SEA CHANGE:

Creating an Aligned Educational System

CASSA Conference – July 2025

Algonquin & Lakeshore
Catholic District School Board

Algonquin and Lakeshore Catholic DSB

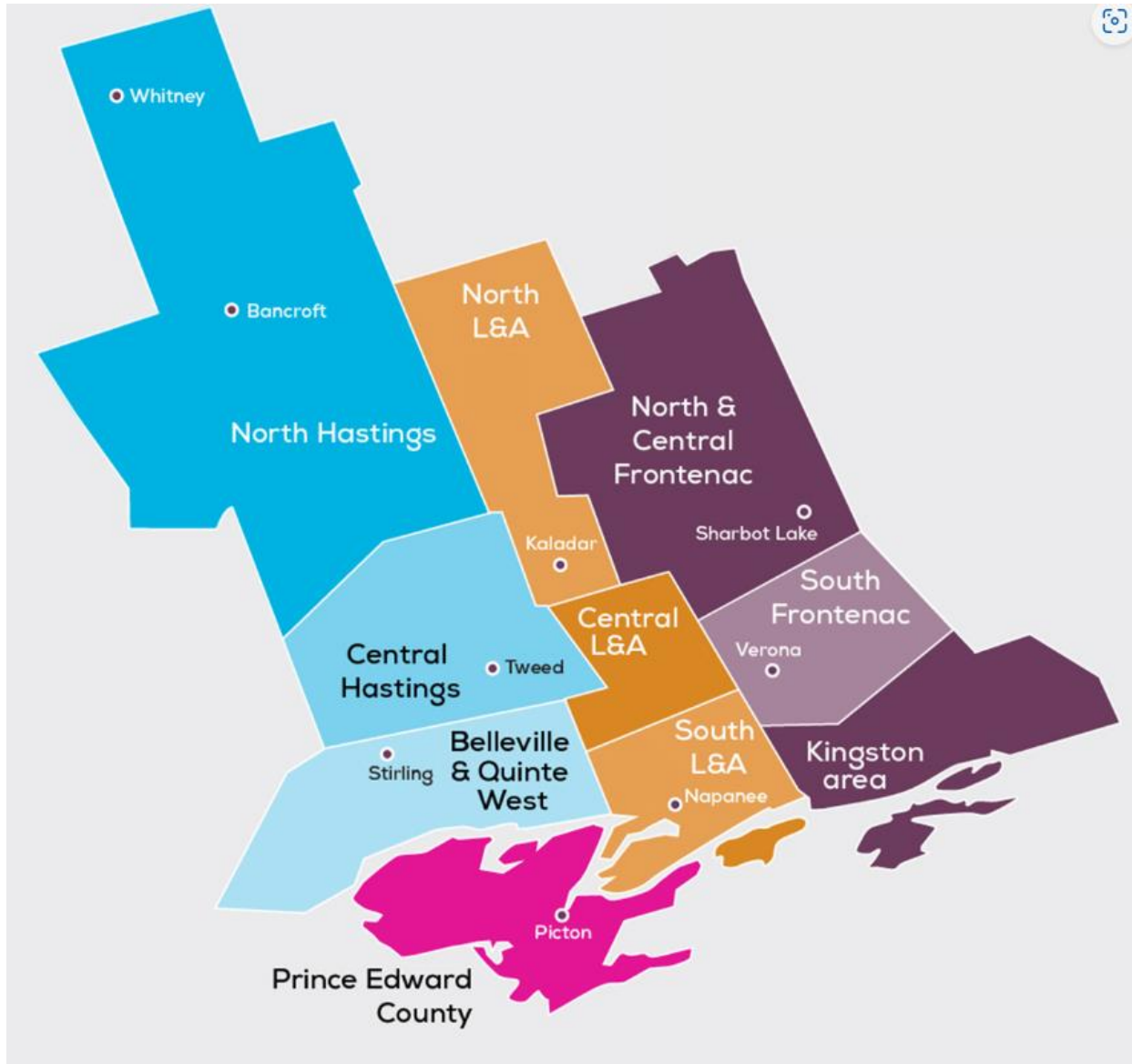Michele McGrath

Superintendent of Education

Bryan Davies

Controller of Plant and Planning Services

Algonquin and Lakeshore Catholic DSB

Algonquin and Lakeshore Catholic DSB

12,347 Total Students

8,451 Elementary Students

3,896 Secondary Students

1,375 Permanent employees

16,000+ Square kilometres that make up our Catholic Learning Community

33 Elementary Schools

5 Secondary Schools

5 Adult Learning Sites

2 International Baccalaureate World Schools

5 Elementary French Immersion Sites

16 Specialist High Skills Major Programs

When you think of a School what image do you see?

"There's a dream he dreams where the high school's dead and stark
It's a museum and we're all locked up in it after dark
The walls are lined all yellow, grey and sinister
Hung with pictures of our parents' prime ministers"

Wheat Kings – The Tragically Hip

Algonquin and Lakeshore Catholic DSB

You are given a blank canvas or a clean slate and asked …

In your mind, picture a place that you love to learn and / or work?

Why did you choose that image?

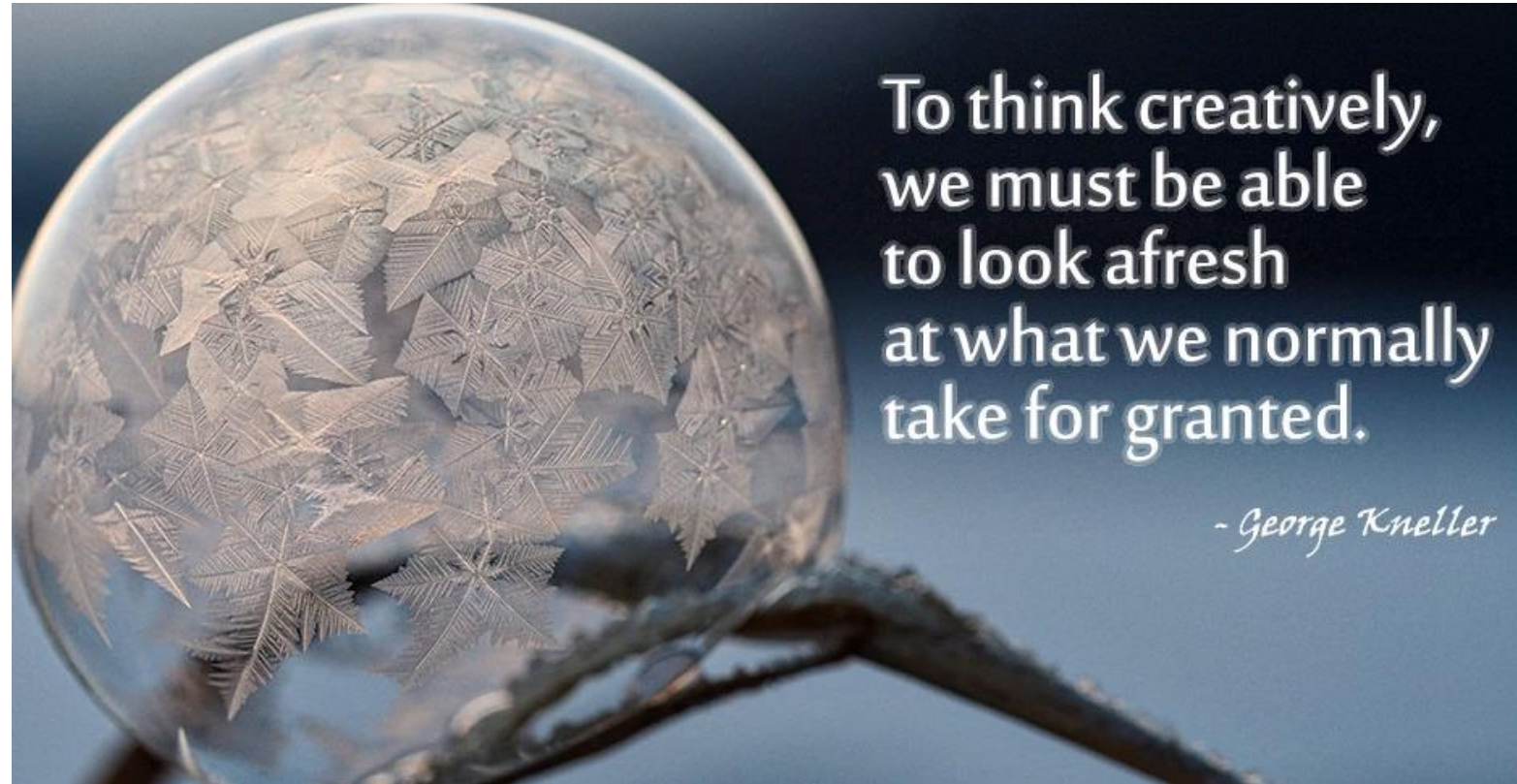# SEA CHANGE - An Aligned Educational System

*"Nothing of him that doth fade
But doth suffer a sea-change
Into something rich and strange"*

The Tempest – William Shakespeare

Sea-Change *itself is a metaphor, suggesting a profound or transformative alteration into something new*

Source: AI Overview

To think creatively, we must be able to look afresh at what we normally take for granted.
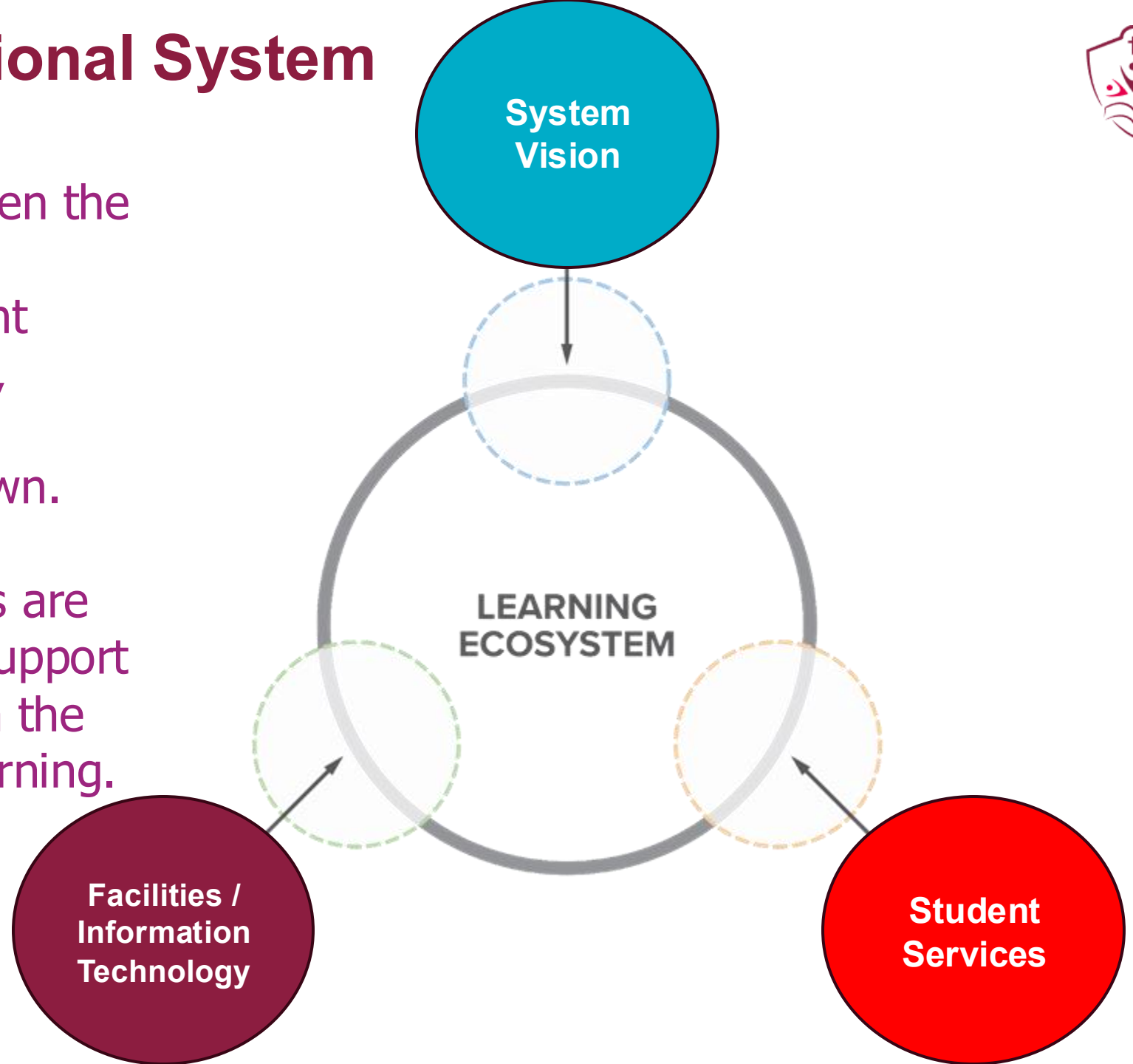
- George Kneller

What do we mean when we say "*An Aligned Educational System*"?

