

Moving to Libraries Learning Commons With the Right Design



A handbook for SD22 School Staff



School District No. 22
VERNON

To Begin:

This handbook is intended to help facilitate the transition of "traditional" libraries into library learning commons spaces. The ideas presented are a way of helping your team visualize the move forward in this new era and how we might change our footprint in the schools. Any final decisions will be in consultation with the Maintenance Dept. once your LLC plan has been reviewed.



"The only thing that you absolutely have to know, is the location of the library."

–Albert Einstein

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HOW DOES THE DESIGN AND UTILIZATION OF SPACE AFFECT LEARNING OUTCOMES IN THE LIBRARY?

****HOW DOES DESIGN AFFECT THE ABILITY TO COLLABORATE?**

****WHAT KIND OF LEARNING HAPPENS WHEN A SPACE IS PROPERLY DESIGNED?**

****WHAT FACTORS CONTRIBUTE TO A WELL DESIGNED LEARNING COMMONS SPACE?**



WHAT DOES THE LEAD LEARNING DOCUMENT SAY?

Appendix 4 “Planning and Leading Transitions.”

Appendix 5 “Tips for Achieving Needed Physical Changes.”

“Designing Learning Environments to Support Participatory Learning.”

- What does participatory learning look like?
- What kinds of physical and virtual features enable participatory learning?
- How do you assess the space to know what is working, what is not and what could be tried to better support learning?
- How do you provide/activate access to the collection?
- How do you strategically organize the collection in order to support participatory learning?

PG. 30



PG. 19

“ Learning commons spaces, collections and tools are changing in response to this paradigm shift. Working together in groups, both virtually and in person is the new norm.”

THE STUDY

MAKING THE CASE FOR SPACE: THE EFFECT OF LEARNING SPACES ON TEACHING AND LEARNING

TERRY BYERS
WESLEY IMMS
ELIZABETH HARTNELL-YOUNG

UNIVERSITY OF MELBOURNE



Click here for full study

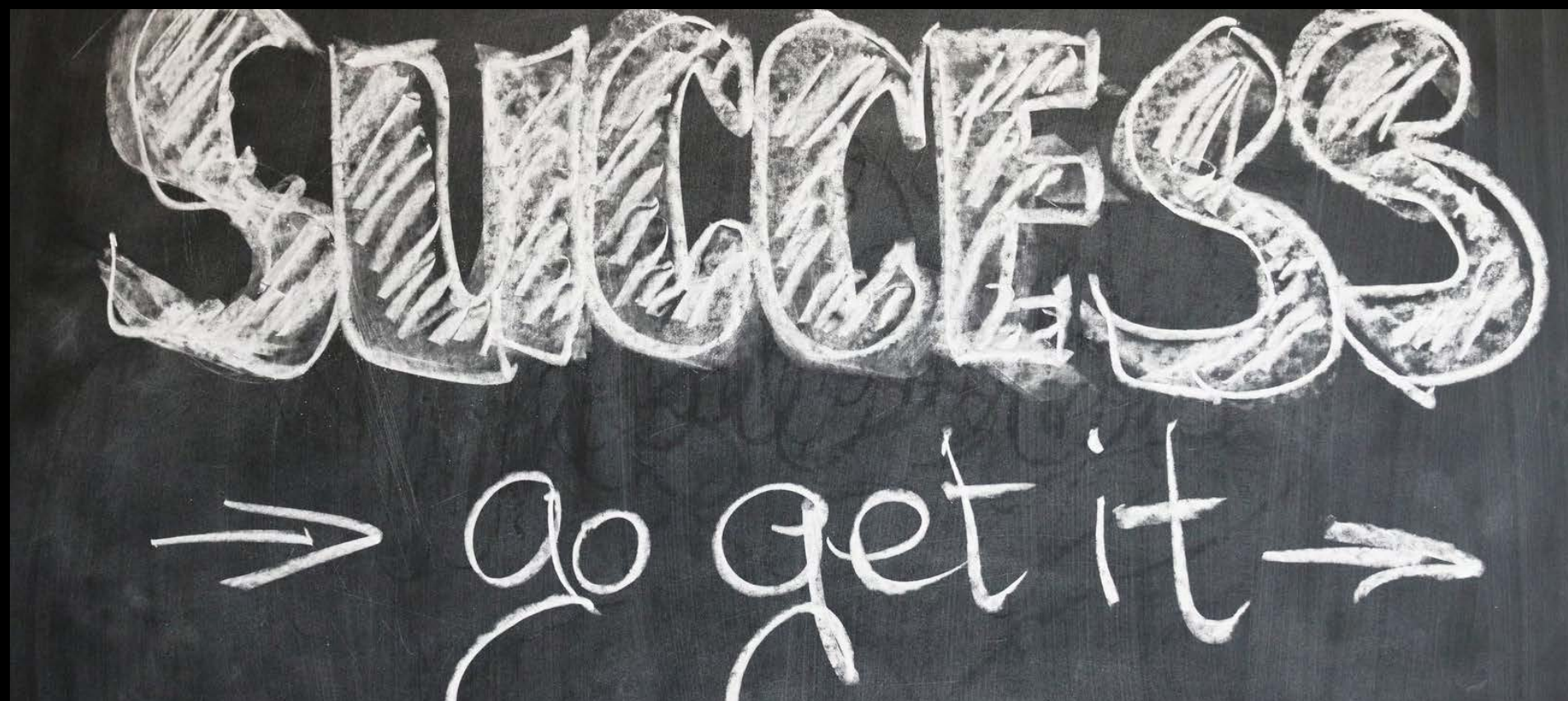
"Results from quantitative analyses over a one-year period indicated that particular configurations of learning spaces did have a measurable effect on how students' perceived their learning experiences and their engagement levels."

