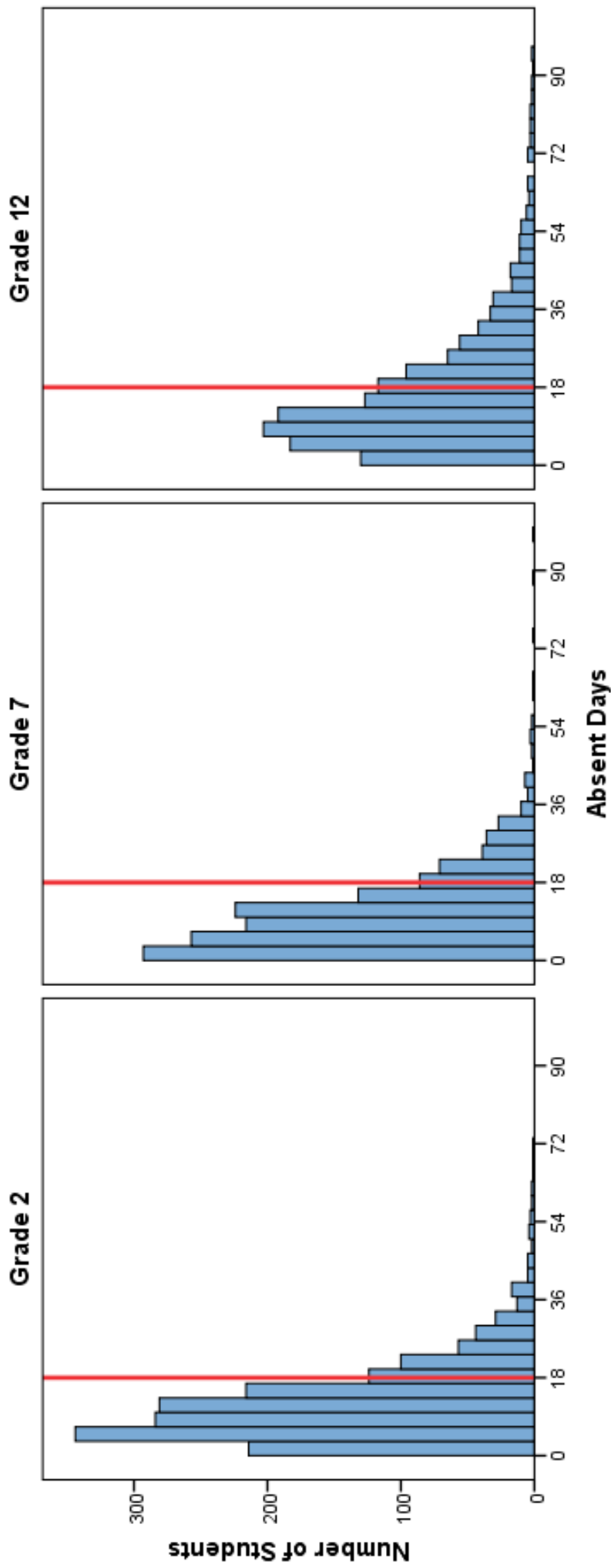
- Absences are a problem if they are excused or unexcused.
- Sporadic and consecutive absences negatively impact learning.
- Attendance patterns matter in all grades, including Kindergarten.
- Children often find it difficult to catch up on missed work.
- Parents who sign off on school absences does not minimize impact.
- Parents underestimate their child's absences by 50%.

How many absences are too many?

- The empirical literature highlights that **missing 10%** of available instruction days has a significant consequence on the development of students.
- That means, **missing 18 days** (or one month) of instruction is all that it takes to become at-risk of negative academic, economic, mental health, and legal outcomes.



Attendance Trends in Rocky View Schools





Prevalence of Chronic Absenteeism

- In Rocky View Schools, approximately **95%** of student are in school on any given day.
- According to data obtained from the 2015-2016 school year, approximately **4,400 students** demonstrate chronic absenteeism.
- This translates to **22% of students** within the Division have problematic attendance levels.
- If the prevalence of chronic absenteeism in Rocky View Schools is representative of the provincial landscape, this means that approximately **151,000 students** are having difficulty maintaining regular attendance.