An Aligned Educational System

In the ALCDSB aligned ecosystem the silos between the Board's Facilities, Learning Technology Services, Student Services, Human Resources, Curriculum and Finance departments are broken down.
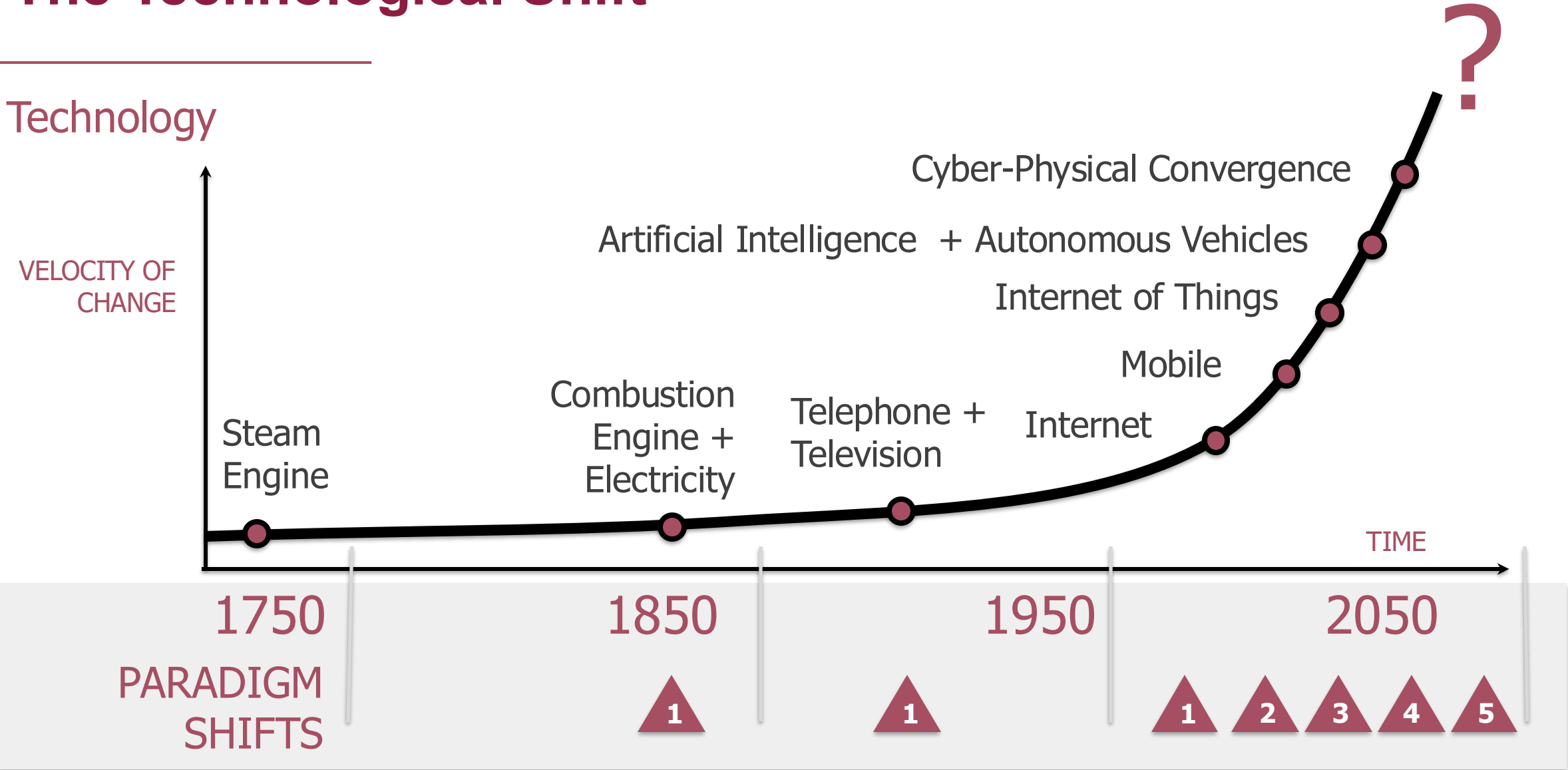
The work of all departments are aligned to strengthen and support one another in keeping with the overall system vision for learning.
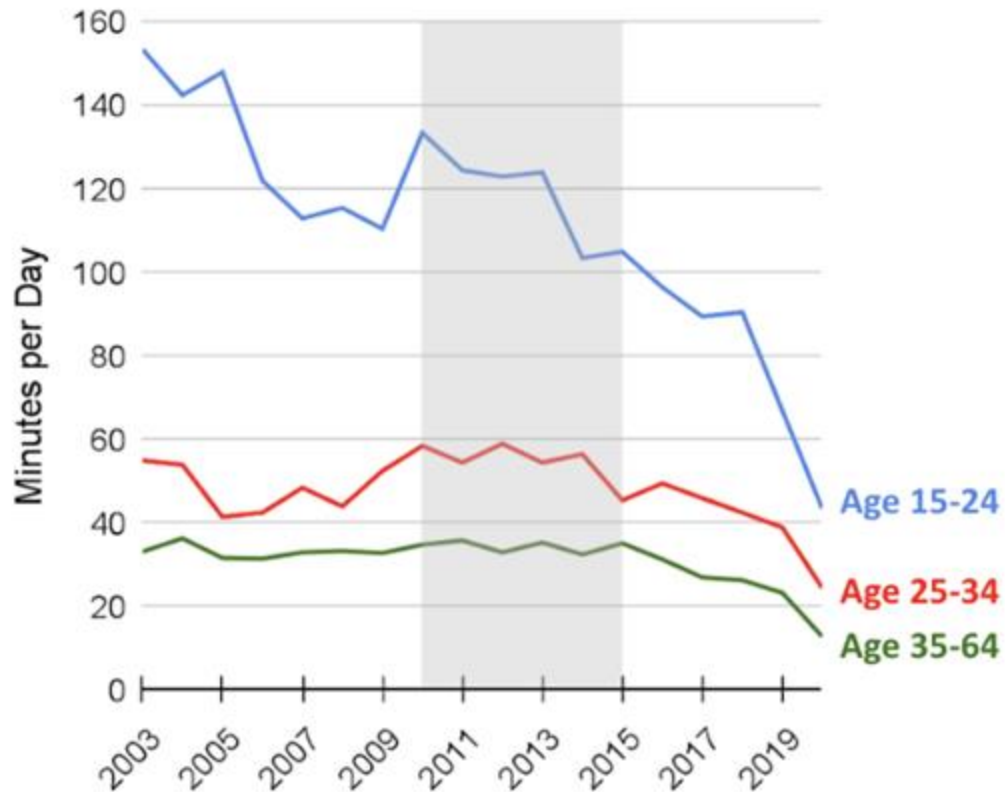
System Vision

LEARNING ECOSYSTEM
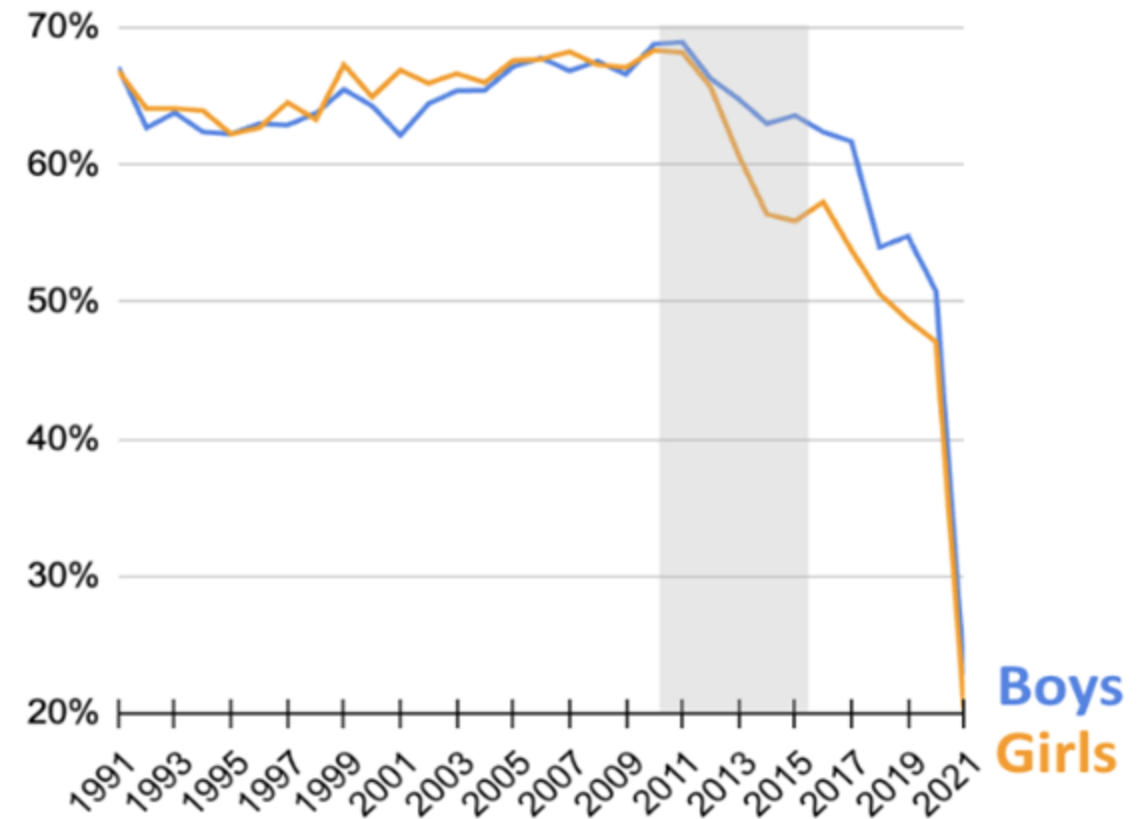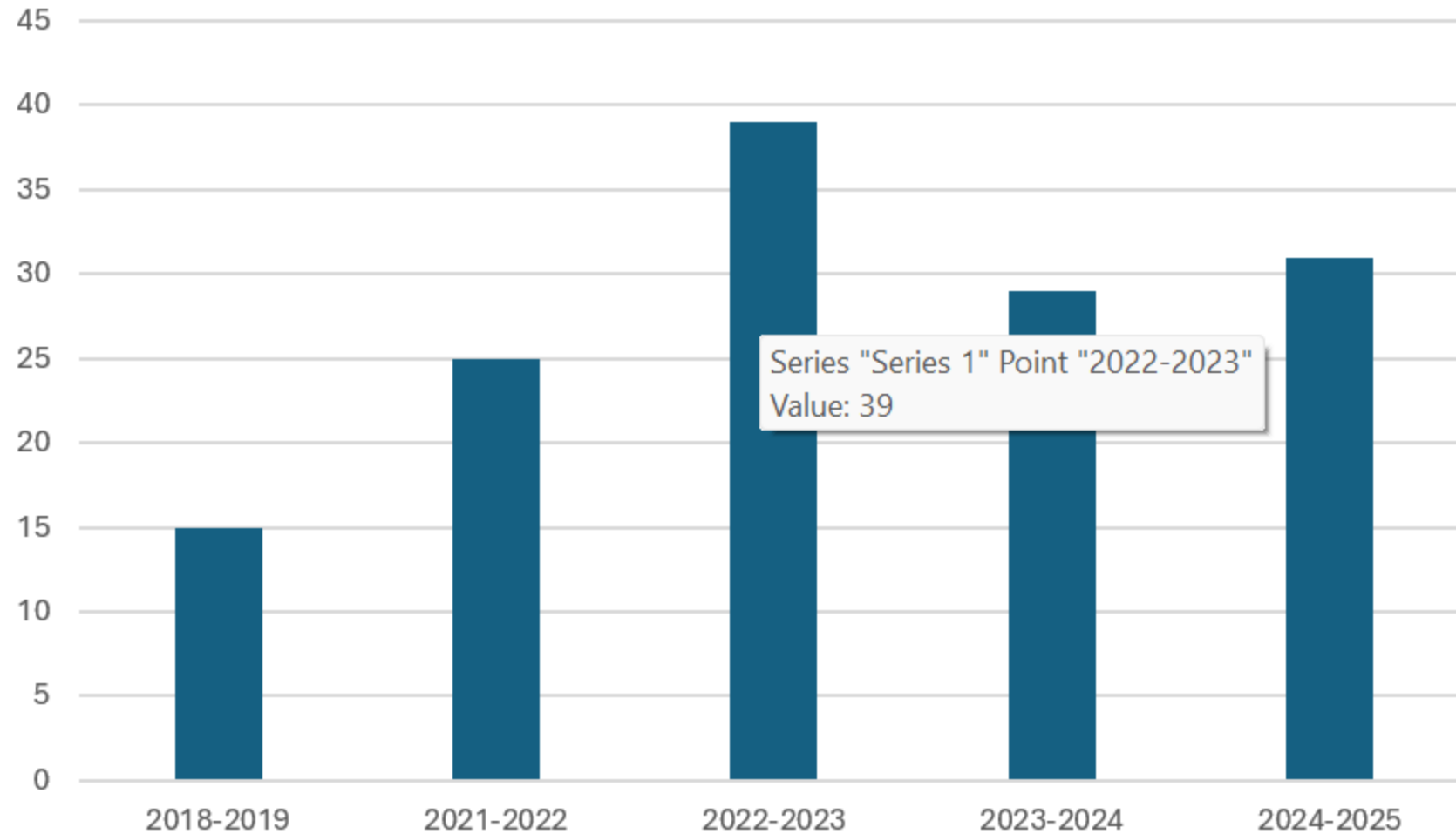
Facilities / Information Technology

Student Services

The Why

The Technological Shift

?