(Byers et.al. 1)

It is obvious that the Lead Learning Document points to the fact that we need spaces conducive to collaboration and participatory learning.

— WHAT DOES THE RESEARCH SAY?

The researchers started with 6 classrooms. They kept 5 outfitted as traditional rooms, lined with rows and desks, and only changed the 6th classroom into a new space that included a much more fluid and interactive design. Over a period of one year, classes were taught exactly the same with the same curriculum etc, and teachers were asked to observe what happened when they taught in the newly designed area.

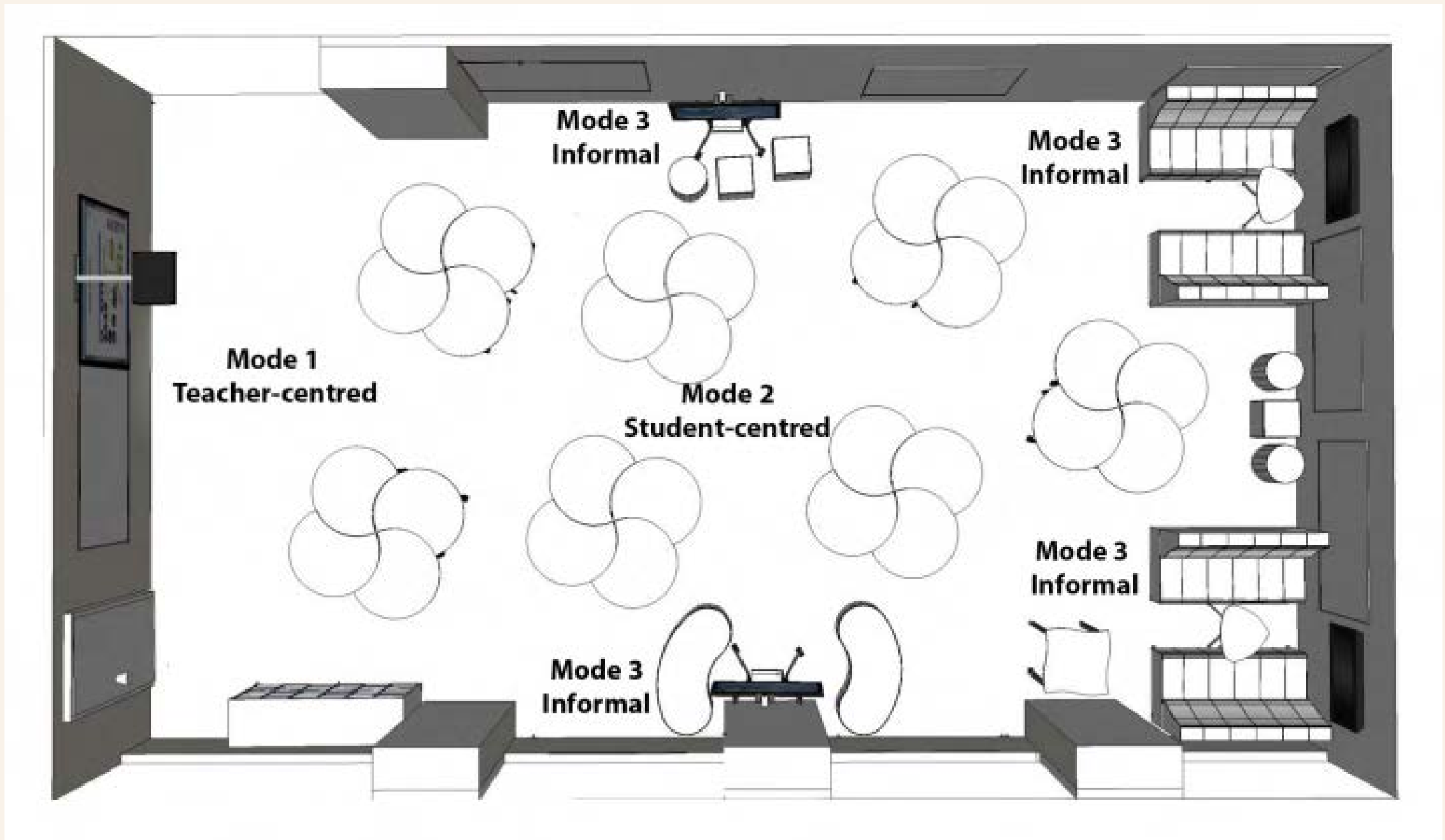


See layout,
next
page....

FOCUS QUESTIONS FOR TEACHERS

1. What is the effect, if any on student learning experiences?
2. What is the effect, if any, on student engagement?
3. What is the relationship, if any, on student learning outcomes relative to their level of ability?

The New Layout



In many instances, teachers noted that they had made changes to their teaching practices to take advantage of the collaborative nature of the new space.