Attendance Innovation Campaign



Educating Communities on Attendance





Empowering Schools to Use Data

- The research shows us that students who accrue ≥ 18 absences often have met one of the following criteria:
 - Absent ≥ 4 days in September
 - Absent ≥ 3 days in any given month (other than September)
 - Absent ≥ 5 days over three months
 - Absent ≥ 9 days over five months
- These early flags exemplify the need for building relationships with families early in the year and implementing an early warning system for absenteeism and tardiness.



Eliminating Barriers to Attendance



Teachers as Mentors

To build positive relationships with students and families, and identify the barriers that present for regular school attendance:

1. Make a positive in-person or phone connection, **at the beginning of September**, with the parents of students in their home room, focus group, or as otherwise indicated by their administrator.
2. Reach out and perform a positive phone call, letter home, email, or text with parents for students in their assigned group on a **monthly basis from October to June**. This connection should describe how the student is doing or something positive they observed.
3. Make a positive phone connection, **at end of each month**, with the parents of students in their assigned group who will be identified as at-risk using the attendance and tardiness early warning system. Please connect with the student as well if it is appropriate.

Number of Chronically Absent Students



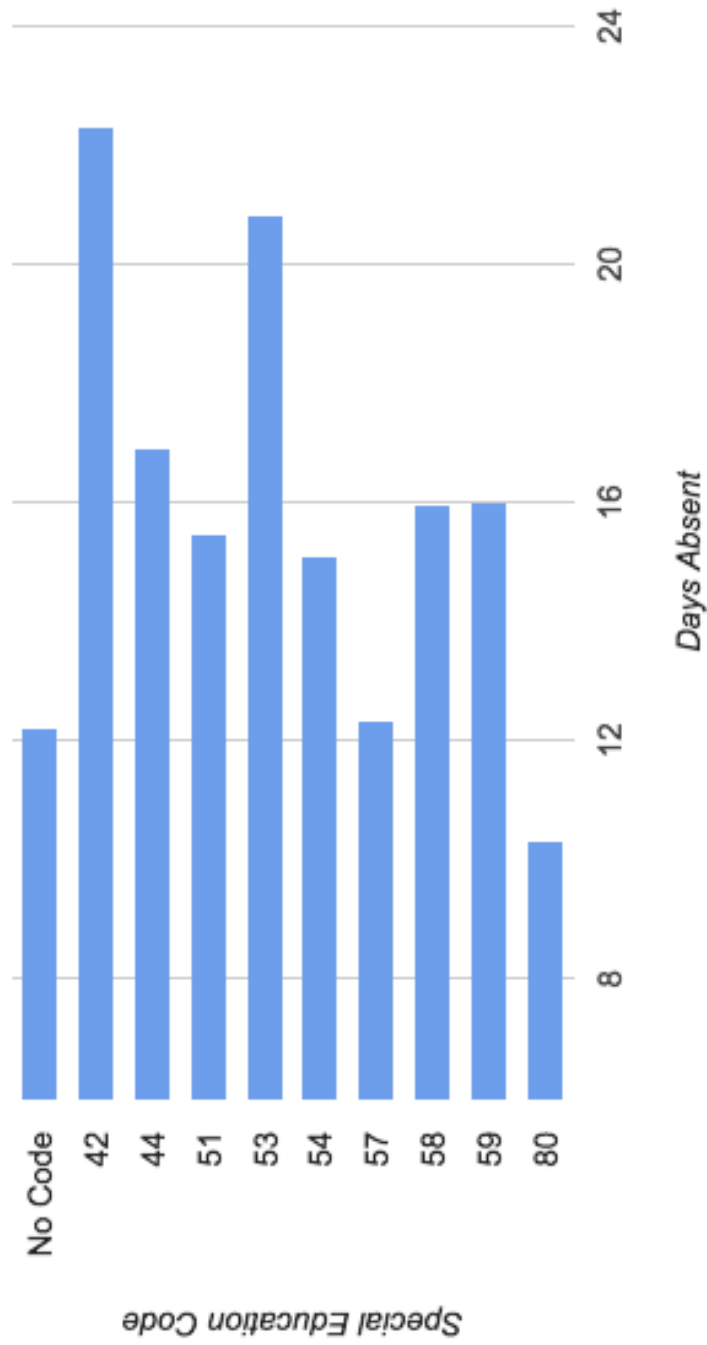
Supporting Students Experiencing Significant Mental Health Distress in Public Education Settings



Child Indicator(s)