Technology

VELOCITY OF CHANGE

Cyber-Physical Convergence

Artificial Intelligence + Autonomous Vehicles

Internet of Things

Mobile

Internet

Combustion Engine + Electricity

Telephone + Television

Steam Engine

TIME

1750   1850   1950   2050

PARADIGM SHIFTS

1   1   1   2   3   4   5

The Why

Daily Avg Time with Friends (minutes)

Percent Satisfied with Themselves (USA 8th, 10th, and 12th Graders)

Source: Jonathan Haidt, The Anxious Generation – March 2024

ALCDSB Absenteeism

The Why

Percentage of Students Who Strongly Agree, By Grade (n = 928,888)

- In the last 7 days, I have learned something interesting at school
- I have fun at school
- At this school, I get to do what I do best every day

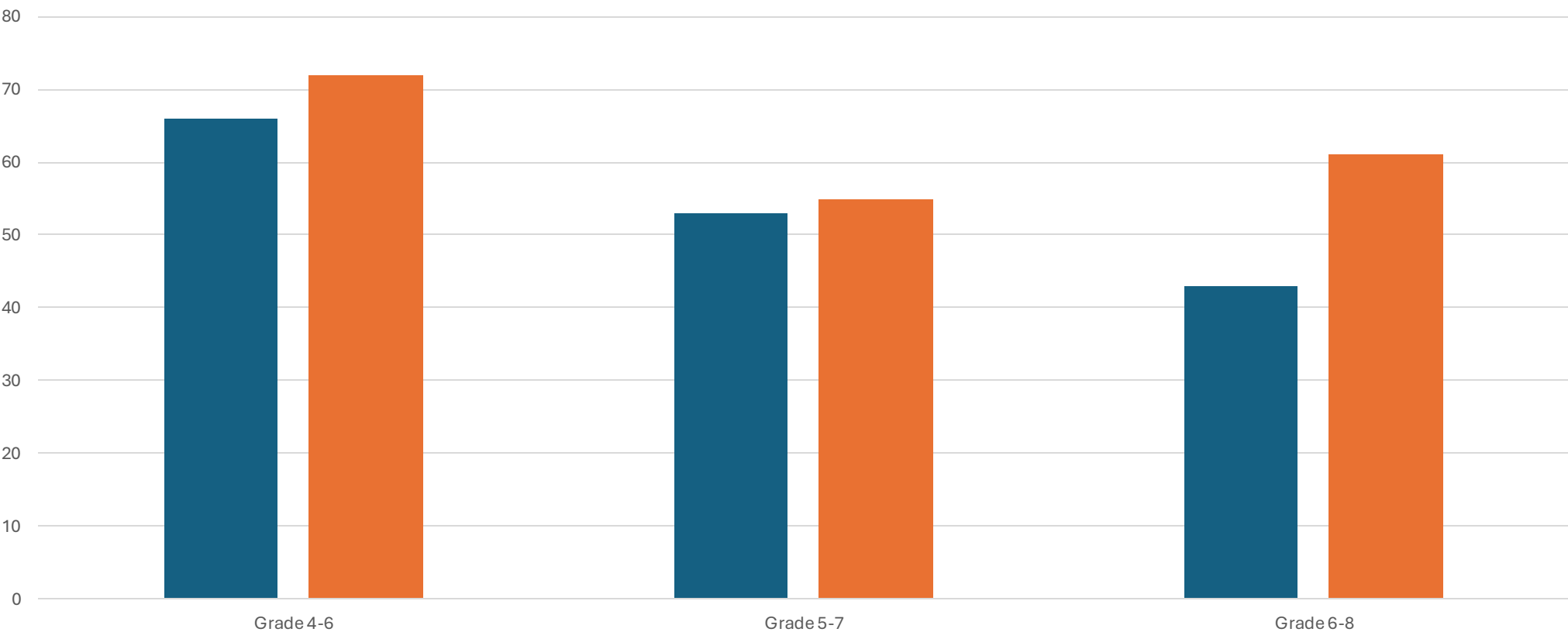Source: Gallup Student Poll
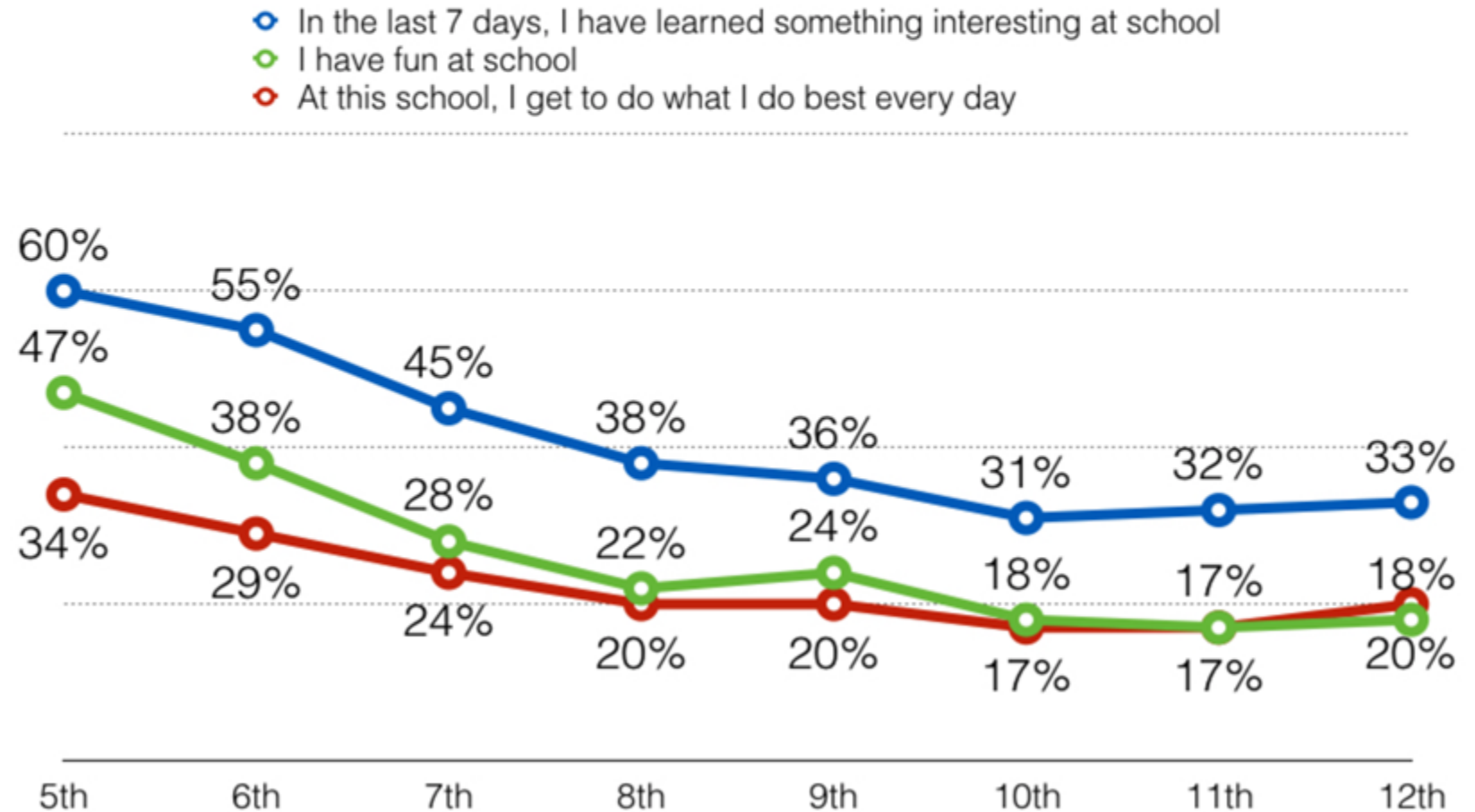
ALCDSB School Climate Survey

"When a flower doesn't bloom, you fix the environment in which it grows, not the flower." Alexander den Heijer

MDI Data St. Joseph Catholic School

2023   2025

An evolving world demands adaptive schools

"It is not our learners who are disabled. It is our systems, our curriculum." David Rose

The goal of UDL is **learner agency** that is purposeful & reflective, resourceful & authentic, strategic & action-oriented.

Design Multiple Means of
Engagement

Design Multiple Means of
Representation

Design Multiple Means of
Action & Expression

The UDL Guidelines

What does the Working Office look like?

"Typical office layout has undergone a complete turnaround from prioritizing desk allocation to focusing on spaces that enable collaboration and high-quality experiences"

Cubicle farms and open floor plans are out
Fortune.com May 31, 2022
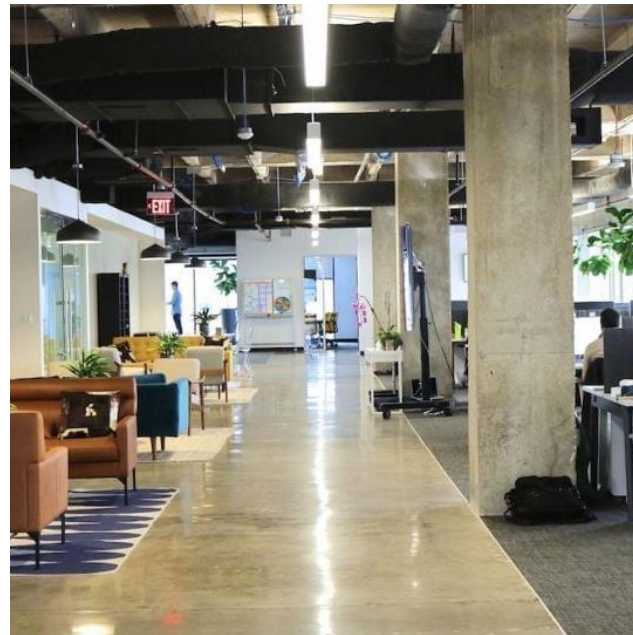
The ALCDSB Journey

ALCDSB Journey

HOW WE WANT IT TO BE

SET A GOAL

ACHIEVE

ALCDSB TIMELINE – Aligned Educational System

2010 - 2012
Visioning Report sets ALCDSB future direction for education and facilities to focus on UDL environments.

2018 - 2020
FI leads Discovery Visits and is design lead for St. Joseph and Kingston West (now St. Genevieve)

2020 - 2023
FI Learning Designers work on learning ecosystem alignment with principals

2023 - 2025
FI works with St. Joseph and St. Genevieve on readiness and implementation.

2025 -
ALCDSB Staff works with 2 Family of Schools on Universal Design for Learning Furniture Pilot.

2014 - 2016
FI leads Discovery Visits and is design lead for St. Francis of Assisi .

2019 - 2023
FI leads Discovery Visits and is Design Consultant for JJ O'Neill, Our Lady of Mount Carmel, and St. Gregory

2022 - 2024
FI conducts 10 school Spatial Audit, creates furniture guide, and leads furniture exhibition

2024 -
FI works with JJ O'Neill, Our Lady of Mount Carmel, St. Gregory and St. Francis on readiness and implementation. FI works with SATs on engagement and implementation.

* Work has been completed with support from Fielding International (FI)

ALCDSB Learning Community School Builds

- **<u>St. Francis of Assisi CS</u>** (Opened Sept 2017)
  - 363 pupil places
  - 36,470 Sq.ft.