Students in class tried to find activities that would take advantage of the resources in the room.

Many teachers noted a positive effect on student motivation, interest, excitement and mood.

There was a genuine energy and enthusiasm when in the space and it generated an air of excitement within the building itself.

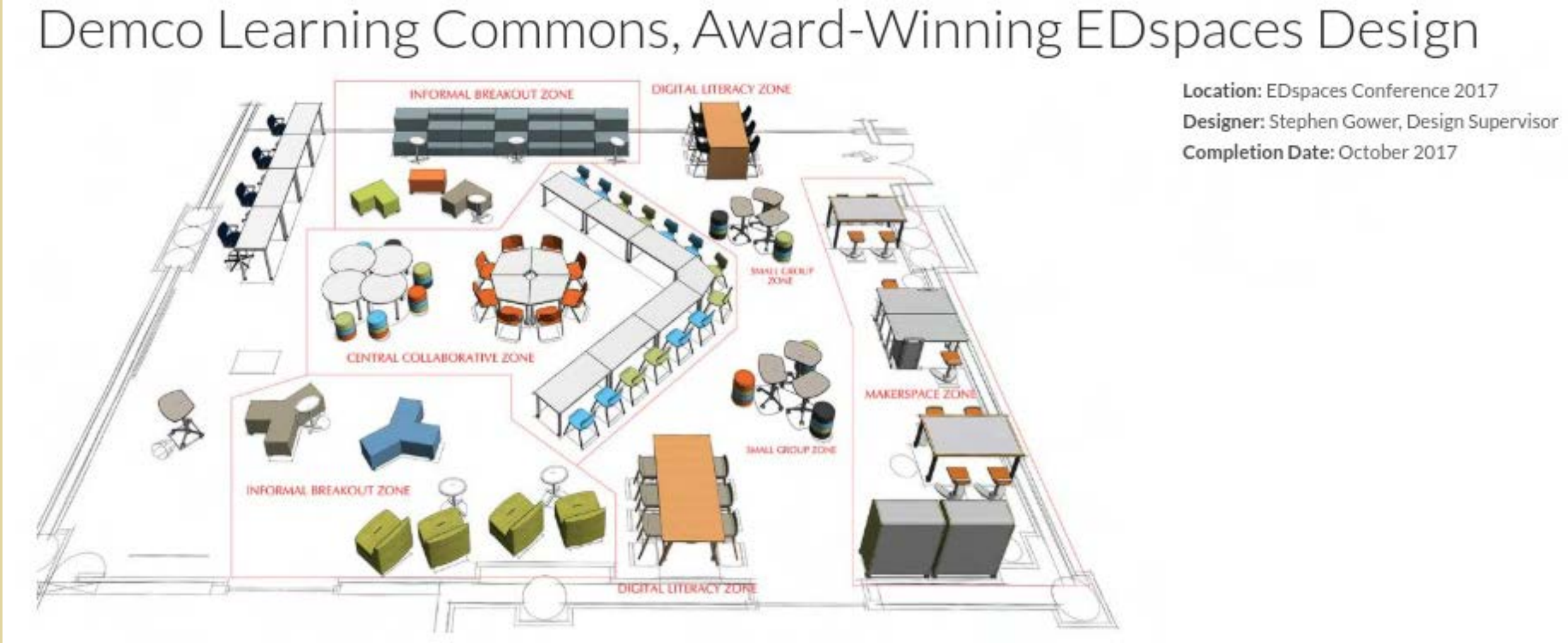
Once students began working in the space, they were fully engrossed in the task at hand, which was a significant change.

DO YOU SEE ANY LINES?



Creating a library space that students want to visit means understanding the different ways students actively engage with learning both individually and socially. Modular tables and mobile bookcases give freedom to reconfigure spaces quickly and easily as groups, individuals and classes flow in and out through the day.

Our colourful bookshelves can be used to create zoned learning spaces for individual and group activities, while contemporary seating brings sophistication and comfort. IT can be integrated throughout the space with options for both desktop and freestanding power access for fixed and plug-in equipment.



Location: EDspaces Conference 2017
Designer: Stephen Gower, Design Supervisor
Completion Date: October 2017



Interactive and Engaging Children's Area

This vibrant children's area invites young adventurers to explore through reading, interactive play, imagination stations, group activities and more. The shelving helps to create smaller zones and nooks throughout the space, while some of the furniture acts as a nook itself. There are mobile tables for reading and activities along with active seating stools. Lounge seating throughout the area gives both children and adults a place to hang out and relax.

FURNITURE AND FUNCTIONALITY

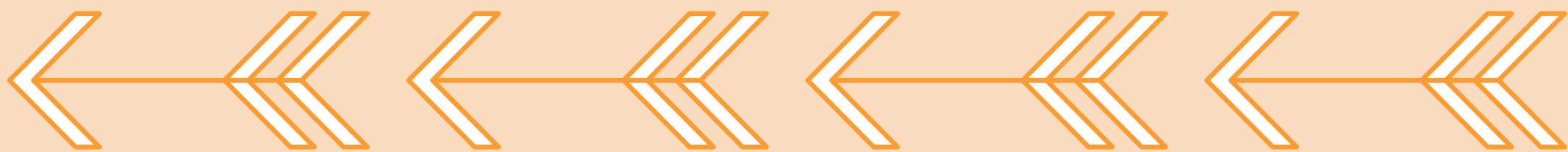
COMFORT: WITH TWO DOZEN BODY TYPES AND AGES IN ONE ROOM, CHOOSING JUST ONE TYPE OF CHAIR OR TABLE CAN BE A CHALLENGE. WITH ADJUSTABLE FURNITURE, THIS GIVES STUDENTS THE FLEXIBILITY TO CHANGE TO THEIR NEEDS. COMFORTABILITY IS AN IMPORTANT FACTOR.