- Educational Success: What does this look like?
 - Relationships
 - Academic achievement
 - Attendance
 - Coping in the face of adversity

Average Number of Absences by Special Education Code 2013-2014



Mental Health Supports

- Universal Supports
 - Social/emotional based learning programs
 - Go-to Educator
 - Mental Health Curriculum guide
 - FRIENDS
 - MindUP
 - Stepping Stones for Mental Health
- Targeted Supports
 - Child Development Advisor
 - Guidance Counsellor
 - Psychologists

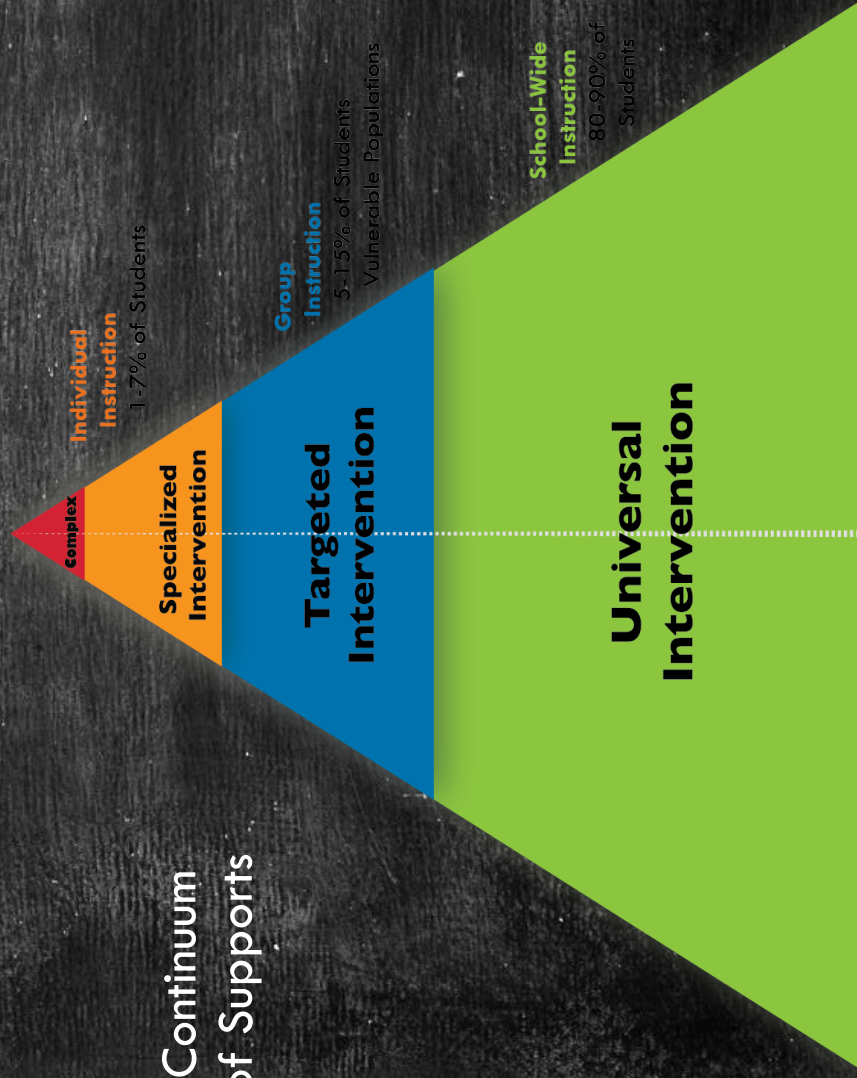


Mental Health Supports

- Pathways to community supports: Specialized Services
 - Psychiatric
 - Pediatric
 - COPE
 - Counselling
 - School-based mental health team
 - Alberta Health Services and school system collaboration
- **Enhanced Support for Mental Health (ESMH)**
- Divisional Classroom



Academic Learning & Social-
Emotional/Behavioural/Mental Health



Framework for Supportive Service Delivery

*Tiered Intervention Model

Continuum of Supports



Enhanced Support for Mental Health Program (ESMH)

- Divisional high school program (2015-2016 school year)
 - 1 classroom
 - Began with 1 PBS, 1 EA, 1 Teacher, .5 Psych
 - 6-8 students
 - development of referral process
 - Enhanced support focused on supporting students in ‘home’ schools
 - Collaboration among members of Learning Support Department and school staff
 - Increased supports based on tiered intervention model