- **<u>St. Geneviève CS</u>** (Opened September 2024)
  - 481 pupil places – 4 childcare rooms – 3 EarlyON Rooms – on a **new school site**
  - 55,177 sq.ft. – Project Cost $22,919,583

- **<u>St. Joseph CS – Addition</u>** (Opened December 2024)
  - 481 pupil places – 3 childcare rooms – 2 EarlyON Rooms
  - 55,313 sq.ft. – Project Cost $22,628,957

- **JJ O'Neill CS – Addition** (Under Construction)
  - 331 pupil places – 3 childcare rooms
  - 44,218 sq.ft. – Project Cost $22,613,998

- **Our Lady of Mount Carmel CS** (Under Construction)
  - 518 pupil places – 3 childcare rooms
  - 54,176 sq.ft. – Project Cost $28,279,689

- **St. Gregory CS**
  - 354 pupil places on a **new school site**
  - 37,448 Sq.ft. – Project Cost $21,244,065

2023-24 Elementary Enrolment – 8,451

Total OTG of LC Schools - 2,528

Elementary Students in LC Schools - 29.9%

What does an Aligned Educational School ("Learning Community" School) look like and where can you find them?

Learning Environment Continuum
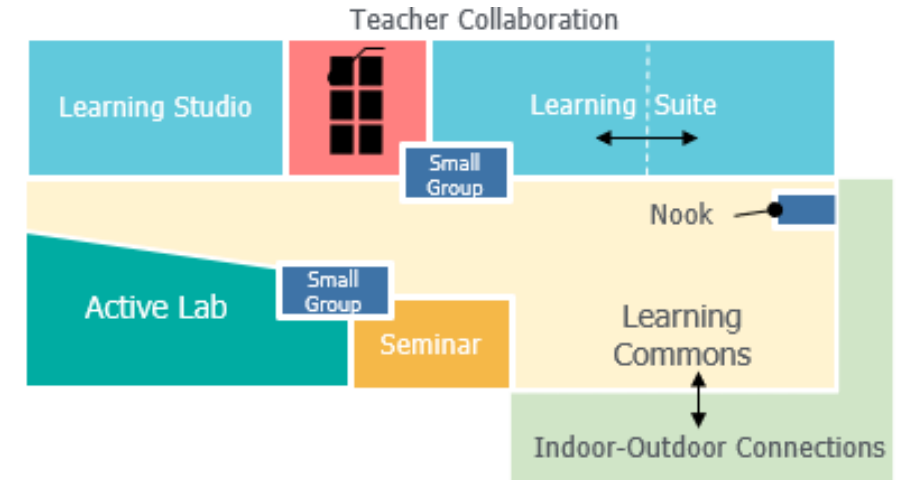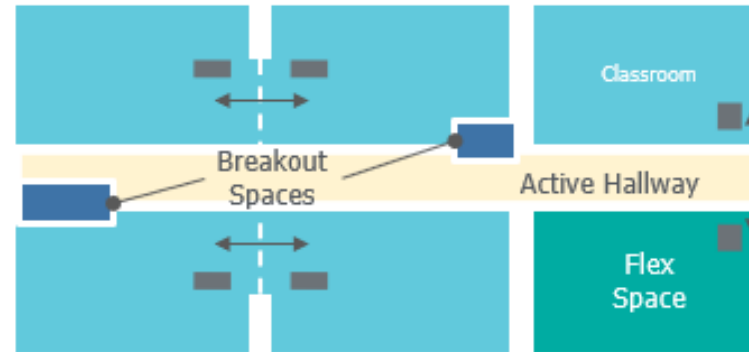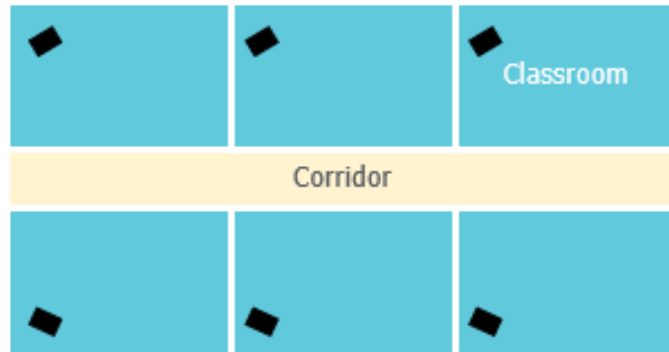
- Less spatial diversity
- More classroom oriented

- Greater spatial diversity
- Less classroom oriented

A Learning Community is…

A variety of dynamic spaces purposefully designed to foster active, student-centered, and collaborative teaching & learning.

Teacher Collaboration Room

Active Lab

Small Group Room

Learning Suite

Learning Commons

Learning Studio

Outdoor Connection

A Learning Community replaces the classroom model, where one teacher engages with 15-40 students in a single confined room, with a model in which 3-6 teachers engage up to 150 students in a variety of agile spaces.
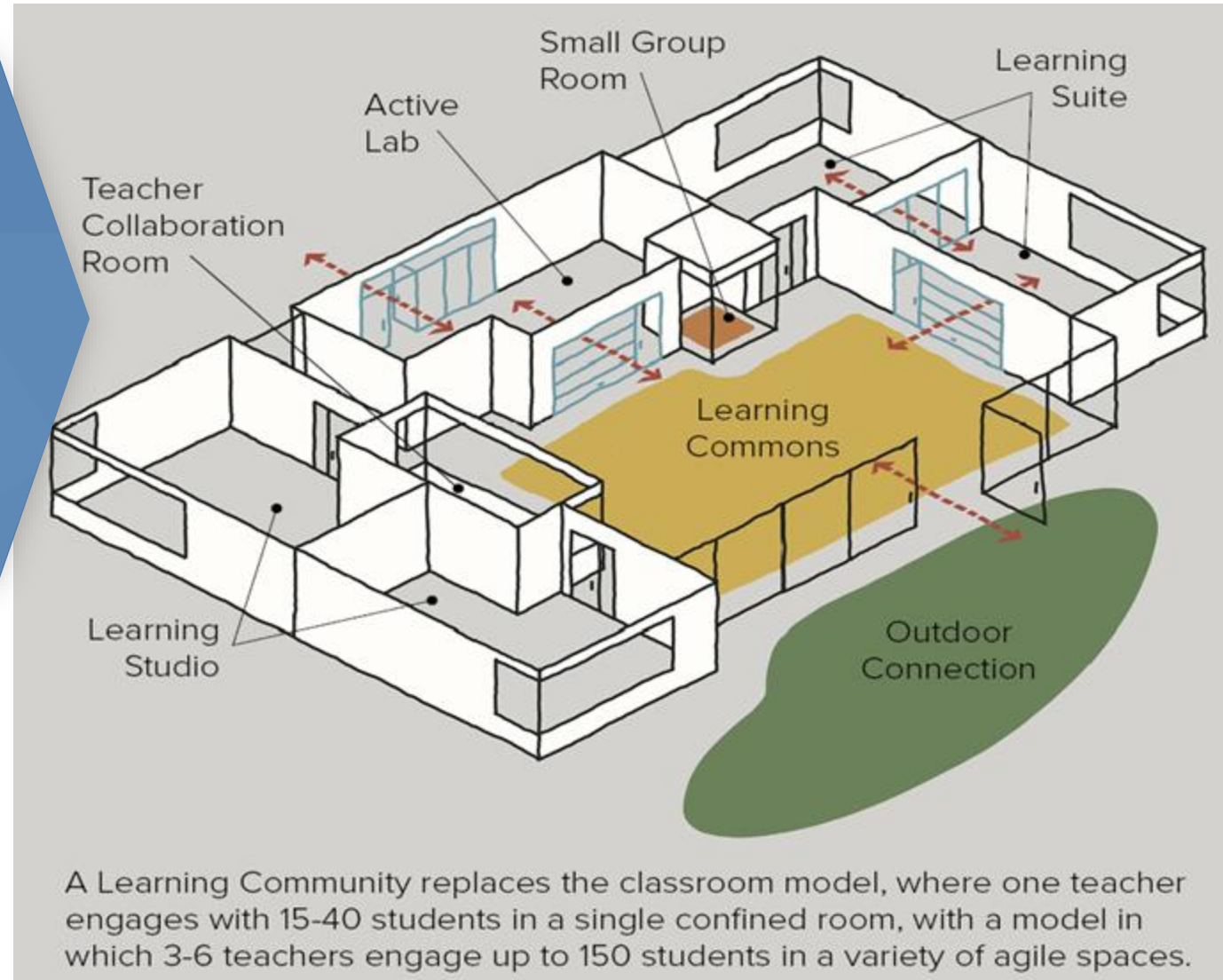
Where are Learning-Community Schools located?

Argentina	France	Maldives	South Korea
Australia	Germany	Mexico	Sri Lanka
Azebaijan	Georgia	Morocco	Sweden
Belgium	Hong Kong	Nepal	Switzerland
Cambodia	Indonesia	Netherlands	Taiwan
CANADA	India	New Zealand	Tanzania
Chile	Indonesia	Nicaragua	Thailand
China	Ireland	Norway	Uganda
Costa Rica	Israel	Philippines	Ukraine
Cuba	Japan	Portugal	United Arab Emirates
Czechia	Kazakhstan	Russia	United Kingdom
Ecuador	Kenya	Singapore	United States of America
Egypt	Lebanon	Spain	Venezuela
Finland	Malaysia	Saudi Arabia	Vietnam

Where are LC Schools located in Canada?

Norma Rose Point School

Vancouver, British Columbia

Where are LC Schools located in Canada?

Strathcona-Tweedsmuir School

Okotoks, Alberta

Where are LC Schools located in Canada?

Douglas Park School

Regina, Saskatchewan

Where are LC Schools located in Canada?

St. Francis of Assisi Catholic School

Kingston, Ontario

Where are LC Schools located in Canada?

St. Genevieve Catholic School

Kingston, Ontario

Where are LC Schools located in Canada?

St. Joseph Catholic School

Belleville, Ontario

Ground Floor

LEGEND

- Active Space
- Admin
- Breakout / Nook Space
- Circulation
- Daycare
- Early-On
- General / Service
- Learning Common
- Learning Studio
- Service
- Specialized Learning Studio

| 34

2nd Floor

LEGEND

Administration
General Commons & Circulation 2
Learning Studio
Nook / Small Breakout
Service
Specialized Learning Studio

The ALCDSB Journey (continued)

ALCDSB VISIONING

Visioning Report

Visioning and Planning the Future of Algonquin and
Lakeshore Catholic District Elementary Schools

Report Prepared by Fielding Nair International
Submitted January 2012

Algonquin and Lakeshore Catholic District School Board
Napanee, Ontario

"If this is something that the board is truly thinking of looking into and implementing some things, **I think it will make teaching less lonely**. How many times do you go into your room at 8:30 and you really don't come out until 5:00, and even though you've had some interactions, you're still alone in your own little brain. Life is not like that. The kids aren't lonely in the classroom."

"Without teacher professionals, all other categories cannot exist and yet the other categories are the reason for teachers to teach. **Our discussion centered around the need not only to change space / environments, but also the way we teach and what we believe about teaching**."