FLEXIBILITY: CLASSROOMS ARE BECOMING MORE DYNAMIC AND ENGAGING. THE FURNITURE SHOULD MATCH THE ADAPTING LEARNING STYLES. TABLES AND CHAIRS THAT'S FLEXIBLE ENOUGH TO ADJUST TO CHANGING GROUP SIZES, STYLES, AND COLLABORATION.

SUPPORT & FUNCTION: MAKE SURE THE ENVIRONMENT SUPPORTS LEARNING, BY KEEPING STUDENTS FOCUSED AND COMFORTABLE. FOR EXAMPLE, CHOOSE CHAIRS THAT OFFER FLEXIBILITY TO SUPPORT THE BODY'S NATURAL MOVEMENT AND VARYING POSTURES. WHEN CHOOSING NEW SCHOOL FURNITURE, KEEP ERGONOMIC PRINCIPLES IN MIND. CONSIDER THE CURRICULUM AND MAKE SURE THE SEATING REFLECTS ITS REQUIREMENTS.

IF IT'S AN ACTIVE LEARNING ENVIRONMENT, YOU'LL NEED PORTABLE CHAIRS THAT CAN QUICKLY AND EASILY BE MOVED AND ARRANGED.

STUDENTS SIT IN ALL TYPES OF POSITIONS. UPRIGHT, TILTED, HEAD DOWN, SLOUCHED... THE LIST GOES ON. EVERY STUDENT LEARNS DIFFERENTLY. WITH A COLLECTIVE OF PERSONALITIES, AGES AND LEARNING TRAITS, IT'S IMPORTANT TO CONSIDER A RANGE OF SCHOOL FURNITURE EQUIPMENT TO MEET THESE VARYING NEEDS.



FURNITURE

CLASSROOM FURNITURE IS THE KEY TO HIGH PERFORMING STUDENTS. ... IT'S PROVEN TO INCREASE STUDENT COLLABORATION, FOCUS, INVOLVEMENT, ENGAGEMENT, FEEDBACK, AND STIMULATION. THE RIGHT CHAIRS AND TABLES ALSO HELPS TO ENGAGE THE BEST WAYS OF LEARNING, INCREASES STUDENT COMFORT, AND CREATES AN ENRICHING EXPERIENCE.

TIPS

- Variety
- Heights
- Materials
- Mobility
- Adjustment
- Weight
- Space to Re-Arrange

ideas to shop + canadian

CLICK ON THE LINKS PROVIDED:

Brodart Library Supplies

SOURCE OFFICE FURNITURE

SCHOOL HOUSE PRODUCTS INC.

Corbett Office

Jonathan Morgan Vancouver

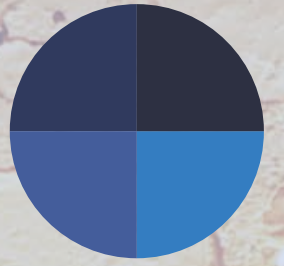
Mitybilt

Educan School Furniture

CDI Spaces

As you look through these lists of suppliers, make note of what peaks your interest and what you think might work for your space. If we can't order it from one place chances are we can order something similar from another.

Archie's carpentry team is also highly skilled at building furniture items such as bookshelves and specialty items. If you can't find what you are looking for, draw it up and see if his team can create it!



Psychology of

COLOUR

HOW DO COLOURS INFLUENCE LEARNING?

Color plays a key role in creating an environment that fosters learning.

What colors help learning? What colors might be annoying or distracting to learners?

Color, as part of the electromagnetic spectrum, is in its purest form energy, a wavelength, which has its own magnetic frequency and can affect neurological pathways in the brain creating biochemical responses. Dr. Robert Gerard recognizes this and has pioneered research, which suggests that every color has a specific wavelength, and each of these affect our body and brain in a different way. Using the right color, and the correct selection and placement can seriously affect feelings, attention, and behavior when learning. It's time that we leveraged that to our advantage. Even research with Alzheimer's patients has shown that color cues improve memory and that learners recall images in color more easily than images in black and white – amazing, right?