ESMH Guiding Principles

- Student-centred approach
- Evidenced-based decision making
- Collaborative practice
- Strong case conceptualization
- Safe and caring environments/trauma informed
 - Milieu intervention
 - Responsive and supportive



ESMH Guiding Principles

- Act on the system and on the individual
- Shifting of philosophy
- First order vs second order change
 - Adapting the system or change the child?
- Education while experiencing MH difficulties
 - Support and guide vs pathologize and refer out prematurely
 - discipline cycles vs restorative justice practices



Challenges

- Referral process and triage
 - Profile and exclusionary criteria
- Understanding of mental health and inclusion
- Staff PL: Strong educator or mental health practitioner?
- Team cohesion and roles/leadership
- Philosophical and operational differences

Challenges

- Homogeneous vs heterogeneous group – contagion?
- Discipline policies and practices
- Hiring the right people
- Choosing a school and classroom
 - Early adopters vs closed system?



Challenges

- Mental health treatment or responsive learning environment?
 - Transitioning out of the ‘class’ ...too comfortable?
- Scheduled therapy, group sessions, and point of performance support
- Family involvement
- Outcome measurement
 - System or individual? Educational outcomes, reduced symptoms and/or subjective well-being?



Student Profile

- 10/10 multiple diagnoses (2-5)
- 8/10 have documented trauma backgrounds
- 5/10 have “attachment issues”
 - 8/10 family system difficulties; parent-child relational problems
- 9/10 involvement with multiple support agencies
- Chronic absenteeism and poor academic achievement
- Other factors: sexual orientation, gender identity



System Response: Divisional

- Expanded to elementary and middle school grades
- Elementary school program (2016-2017 year)
- Middle school (2017-2018)
- 6 additional schools requested consultation to support similar models
- Addition of 2.2 FTE psychology
- Addition of 1.0 FTE Family-school Liaison (family support)
- Enhanced Support Team to manage referrals and school consultation



System Response: Divisional

- Expanded consultation and direct intervention model
 - Approx. 26 students served in 'home' school (2016-2017)
 - Counselling, refer to community supports, and school-based consultation
- 6 additional schools requested consultation to support similar models
 - Increase in school requests for related professional development
 - Presentation to leadership group regarding Restorative Justice Models to support students with mental health concerns

System Response: School

- Integrated model
 - Learning support team, classroom teachers, guidance department
 - Dedicated administration support
- Mapping Meetings
 - Student-centred planning based on wraparound principles
- ESMH class meetings weekly
 - Responsive to ‘crisis’
 - In the moment support



System Response: School

- Stronger collaboration with community partners
 - Transition from residential treatment back to school setting
- Increase in experiential learning opportunities
 - Volunteerism
 - Field trips
 - Equine-assisted learning
 - Student/class hosted lunch weekly open to staff, family and friends



Having people around that can relate was helpful and it was a small group and predictable, so that was helpful

People don't pry here, they stay out of your face until you are ready to talk

I would literally get to the top of the stairs and leave because of so much anxiety

I would have anxiety in class and leave almost every time

Not sure if I would have graduated, at least not on time



Student Response

- Move from self-contained classroom to high school integration
 - Push-in vs Pull-out model
 - Dramatic increase in attendance
 - Increase in academic output/task completion
 - Connectedness and strengthening of relationships
 - Classroom “genogram”
 - Teachers come to classroom to connect with students/support coursework
 - Invite students to class



I only had 10 credits in all of grade 10 and got 15 more in grade 11...when I came here in grade 12 I got 51 credits for the year

I didn't have any panic attacks since coming to this room...I like it here because I can distress here without being questioned

You are allowed to have a bad day

I don't think I would have graduated without it



Student Response

- Decrease in suspensions and related discipline cycles
- Shift from negative narrative to strength-based narrative
 - Amongst staff
 - Student schemas
 - Self-belief
 - Belief about others
- 4 students have graduated this year!
 - 3 moving on to post-secondary



Conclusion

- School psychologists as change agents
 - Impacting multiple level of supports
 - Capacity to support more students versus only top tier
- Leadership: championing system change
- Policy and procedure reviews
- Collaboration with universities, Alberta Education and community service providers
- Incorporating evidence-based practices into the way we support students in our schools





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