Discovery Process

Visioning Process | OLMC

The Visioning Process for Our Lady of Mount Carmel took place virtually over a three-day period: February 8-10, 2022

A team at Fielding International facilitated a series of engagements to gather input from a variety of OLMC stakeholders. These engagements included:

- 4 Core Visioning Team Workshops
- 4 Student Focus Groups
- 2 Teacher Focus Groups
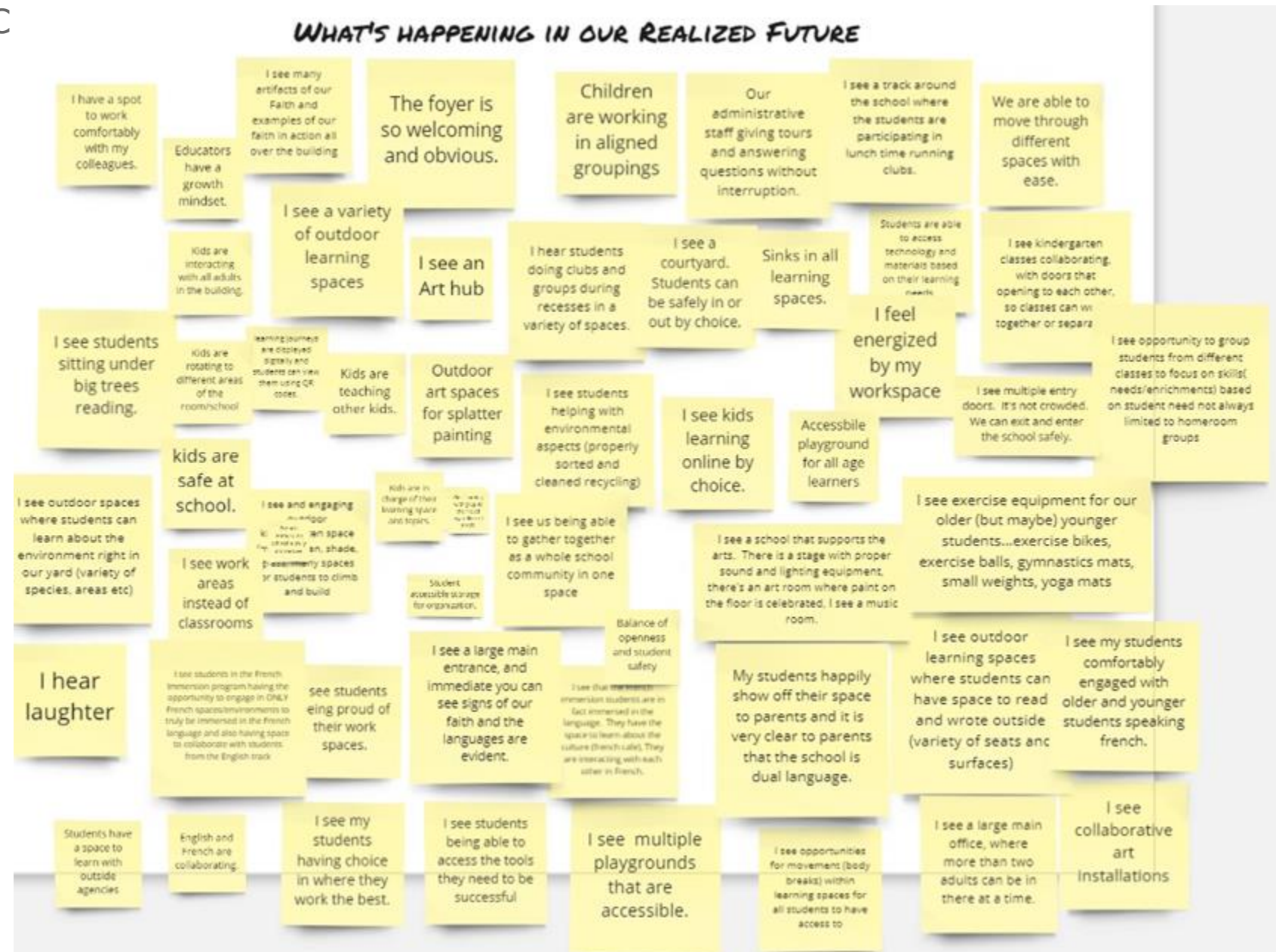- A Community Meeting
- Emerging Opportunities Presentation

Example of archival information obtained through the discovery process.

Question:

Looking into the future, what do you see happening in the new school?

| 39

A Brief Look Back

Design Drivers | OLMC

What is a Design Driver?

A Design Driver is an action-oriented statement that the school design team will use to focus and refine the creation and construction of the new OLMC School.
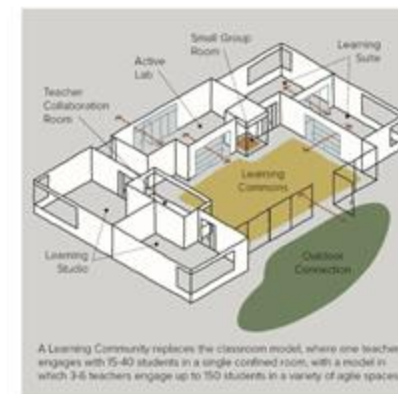
How were they chosen?

Each of the Design Drivers captures a key idea that emerged out of the visioning sessions, and also relates to the overall mission, vision, and values of ALCDSB.

Design Drivers | OLMC
UDL Equity is Adaptability

UDL: Equity is Adaptability
The learning environment will provide the flexibility for every learner to experience personalized success. Adaptability and accessibility are essential.

Spiritual Presence
The presence of God will be felt throughout the school. The building will have distributed places for calming reflection. Stained glass will be featured.

Communal & Collaborative Learning
The school will be a welcoming environment that promotes belonging, togetherness, and shared experiences for students, educators, and community members.

A Dual Language Ethos
Intentional detail will be paid to create special places that celebrate and support the learning of two languages: English and French.
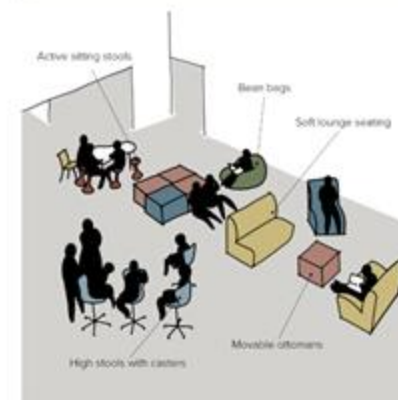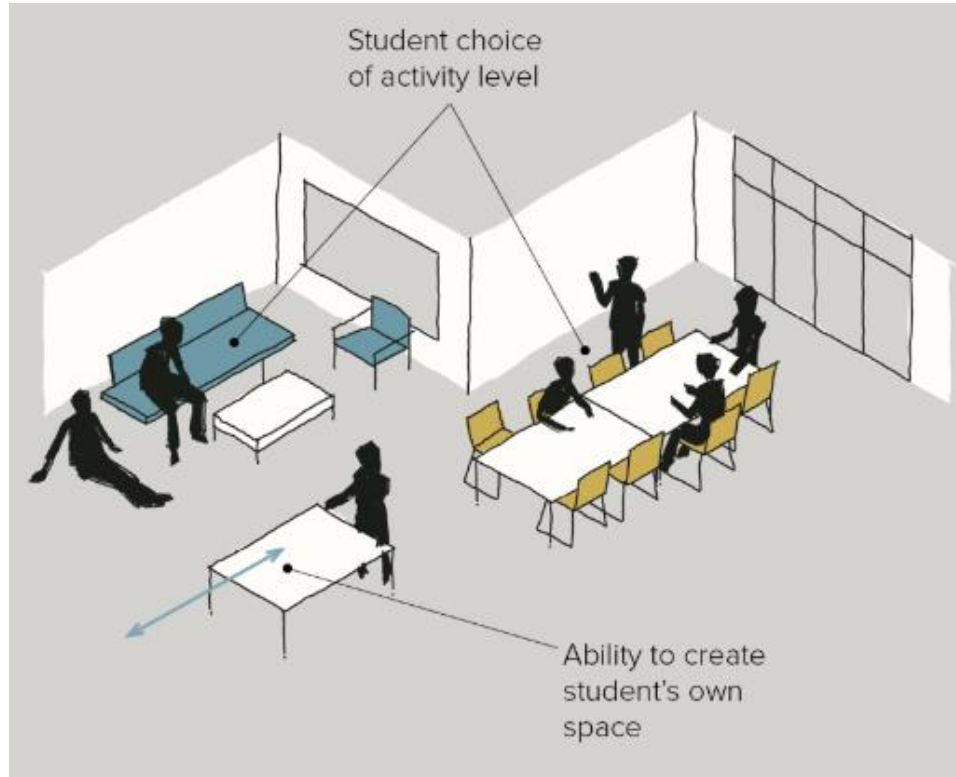
Holistic Safety & Well-being
The campus will promote personal wellness through a variety of spaces that support physical, social, and emotional health. Movement and comfort are vital.

Outdoor Connections
In addition to an abundance of natural light to make the interior feel warm and inviting, there will be meaningful outdoor learning spaces that connect with nature

Learning Community

A Learning Community replaces the classroom model, where one teacher engages with 15-40 students in a single confined room, with a model in which 3-6 teachers engage up to 150 students in a variety of agile spaces.

Variable Seating

Design Patterns

Student choice of activity level

Ability to create student's own space

What is a Design Pattern?

Design Patterns are simple sketches and annotations that get down to the essence of how a space works. These key ideas break down the complexity of school design as part of a system. Through the use of Patterns we can design and connect successful educational environments and experiences.

Read More

Curated by Fielding International

SchoolPatterns.com

CHOICE OF ENVIRONMENT in order to give learner's choice in how they interact with their environment, create partially-separated, visually-transparent learning environments that offer areas of different stimuli. Provide a variety of furniture that fits the context of the learning activities that will take place.

| 41
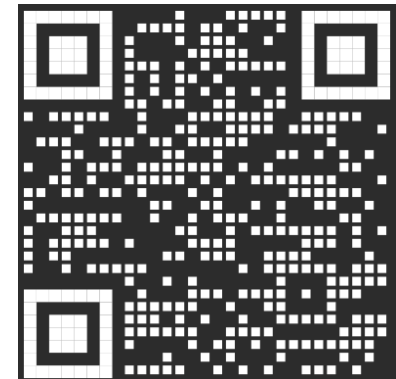
# Deck of Spaces – Creating Spaces aligned with UDL

WHY SPACE DESIGN

Space is proven to influence behaviours and perceptions. If we are to empower educators to meet the needs of learner variability, and reinforce UDL inherent quality of supporting diversity, equity, inclusion and belonging, then our spaces must be the body language to reinforce these everyday efforts.
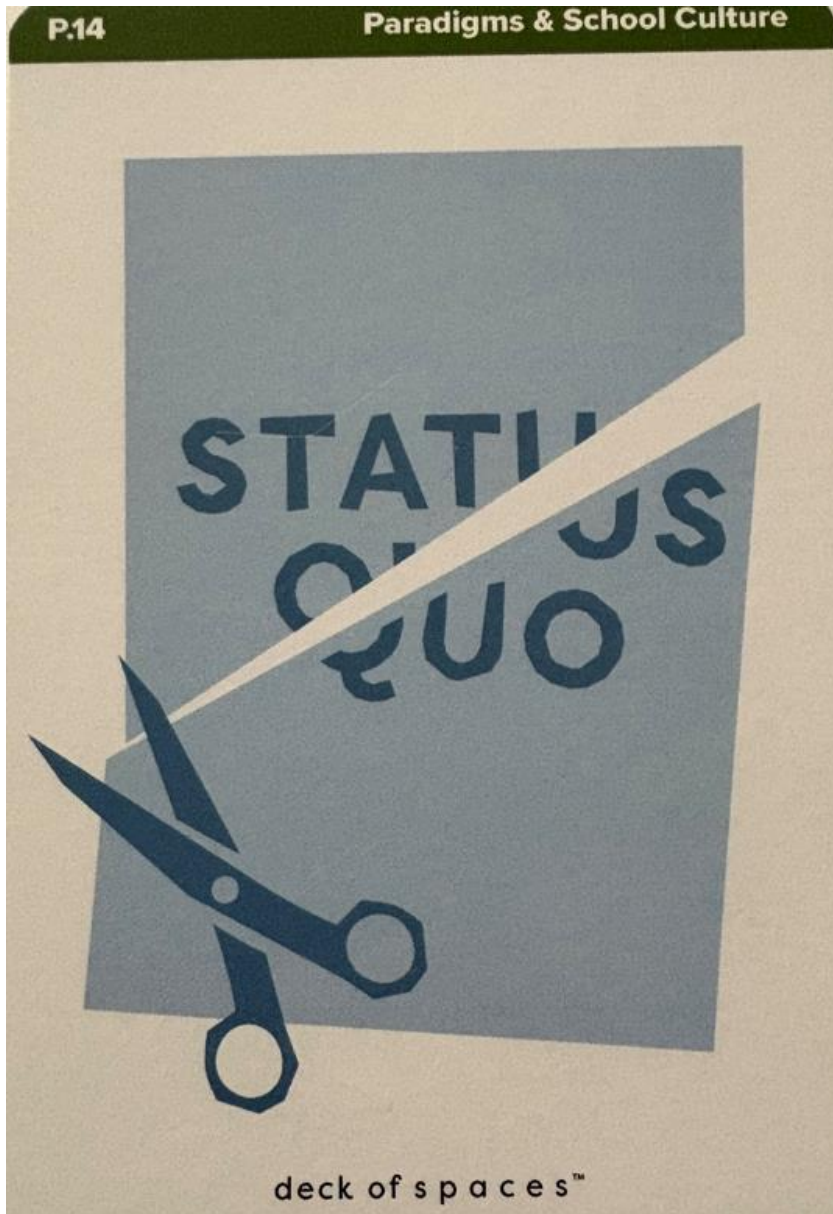
Physical space is a fundamental element in implementation, complementing and amplifying teaching practices, impacting learning mindsets of students and faculty, and having profound impacts on the overall student experience at your institution(s).