FEELINGS	EFFECTS	Blue
Safety Calmness Openness Reliability Honesty	Boosts creative thinking Suggests precision and focus Has a calming effect	
FEELINGS	EFFECTS	Red
Love Anger Urgency Passion Hunger	Grabs attention Inspires Action Creates Excitement Think out of the box Encourage Risk Taking	
FEELINGS	EFFECTS	Orange
Fun Energy Health Change Vibrancy	Grabs attention Brings content to life Stimulates emotions and actions Activeness and togetherness	
FEELINGS	EFFECTS	Yellow
Optimistic Creativity Energy	Grabs attention Encourages creativity Activates your design	
FEELINGS	EFFECTS	Purple
Dignity Wisdom Creativity Imagination Magic	Associated with romance, luxury and mystery Promotes problem solving and intuition	
FEELINGS	EFFECTS	Green
Growth Tranquility Freshness Positivity Calmness	Most restful color for the human eye Boosts reading ability Helps learners to make a decision	

Click arrows for more information

YELLOW: HAPPY

THIS IS A COLOR, WHICH HELPS TO CREATE A VERY OPTIMISTIC FEELING. IT SIMULATES THE BRAIN AND THE WORKING MEMORY, ENCOURAGES CREATIVITY AND CREATES A SENSE OF HAPPINESS AND FRESHNESS IN YOUR DESIGN.

HOWEVER, TOO MUCH OF YELLOW CAN BE STRESSFUL ON THE EYES. USING YELLOW AS A BACKGROUND COLOR IS NOT AT ALL RECOMMENDED AS IT IS A FAST-MOVING COLOR AND CAN HAVE A BLINDING EFFECT. IT IS ALWAYS SUGGESTED TO USE A SOOTHING COLOR AS THE BACKGROUND OR PRIMARY COLOR AND USE YELLOW TO HIGHLIGHT THE IMPORTANT ELEMENTS IN A DESIGN.

GREEN: CONCENTRATION

YOU PROBABLY KNOW THIS ALREADY, JUST BY TAKING A LOOK AT A FOREST OR A FIELD. LOW WAVELENGTH COLORS PROMOTE RESTFULNESS AND CALM, AND THEY IMPROVE EFFICIENCY AND FOCUS.

SO THAT'S WHY GREEN IS AN EXCELLENT COLOR FOR IMPROVING CONCENTRATION. APART FROM BEING ONE OF THE EASIEST COLORS ON THE EYES, IT REMINDS US OF NATURE. THAT'S WHY TV STARS STAY IN THE 'GREEN ROOM'. IT'S A RELAXING SPACE. GREEN IS A GOOD COLOR FOR KEEPING LONG-TERM CONCENTRATION AND CLARITY.

ORANGE: MOOD LIFTER

ORANGE CAN BE A WELCOMING AND MOOD-LIFTING COLOR FOR LEARNERS, WHICH IN TURN PROMOTES COMFORT AND IMPROVES NEURAL FUNCTIONING.

SOME THEORISTS ARGUE THAT AN ENVIRONMENT RICH IN THE COLOR ORANGE INCREASES THE OXYGEN SUPPLY TO THE BRAIN, STIMULATING MENTAL ACTIVITY WHILE SIMULTANEOUSLY LOOSENING PEOPLES' INHIBITIONS. AN INCREASED OXYGEN SUPPLY ALSO LEADS TO FEELING INVIGORATED AND GETTING READY TO 'GET THINGS DONE.' BUT THIS COMES AT A COST - AVOID BOLDER ORANGE COLORS IF YOUR LEARNERS ARE YOUNG AND NATURALLY ENERGETIC. THIS ISN'T A GOOD COLOR FOR THOSE PRONE TO OVERSTIMULATION AS WELL, FOR INSTANCE IF YOUR GROUP OF LEARNERS HAVE ATTENTION DEFICIT HYPERACTIVE DISORDER OR ANOTHER HEALTH CONCERN WHICH LEADS TO EASY OVERSTIMULATION.

BLUE: PRODUCTIVITY

BLUE IS BEST USED FOR LEARNING SITUATIONS WHICH ARE CHALLENGING. BLUE PAPER, BLUE INK, OR BLUE HIGHLIGHTING CAN BE USED TO HELP IMPROVE READING COMPREHENSION TOO. BLUE IN GENERAL IT SEEMS IS A RELAXING AND CALMING COLOR, BUT LIGHTER SHADES WILL SEEM MORE 'FRIENDLY' WHILE DARKER ONES SEEM A LITTLE MORE SOMBER.

LIGHTING FOR LEARNING



KINDS:

- natural light
 - task lighting
 - up lighting
 - down lighting
 - soft lighting
- important for mood
important for work
important to add ambience and colour
important for functional ambient light
important for calm and mindfulness

THINGS YOU CAN CHANGE

REPLACE FLUORESCENT LIGHTING BULBS WITH FULL-SPECTRUM BULBS

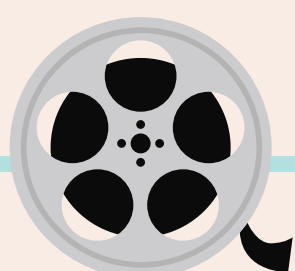
USE LAMPS IN THE CLASSROOM WITH FULL-SPECTRUM LIGHT BULBS

COVER FLUORESCENTS WITH CURTAINS MADE FROM PAJAMAS MADE FROM FIRE-RETARDANT MATERIAL

IF YOUR CLASSROOM HAS DROP CEILINGS, COVER THE CLEAR PANELS UNDER THE FLUORESCENTS WITH HEAT-RESISTANT BLUE SPRAY PAINT

PUT BLUE FLUORESCENT LIGHT PROTECTORS OVER FLUORESCENT BULBS

LINK TO ANOTHER VIDEO: "HOW CHANGING MY CLASSROOM LIGHTING
MADE A BIG IMPACT ON KIDS' LEARNING



Natural Materials

Keeping It Natural Means Keeping it Healthy!

