

A4LE Project Award Submission

Immaculate Conception Catholic Regional School
Innovation Center

235 Garden Hills Dr, Cranston, RI 02920

Executive Summary

Introduction & Objectives

The Immaculate Conception Catholic Regional Schools (ICCR) Innovation Center was a spark that ignited Pathways Programming. As commented in RI News Today, "Pathways Programming is a cutting-edge educational initiative aimed at cultivating innovation, creativity, and problem solving." Inspired by learner-centered, ground-up research and developed internally by school leadership, this program embodies two paths: Fine Arts & Innovative Thinking. In order to begin a path of experiential learning excellence, one must consider the physical environment and how it impacts knowledge acquisition. And that's exactly what ICCR Principal Mike Miele, ICCR Executive Assistant Sue McKenna, External Consultant Christina Corser, and External Director of Education Hannah Tejada set out to do. In collaboration, this team of educational leadership and spatial specialists paved a way for ICCR facilitators and learners to experience the environment as a second teacher - acknowledging the importance of social connection, pretend play, growing flexible thinking, confidence building, sensory input/output, restorative opportunities, and organization in a high-traffic learning environment.

Objectives for this project were drafted to pull research from individuals in education, educational leadership, special education, neuroscience, curriculum creation, and psychology to pinpoint where theories intersect and more efficient application begins. Each objective was written methodically; parallel to ICCR's mission and vision for not only its learners but also its community.

1. Create school-wide initiatives to positively influence socio-emotional and academic growth by reconfiguring learning spaces.
2. Observe and measure socio-emotional and academic growth of learners at various developmental levels / instructional growth at varying levels.
3. Ensure that all leadership, facilitators, and learners of ICCR experience meaningful spatial influence, solidifying an understanding, acceptance, and implementation of the environment as a second teacher.
4. **Leadership:** To gain expertise and confidence in planning, implementing, and modeling learner-centered, environment-minded learning spaces that work to support strategies found in CKLA/The Science of REading, Pathways Programming, and utilizing the environment as a second teacher.
5. **Facilitators:** To gain mastery of facilitation process skills such as: instruction, assessment, community, and feedback by including the practice of environmental design and awareness.

6. **Learners:** To gain expertise and confidence whilst in the growth process of the following skills: innovation, communication, problem-solving, compassion, and Gospel-centered leadership.
7. **Community:** To gain insight and understanding by observing and participating in the school-wide growth process within the following components: nurturing the whole child, learning experiences, high-quality instruction, faith and Christian service, student achievement, and home school relationships.

Scope & Budget

The previous ICCR Library housed multiple 'sections' age groups and activity types (i.e. carpeted area for Read Alouds and floor work for younger grade bands, work surfaces and display cases for older grade bands). Original overviews lacked detail in social connection, learning experience, sensory understanding, and innovative consideration. Considering the project objectives, the transformation needed to better supply experiential support for learning communities PreK - 8th grade. ICCR wanted to introduce innovation in a new way by creating a spatial flow which could be continuously rearranged by learners while producing insights into communication, behavior, and invention. Spaces such as:

- News Casting / Reporting
- Film
- Robotics
- Discussion / Socratic Seminar
- Debate
- Technology Integration
- Research & Communication

Process & Exhibits

Project partners solidified a process which included integral steps to ensure the full vision of ICCR's Innovation Center actualized.

STEP 1: Initial conversations between project partners (i.e. school, distributor, manufacturer)

STEP 2: Live Design - A Live Design session allowed project partners as well as stakeholders to meet in a virtual call while the project designer and educational specialist listened, ask detail oriented questions, and made recommendations. Throughout the conversation, the project architect manipulated a 3D drawing to showcase how the space can be manipulated and rearranged.

STEP 3: Finalized Drawings & Project Look Book - Following the Live Design session, the manufacturer educational specialist worked to provide school leadership with 5 intricate drawings and a project LookBook. The LookBook highlighted the history of all project partners, outlined the drawings and hope of space, as well as provided educational and cognitive justifications of pieces specified. The LookBook was a resource provided which could be utilized to emphasize project details in internal meetings, fundraising opportunities, community updates/town hall meetings etc.

STEP 4: Quoting - The manufacturer worked to provide the distributor a product key and initial quotes.

STEP 5: Quoting - The distributor worked to provide the school a product key and quotes.

STEP 6: Adjustments & Follow Up - After consideration of design and financial logistics, there was a period of open communication where the following took place:

- A) Edit drawings, Look Book, and re quote
- B) Finalize specifications and next steps

STEP 7: Project Purchase & Follow Up through Delivery & Install

STEP 8: Professional Development - The manufacturer offered additional professional development sessions to support spatial implementation and outcome measurement.