- Multistudio
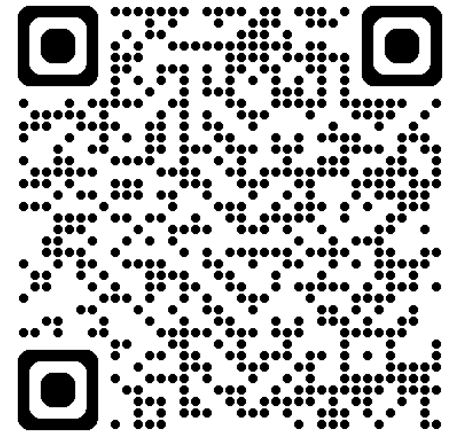
Deck of Spaces

Deck of Spaces Activity

P.14   Paradigms & School Culture

STATUS QUO

deck of spaces™

ACTIVITY

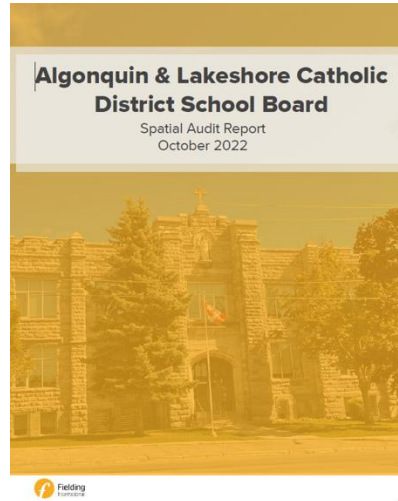Working with your new friends around you and the cards provided consider the following question – 10 minutes

QUESTION?

Think about your own classroom, school, or district and use the cards to identify ideas about how you can reduce learning barriers for specific students or conditions in your school.

Spatial Audit Report

Spatial Audit – 10 Existing ALCDSB Schools

Algonquin & Lakeshore Catholic District School Board
Spatial Audit Report
October 2022

Average Scores Across 10 Schools

Evidence Score

Competency	Evidence Score
#1 Diversity of accessible learning spaces	2
#2 Furniture supports student agency	1.7
#3 Warm & welcoming	3.1
#4 Conditions support holistic well-being	2.8
#5 Outdoor learning (beyond recess)	3.3
#6 No wasted space	2.2
#7 Quality commons	2.6
#8 Breakout zones	2

There were four primary goals of the Spatial Audit:

1. Look for patterns in the physical environment of ALCDSB schools of what is working well (*aligned with vision and values*) and what is not working well (*misaligned with vision and values*)

2. Create a set of spatial competencies that any school in the district can strive for.

3. Discover opportunities for potential Pathfinders. That is, conditions that are ripe for innovation.

4. Identify exemplars throughout the district.
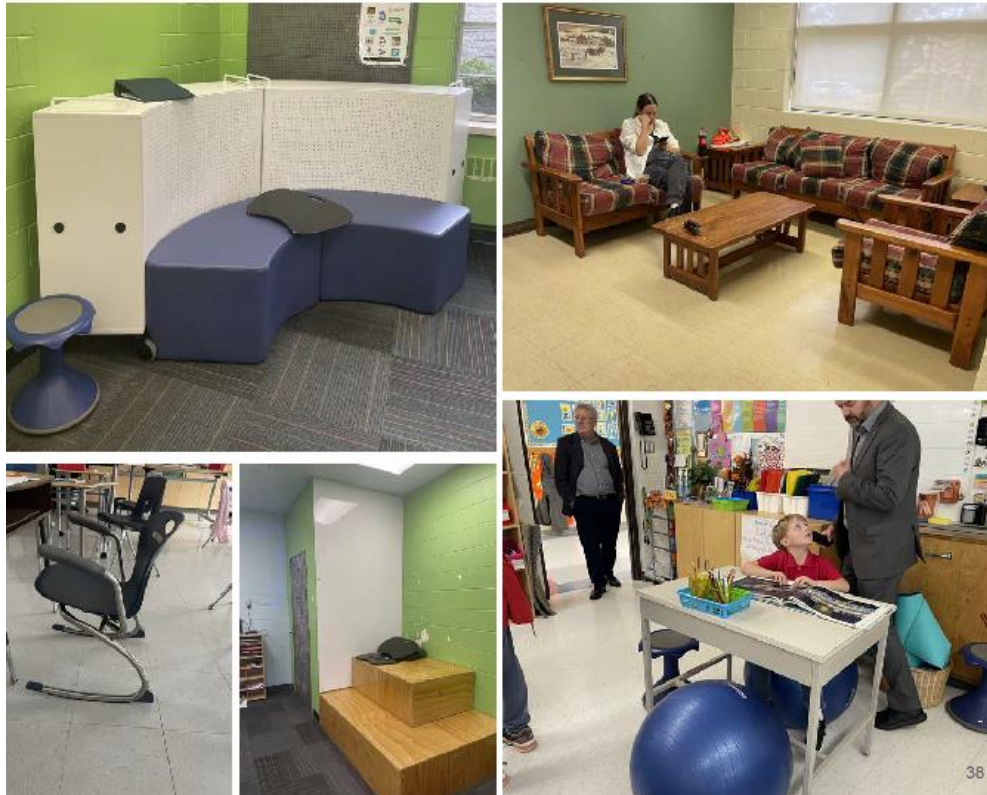
Fielding International
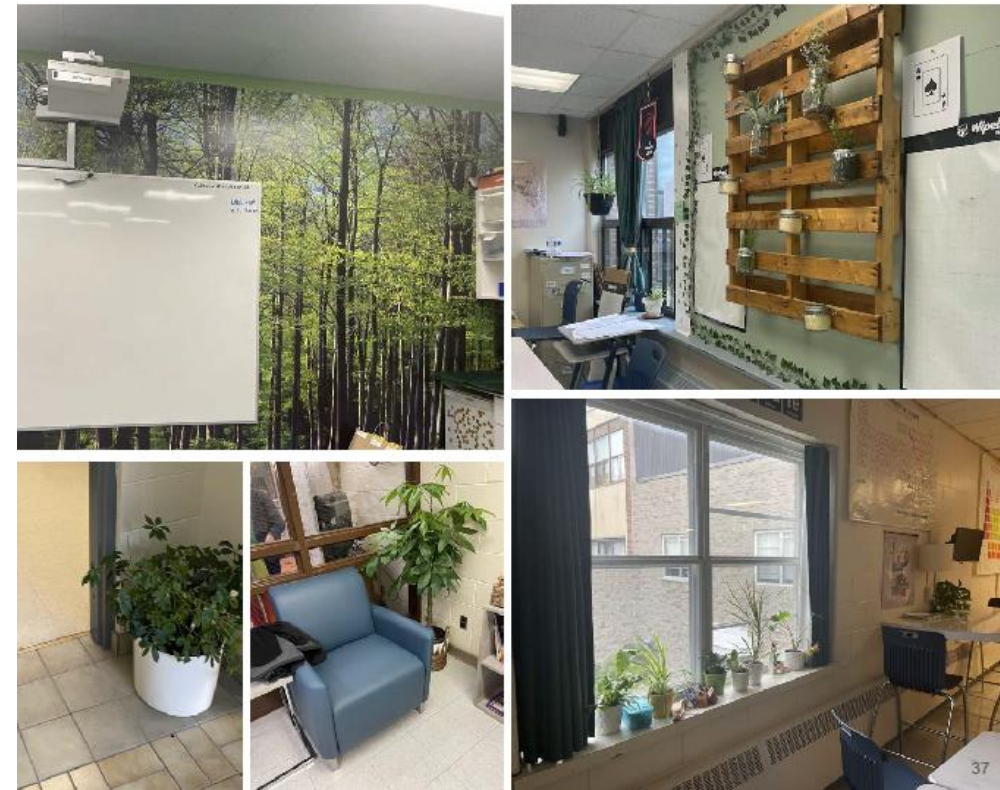
Audit Spatial Competencies Recommendations

Invest in Seating (and standing) Variety

- Soft seating, balance boards, standing desks, exercise balls, rockers, tiered seating, stackable floor cushions, bean bags, wobble chairs, high tables, rugs, bar style seating...it will be transformative.

Greenify Our Schools

- The presence of nature on the inside of buildings has a remarkable effect on the feel of the space. Plants can be an easy way to give kids opportunities to take responsibility for something. Murals and views of nature has been shown to contribute to healthier learning environments.

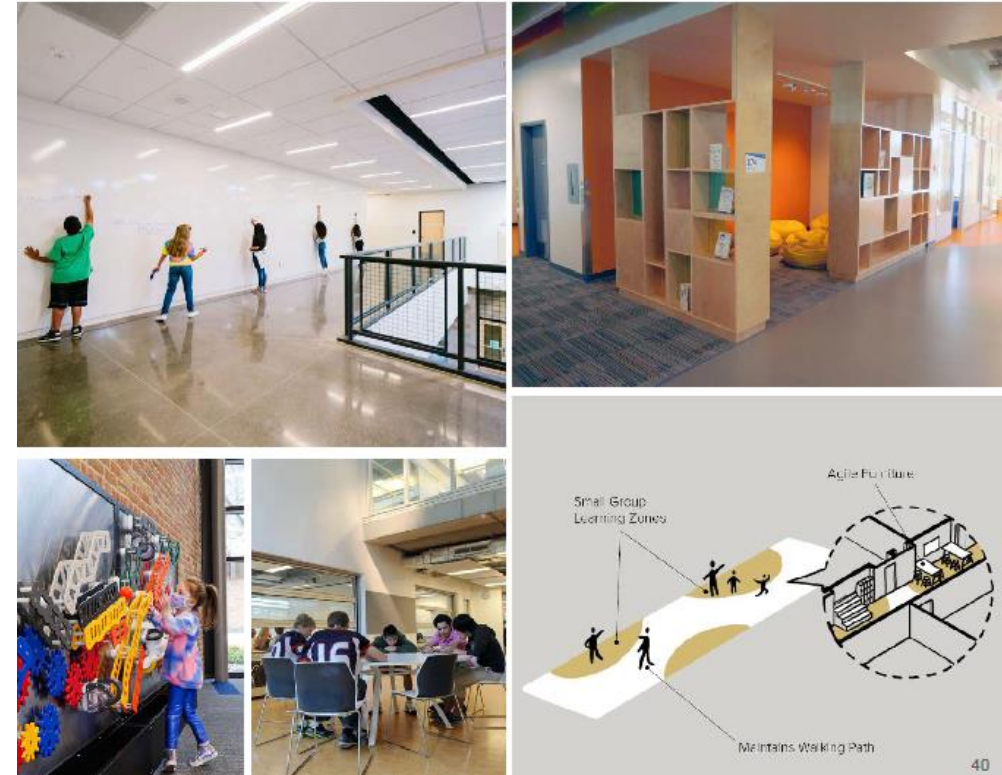# Audit Spatial Competencies Recommendations

Create UDL Classrooms

○ What does a UDL classroom look, sound, and feel like? There are a number of teachers who have the mindset to address this question at ALCDSB. Bring students into the conversation to see what their needs are in shaping a UDL classroom.

○ In our experience at Fielding International, UDL classrooms are de-fronted and often broken into multiple zones. They offer large amounts of choice to find the right place each person needs at any given time. It's a space that draws you in.
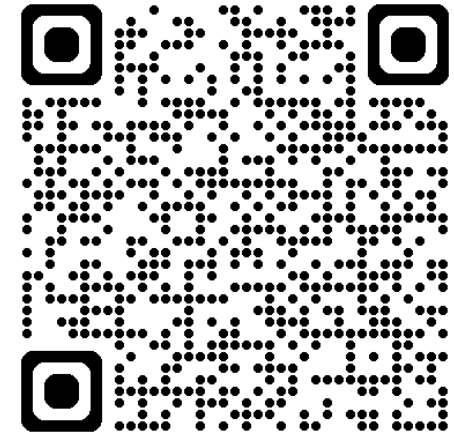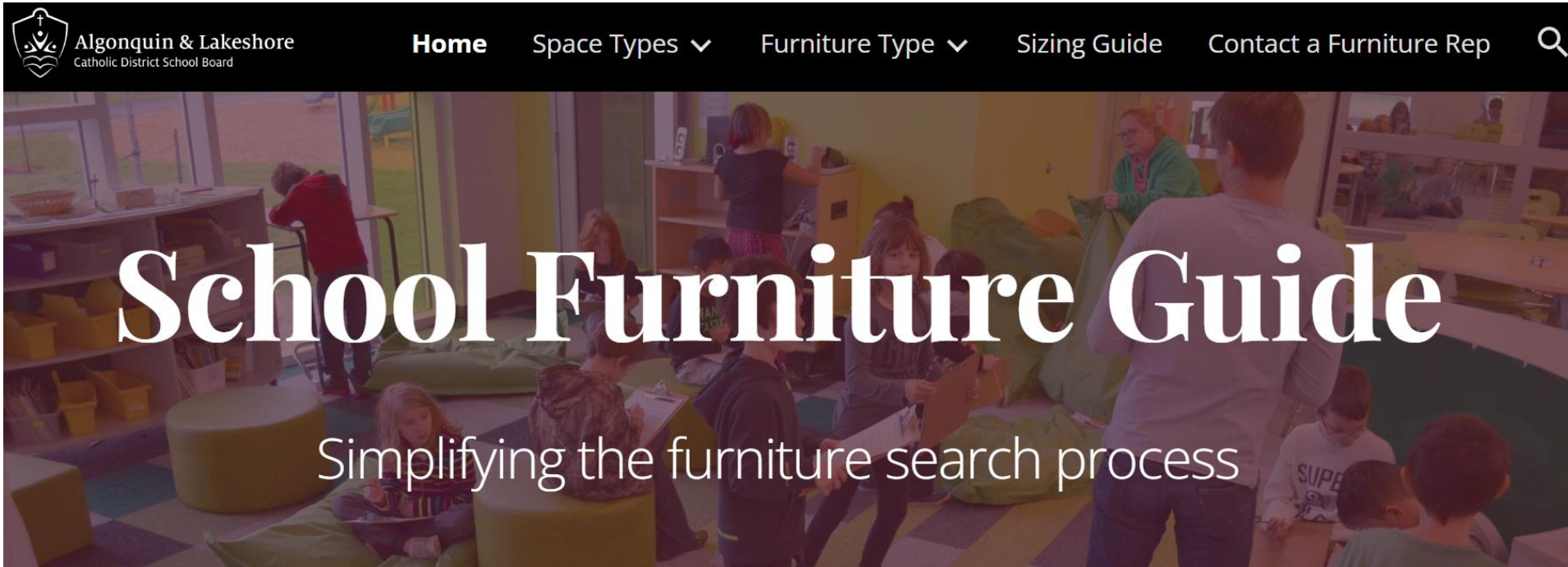