"The gases emitted by furniture, paint, and countless other products are called VOC's or volatile organic compounds. These are organic chemicals that have a high vapor pressure which causes molecules to evaporate and enter the air. They can even be odorless so we may not be aware of them. VOC's have been linked to asthma, certain cancers, and many other serious health issues. Exposure to these chemicals in schools is of particular concern since children are more susceptible to their harmful effects due to their developing immune systems. The good news is that there are many ways to significantly minimize exposure to these toxic gases" (Brodsky).

AIR QUALITY STUDY

How does air quality affect school classrooms?

Lia Chatzidiakou

Dejan Mumovic

Alex James Summerfield



FULL
STUDY
CLICK
HERE

The summary of the study showed that high levels of pollutants in classrooms were common, affecting health and academic performance of the students. Lower ventilation rates were connected to an increased risk for viral infections, asthmatic symptoms and nasal patency.

Decrease in ventilation rates = increase in CO2 concentrations resulting in

impaired attention span, concentration loss and tiredness.

- Advocate for the use of low or no VOC paints and floor coverings.
- Choose furniture made of solid wood rather than plastics. Not only is wood furniture devoid of the VOC's you can seal and stain with eco-friendly, water based products that won't off-gas.
- Purchase safer classroom materials such as water based paints, washable and odorless markers, and phthalate free binders.
- Avoid air fresheners and other scented products, as all of these products contain a high concentration of VOC's.
- Ensure your classroom has sufficient air circulation. VOC levels are much greater indoors and proper air flow helps clear them out.
- Use green cleaners rather than traditional cleaners to avoid the wide array of toxic chemicals from standard products that can off-gas into your classroom air.
- Consider adding plants to your classroom decor. Not only do they beauty and calm to your classroom, they can also naturally remove toxicants and absorb air pollutants.
- Avoid any products made with formaldehyde based glues. Instead seek ones that use soy-based glues.
- Choose manipulatives and toys made with wood, soy based glues, and plant based dyes to avoid the numerous toxins found in traditionally made toys.

3 KEY AREAS OF THE LIBRARY LEARNING COMMONS

A SUCCESSFUL DESIGN INCLUDES THE FOLLOWING:

Makerspace
Technology
Centers

1. The Collaborative Zone

Project-based learning and group work. Tables can easily be moved around to encourage teamwork and collaboration. Seating options should be lightweight and student displays of work are encouraged. Power access and connectivity are also important. Include charging stations and in-table outlets where possible.

Reading
Socializing
Eating

2. The Social Learning Zone

This area is more playful, casual and comfortable. It takes on a living room feel with softer seating choices and a variety of work surfaces. For example, café tables and stools contribute to a relaxed coffee shop appeal. Students are encouraged to interact with each other here. Embrace noise and conversation in this area.

Reading
Studying
Quiet
Privacy

3. The Individual Study Zone

This zone is for students who want to study or work on their own but don't mind the background noise of others around them. There doesn't have to be wide margins of separation between this zone and the other ones. However, there should still be some privacy elements such as individual seating, privacy screens, carrels or smaller tables with one or two chairs.

Where to Start?

Begin by taking a video or pictures of your own library.

Focus in on the strengths/challenges and keep a record.

Decide what is feasible, practical and within budget to change.

Make a list for NOW, On-GOING, and FUTURE and prioritize each one.

Decide who to ask for help.

Delegate tasks if you can.

Look for \$\$ in PAC, Grants, within your school, and finally the District itself.

Breathe.....it won't happen overnight.

*A helpful guide in
designing the best
learning
environment for the
LLC.*

CHECK LIST
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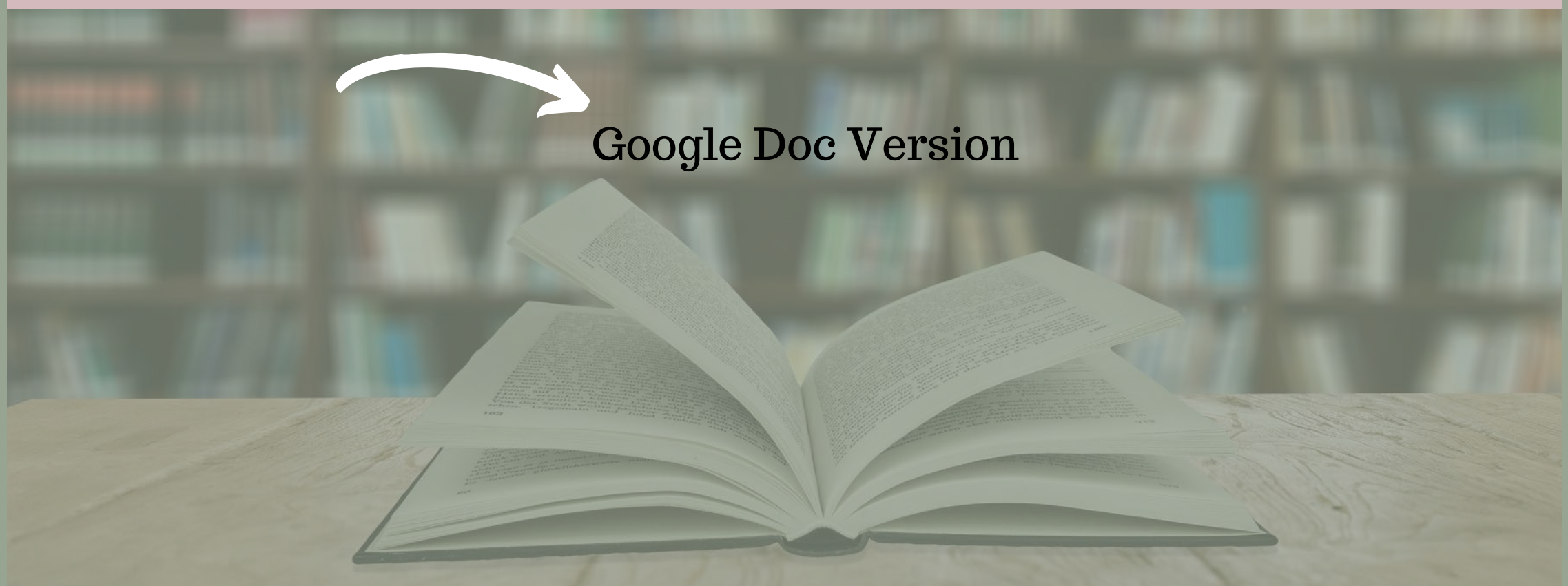
A Re-designed Library