There are several aspects of the project process that were included within the final cost of the project itself - these resources were at no additional cost to the distributor or school.

1. Live Design
2. Project LookBook
3. Adjustments
4. Professional Development
5. Follow Up & Outcome Reporting

In this way, all core values have been attended to. Within the Live Design process, stakeholders' voices were heard and celebrated. Stakeholder engagement was not limited to adults in leadership but purposefully opened to learners and adults in numerous faculty positions. The LookBook was utilized internally in partnership by the school, manufacturer, and distributor to showcase transformation possibilities and encourage staff in discussion of misconceptions, opportunities, excitements, and best practices. Project drawings were used to encourage learners within Project-Based Learning (PBL) units in discussions on knowledge acquisition, research regarding texture and sensory inputs/outputs, corral questions on lighting and biophilic properties, and inspire acceptance on the importance of physical uses of a learning ecosystem. Due to the development-centered approach to design, each potential layout invites the practice and use of transversal communication skills directly impacting the temperature of diversity and representation within the environment.

Exhibits (Renders & Design)





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Exhibits Cont. (LookBook Content Page)

LOOK BOOK CONTENTS



- 01** ICCR FAITH JOURNEY
- 02** ABOUT THE SPACE
- 03** DRAWINGS
- 04** KEY PRODUCT DETAILS
- 05** EDUCATIONAL JUSTIFICATION
- 06** CALL TO ACTION
- 07** THANK YOU



Educational Environment

Immaculate Conception Catholic Regional School is an award-winning innovation-recognized private elementary school (PK - 8) in Cranston, Rhode Island.

Immaculate HISTORY



Immaculate Conception Catholic Regional School continues the long and noble legacy set forth by Cranston-Johnston Catholic Regional School (CJCR) since its inception nearly 50 years ago. As successor to CJCR, we still continue the proud tradition that leads students and parents to use the words "family" and "community" to describe their school. With a history of excellence in a safe and nurturing environment, our students develop necessary skills, knowledge and attitudes that prepare them for a solid and successful high school and college experience. More importantly, we seek to build the foundation for young people to lead lives of character, service, sacrifice and success.

When CJCR first opened in September 1960 as St. Mark's School, its mission was to teach Catholic beliefs and values to young people from Cranston and neighboring communities. Over the decades, the school has grown in enrollment and reached increasingly ambitious goals. Today, Immaculate Conception Catholic Regional School stands on the shoulders of our tradition while expanding the role of Catholic education to children and families from communities around Rhode Island.

Immaculate VISION

Immaculate Conception Catholic Regional School provides students, families, and teachers with opportunities to become authentic Christian disciples. Students' unique skills and strengths are enhanced through the highest quality instruction that challenges them to reach their academic potential in a safe and nurturing learning environment. Learning is designed to graduate student who will become productive, contributing members of society. Students are empowered to become creative, compassionate builders of the future.

Immaculate MISSION

Immaculate Conception Catholic Regional School is a community of learners inspired by the Gospel of Jesus Christ and the Roman Catholic Church to form character through faith. We nurture the whole child - mind, body, and spirit while providing academic, artistic, and athletic excellence in a safe and loving environment.

Immaculate

DESIGN & FAITH JOURNEY

ICCR's Vision of a Graduate, pinpoints wholistic objectives all ICCR Saints strive for. Each objective holds key transversal skills that each facilitator encourages and fosters for every learner across grade bands.

Introducing Faith Journey concepts in association with learning design, will allow facilitators, in partnership with families, more opportunity to showcase faith trajectories well past the time of graduation. Encouraging learning spaces to function collaboratively with an interdisciplinary focus, helps construct the foundation needed to build a learner's Faith Stamina.

EDUCATIONAL JUSTIFICATION

Research from Antioch University, Columbia University, and Harvard University support movement, choice, and texture throughout the experiential learning space.

An experiential learning space is not confined to a 'classroom'. Once learners an educational organization, each environment has potential to become a learning space.

Varying textures support different cognitive processes. Including a multitude of textures and interchangeable pieces within a learning space, provides learners with resources that meet their needs as opposed to asking them to advocate for a need. Textures such as turf, velvet, and felt provide outlets with allow neuropathway advances and opportunities for learners to be removed from flight or fight responses.

Providing choice within any learning environment is pivotal in supporting equitable cognitive, physical, and socio-emotional development. Learning environments should remain needs-based instead of advocacy-based. Increased agency generally equates to increased self-actualization and confidence within the growth process and in a designated space.

COGNITIVE JUSTIFICATION

Research from Johnson & Wales University showcases the amazing responsibility the Limbic System has regarding imagination and neuroprocessing.