Activate Hallways

○ Wherever possible, try to convert non-learning hallways into active hallways. This can be done with floor-to-ceiling whiteboard walls, interactive surfaces, carving out nooks, and creating places to sit and work. Consider trying smaller student storage rather than full-size lockers to recapture about 25% of the school as learning space. Transparency into hallway space is currently poor, which is a challenge that may need to be addressed.

ALCDSB School Furniture Guide

Algonquin & Lakeshore Catholic District School Board

Home   Space Types ⌄   Furniture Type ⌄   Sizing Guide   Contact a Furniture Rep   🔍

School Furniture Guide
Simplifying the furniture search process

[ALCDSB School Furniture Guide](#)

Learning Studios in Action

Learning Studios function best when there is a variety of seating and work surface options that give students the autonomy to choose what suits their needs at any give time. Smaller, easily reconfigurable tables make the space versatile, adapting to accommodate a range of learning experiences.
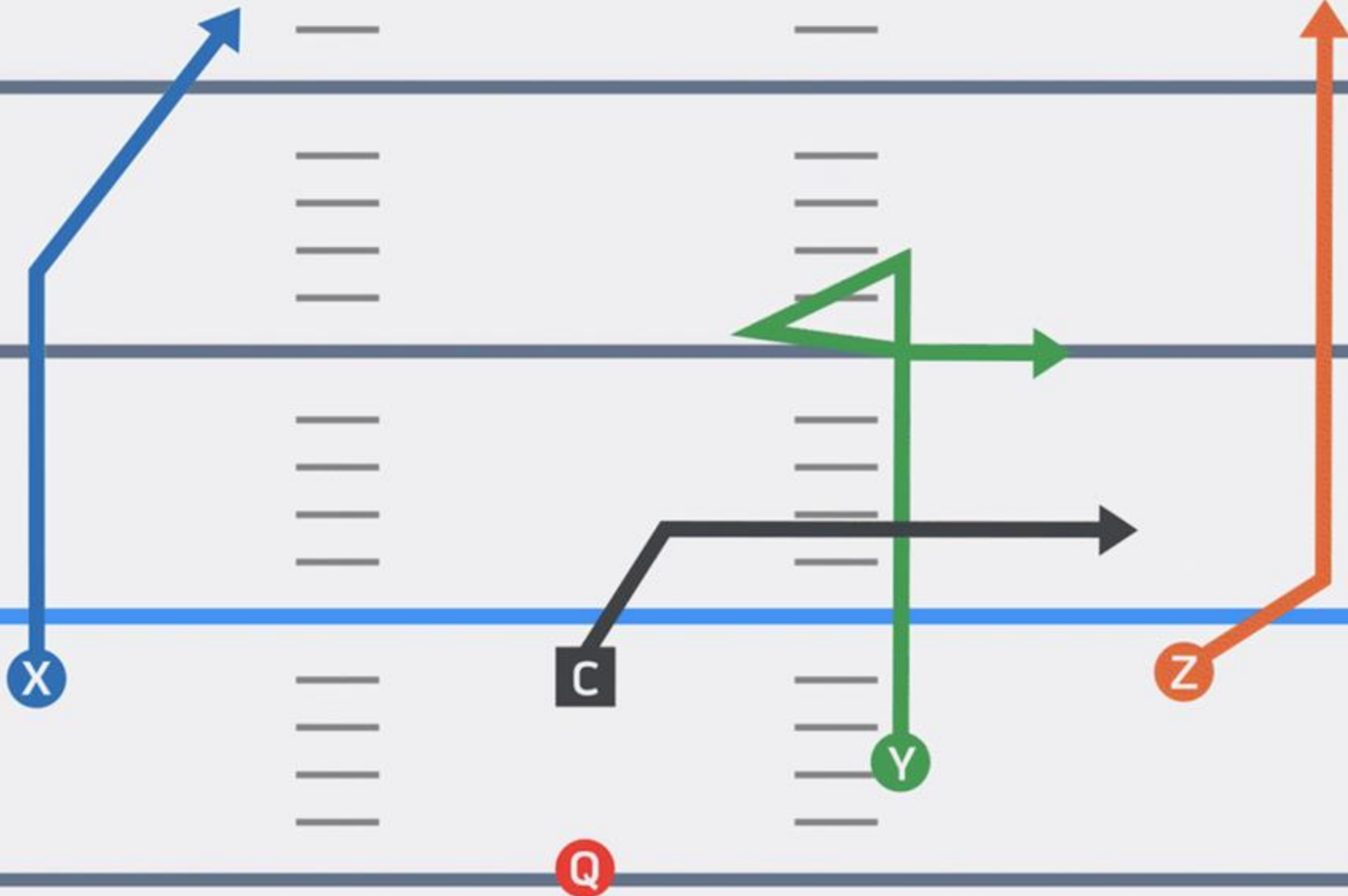
Key Components / Concepts

- Variety of Seating Options & Work Surfaces
- Combination of Fixed and Mobile Storage
- Writable Surfaces

Pedagogical Plays!

SPREAD FORMATION – PLAY 1

Pedagogical Plays intentionally use space with learner-centered pedagogy.

Each play is meant to be adaptive, in that it is can be mixed and remixed to serve different purposes.

While the plays are catalyzed by flexible learning environments with a variety of spaces, most can be utilized within a traditional classroom model.
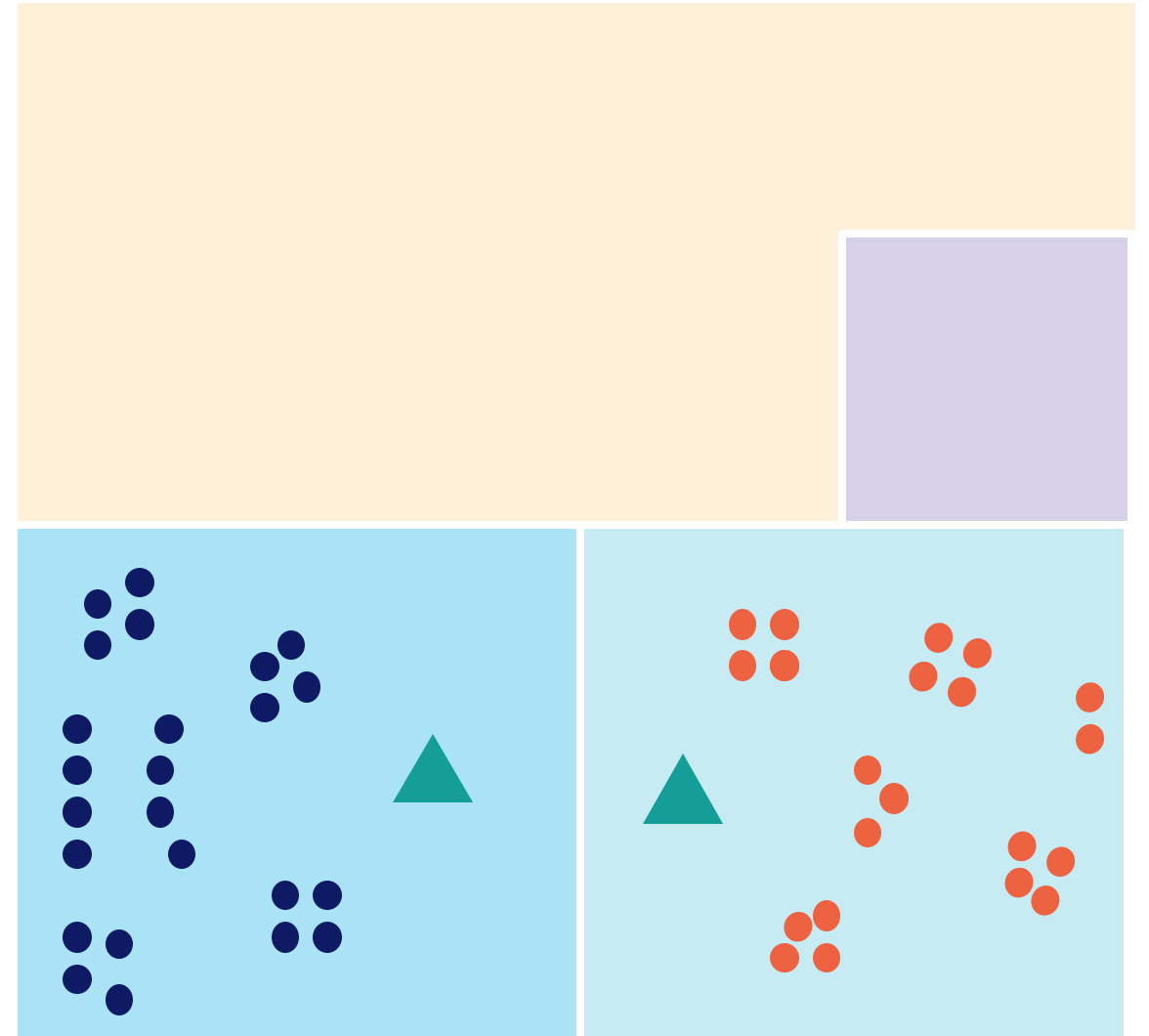
Commons