Click Below to see how all of the previously mentioned design elements are put into a final project in re-working a space within my school district.

Enjoy!



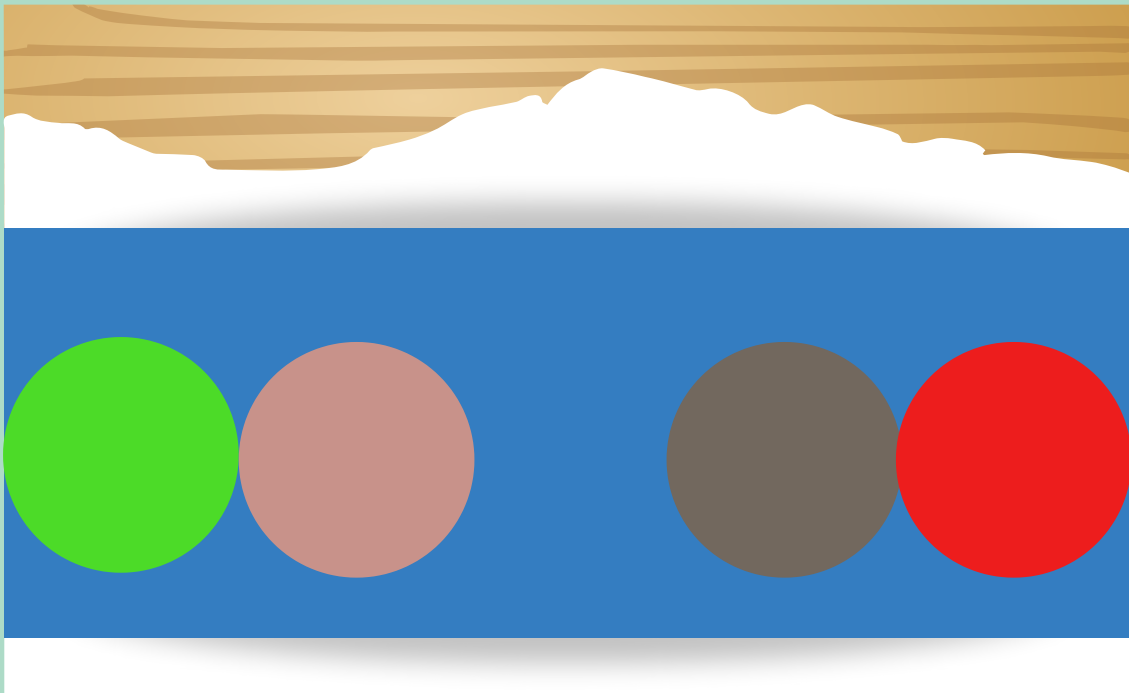
Click to download checklist:



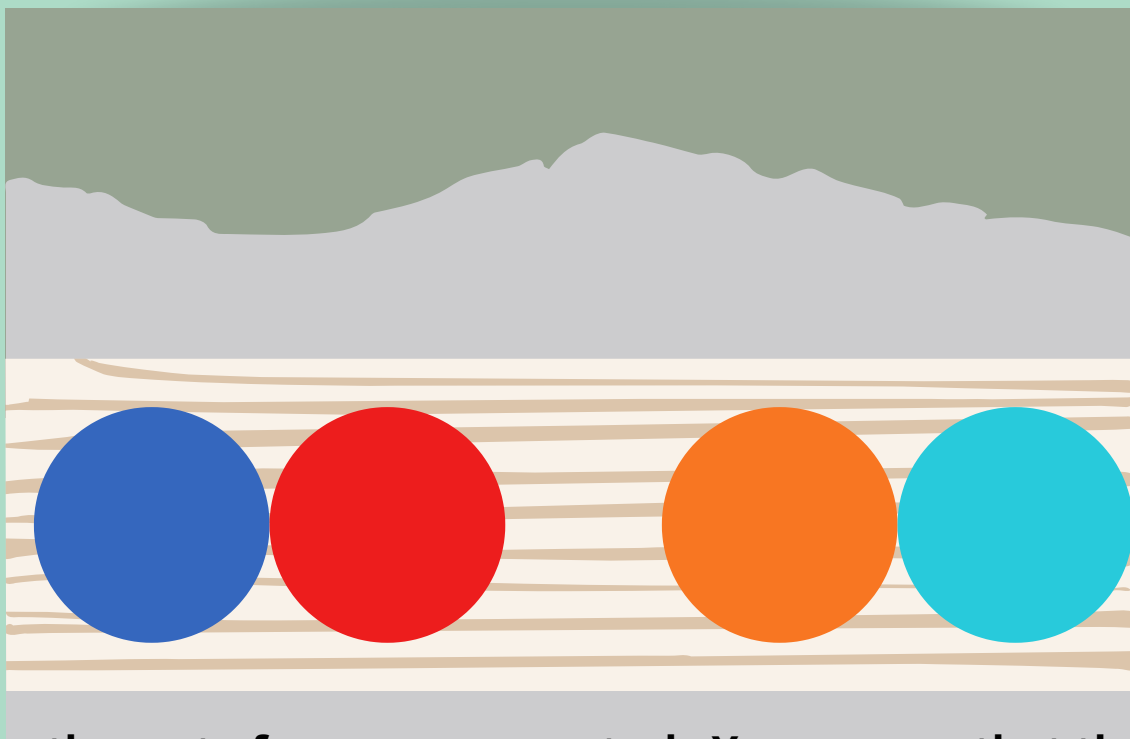
Ideas



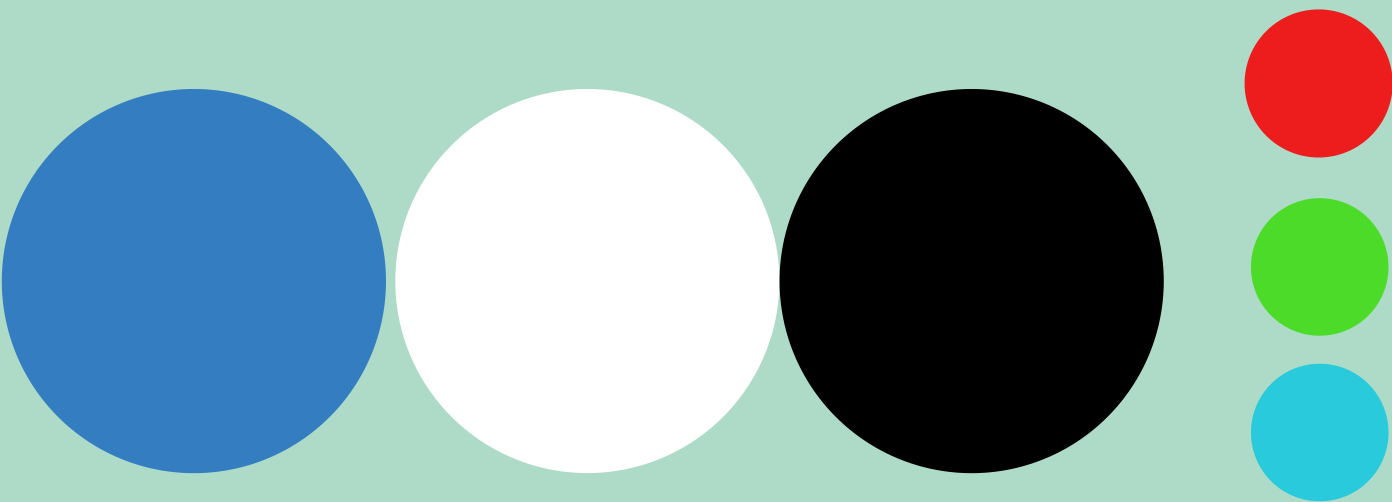
Try to think of your "staple" items as being more neutral. In this case, the tables, chairs, cabinetry, ceiling lend themselves to a neutral palette that will be timeless in design for years to come. The paint colours are played with by choosing a main neutral blue and then in small sections popping orange and tourquoise to stand out against the room. This works because it draws the eye to those sections and highlights the design on the wall. Then those colours are brought down to the floor in soft furnishings to complement the colour scheme.



If you want to use colour, choose your sections wisely. In this case two bright deep colours were used against a wall (green and blue). The flooring and white bookshelf are neutral in colour which allows for a third colour (pink) to be presented on the floor level. This colour is complementary because it is a lighter hue. Had they chosen the colour red, this would have competed too much with the walls and thrown the colour balance off. The green also speaks nicely to the framing of the windows and trees, which brings the feeling of outside in!



If you want to have fun with different coloured furnishings, keep the rest of your space neutral. You can see that the colour patterns are repeated in the wall circles, pillows, ottomans, and SOME chairs. This can be a great way to invite colour in, while keeping your main footprint light, bright, and neutral.



If you find something large like artwork or wallpaper with a graphic vibe, keep the surrounding areas fairly neutral so that this piece can really stand out in that space. You can play with colour in another area of your LC!