The Limbic System is a section of the brain in charge of processing memories and emotion as well as responses to environmental stimulus. When the parts of this system work in tandem, our relationships to memories and emotional reactions to sensory stimuli designate our imagination and problem-solving capabilities.

Designing a space which includes the textures and a playful geographic location... can work to positively influence the Limbic System's functioning as well as promote growth in both curiosity and brainstorming.

The Innovation Center was created with differentiated curricular tools, learning styles, and teaching methods in mind. Not only were capabilities of learners discussed but also strengths and weaknesses of leadership and instructional staff. Along with Pathways Programming, ICCR primarily utilizes Interdisciplinary Project-Based Learning which gives scholars opportunities to master concepts across content. Throughout IPBL, tasks require activities such as guided exploration, notice/wonder, discussion/debate, research & interview, written analysis, socratic seminar, and multi-medium community presentation.

Each stage of IPBL occurring within the Innovation Center has incorporated a variety of spatial objectives. These objectives directly relate to use of space, teaching methodology, and learner agency (i.e. one teach one assist, co-teaching, parallel instruction, small group/intervention, centers etc.)

Facilitator Facing Objectives

- A) Using the IPBL Unit Overview, list & explain each learning space/center to maximize differentiation.
- B) Prior to facilitation, map learning space to adapt to lesson objectives & increase learner engagement by preparing for stimuli.

Learner Facing Objective

- C) Given 2 layouts, use the 10 minute timer & collaborate with a small group to build a learning space.

Due to the flexibility of the design, the space follows a 60-second rule which means the learning environments can be rearranged within 60-seconds. Learners assist in the layout options which drives the success of a complete learning ecosystem. In order to promote acceptance and success of the environment as a second teacher, the manufacturer supplied the school with additional layouts for groups to practice spatial transformations. Throughout professional development sessions, staff were able to 'play' and 'practice' in the space to efficiently connect the environment with teaching/learning styles and content.



Results

Post transformation, the Innovation Center was primarily utilized during Pathways Programming, which occurs on Wednesday afternoons during a 2-3 hour block. Outcomes in several categories were captured qualitatively and quantitatively. [Table 1 & 2] These outcomes represent goals and achievements that directly benefit the school as well as the district and surrounding communities/families.

Table 1 - Measurement Tool

Communication Support Criteria	Scale
Social Communication	1 - does not meet criteria 2 - somewhat meets criteria 3 - meets criteria 4 - above and beyond criteria
Pretend Play	
Growing Flexible Thinking	
Confidence Building	
Sensory Input/Output	
Restorative Opportunity (Biophilic Resources)	
Organization	

Table 2 - Results

Key:

L = Learning Facing

F = Facilitator Facing

Category	Results
Attendance (L/F)	<p>According to both qualitative and quantitative data provided by school leadership, faculty, and learners - attendance increased for grade bands 2-8 and dramatically increased for Pathways Programming in grade bands 6-8.</p> <p>As emphasized by school leadership, there was also a substantial drop in early pick-ups on Wednesdays during the Pathways block. When asked about remaining in the school building on Wednesdays, learners said, 'Well, we don't have school.' When probed further learners responded, 'We have school, but it's not like school.' And continued to explain their response to the Innovation Center in conjunction with Pathways Programming.</p>
Communication Considerations (L/F)	<p>According to both qualitative and quantitative data provided by school leadership, faculty, and learners - there has been increased consideration and conversation around how the environment has capabilities to support communication. Specifically transversal skills within social connection,</p>

	pretend play, growing flexible thinking, and confidence building. Facilitators are now capable of observing the physical space and how pieces relate to socio-emotional outcomes they're measuring for individual learners. Learners are now capable of engaging the space more effectively and growing in understanding of what they need to be most successful.
Academic Growth (L)	According to both qualitative and quantitative data provided by school leadership, faculty, and learners, positive academic growth has increased and can be contributed to the following: <ul style="list-style-type: none"> • More efficient use of instructional time • More efficient use of space regarding individual needs • More in depth understanding and mastery of experiential concepts • More effective question formation and inquisitive responses • More in depth conceptual connections • Greater interdisciplinary understanding
Acceptance of Environment as Second Teacher (F)	According to both qualitative and quantitative data provided by school leadership and faculty, the acceptance rate of the environment as a second teacher, for the individuals directly involved in the transformation of the Innovation Center, has grown from close to 40% acceptance to close to 90% acceptance.
Mapping/Planning (F)	According to both qualitative and quantitative data provided by school leadership and outside consultative resources, effectiveness of curriculum mapping and planning has increased and now includes cognitive, psychomotor, and affective objectives for the physical space.

Additional Exhibits

Pre Transformation





Post Transformation



ICCR student, Matthew Clifford (Johnston) learns how to make a movie in his Intro to Filmmaking Pathways™