Small Group Room

Studio

Studio
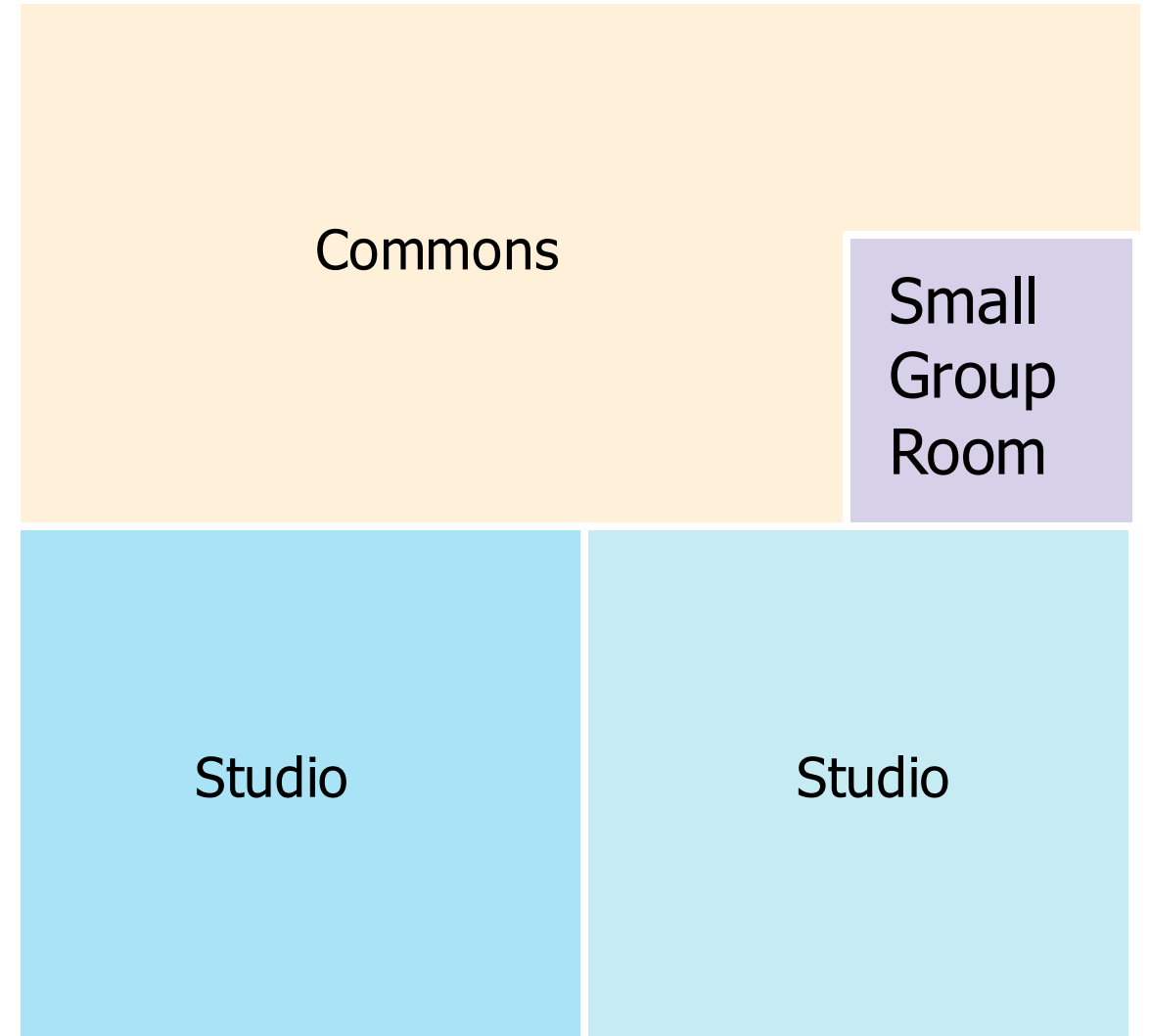
Whole Class Instruction

- Student Home 1
- Student Home 2
- Instructional Support (magenta triangle)
- Teacher (teal triangle)

Play Description

To help get orientated, here is a play we all know well. A teacher is in a classroom with a group of students delivering instruction.
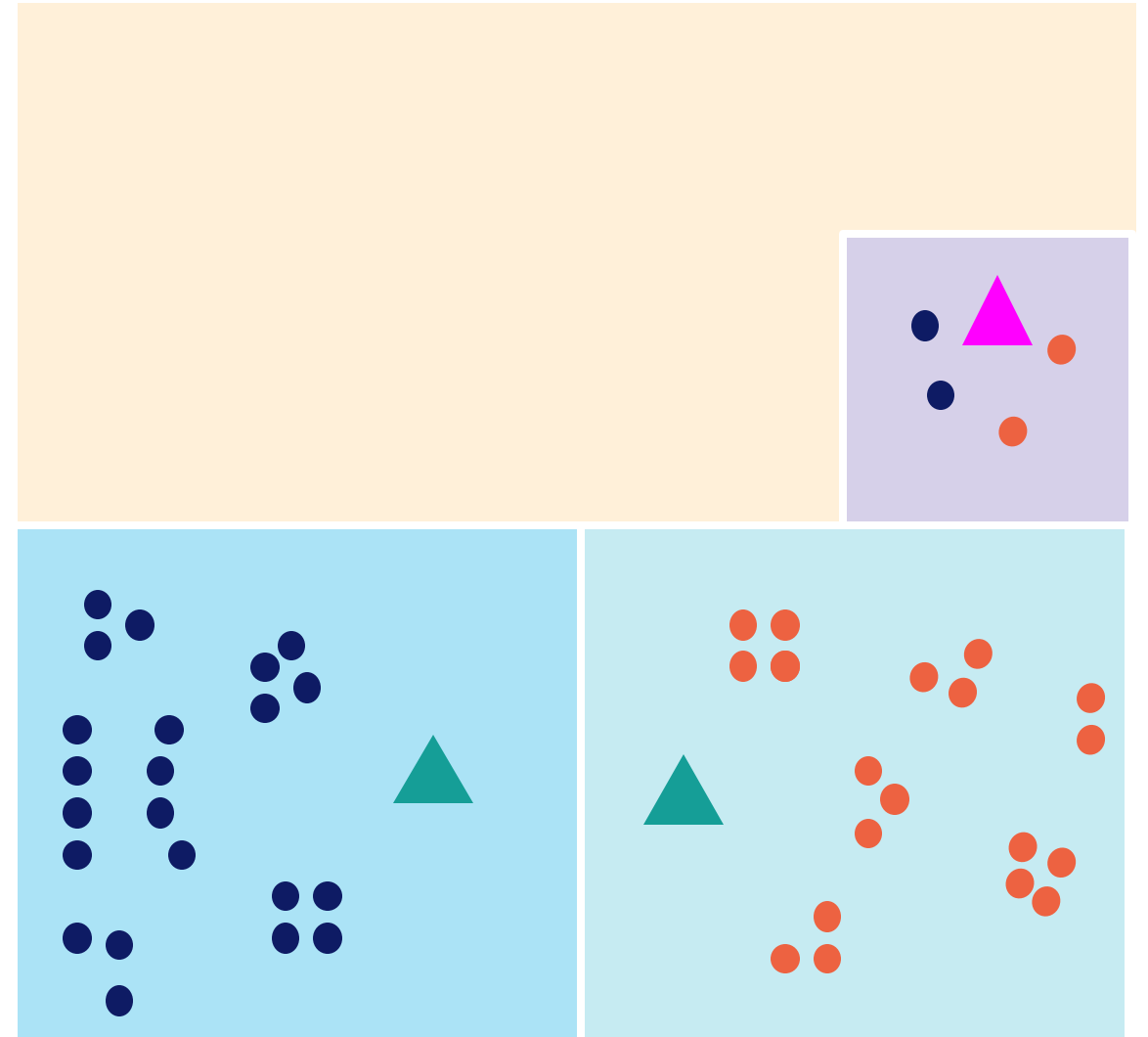
Whole Class Instruction with Pullouts

● Student Home 1   ▲ Instructional Support

● Student Home 2   ▲ Teacher

Play Description

This is a play we all know. Teachers are delivering instruction in their classroom while a specialist, paraprofessional, Sped Ed teacher, etc. pulls out a small group of students for a given reason.

Student Home 1

Student Home 2

Instructional Support

Teacher

Play Description

Set up a playlist for students to complete starting in the commons. Introduce the items on the playlist and field clarifying questions. Have students complete 1 of more "must do's," then then check in with you when they have finished to check for mastery.

Student Home 1   ▲ Instructional Support

Student Home 2   ▲ Teacher

Play Description

Set up a playlist for students to complete starting in the commons. Introduce the items on the playlist and field clarifying questions. Have students complete 1 of more "must do's," then then check in with you when they have finished to check for mastery.
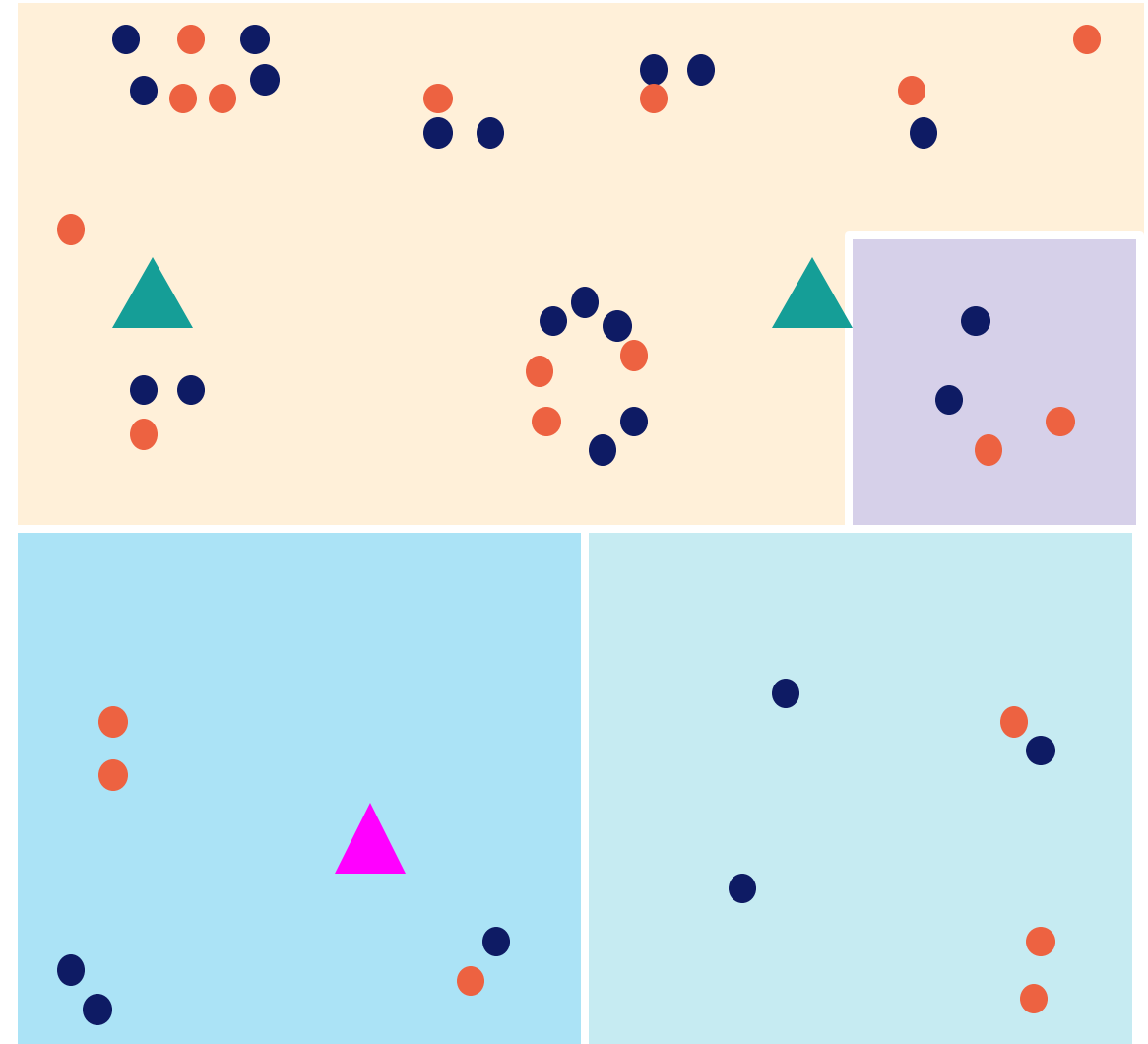
The Impact

Spatial Paradigms for Schools

Conventional Paradigm	Thriving Paradigm
The school building operates as a series of segregated, fixed learning spaces	The school building operates as a fluid environment of connected, agile learning spaces
A Classroom-based approach to learning	A community-based approach to learning
Corridors function as arteries to get from one place to another	Circulation areas function as diverse learning spaces that foster connectivity and collaboration
School safety is mostly focused on building security	School safety takes a holistic approach that addresses building security and each student's mental, physical, & social-emotional health
Outdoor spaces are primarily used for recess and sports	Outdoor spaces are seen as essential places to learn, connect with nature, and engage in physical activity
Institutional, static furniture & fixtures that tend to support lots of sitting and obedience	Comfortable, diverse, and agile furniture & fixtures that tends to support more movement and choice
Good lighting and acoustics are seen as a luxury	Good lighting (especially natural light throughout the school) and acoustics are prioritized
The physical environment lacks a strong sense of local ethos, often isolated from the rest of the surrounding community	The physical environment embodies local values and context, often aiming to become more of a whole community asset

Fielding International

FI – Thriving Learners – Feb 2, 2022

What We're Proud Of (Jan to June'25)

"I can rely on you guys"

we're all there for each other even if we don't see each other

We have so much good stuff going

We've embraced a sense of positivity

overcoming the barrage of fire alarms
- they are becoming less frequent

We have a sense of humor

we're all first year teachers here, so we feel we're in this together

we've developing our own school culture
- Do people want us to fail?

We're figuring out who we are.

we made a choice to be here.

Learning from others

The Wins
- Like not feeling alone
- Improved educator mental health
- Ability to meet all students needs
- Enjoy the sense of community in the professional collaboration space
- Sense of community
- The students intuitively know how to use the space
- Kids building relationships with multiple adults
- Whole school rituals and routines
- Higher expectations for the students and their ability to regulate themselves

Change is a marathon not a sprint … and you have to have a long-term implementation plan

Thank you!

Question Time

Our Lady of Mount Carmel Catholic School