Early Childhood Center
at the Boulder Jewish Community Center
Boulder, Colorado

“I was never certain about the difference that a building could make to the Jewish future in Boulder, but I am now quite convinced. It’s not just a building, it’s a home.”

Bruce Shaffer, Boulder JCC
Overview
The new Boulder Jewish Community Center’s (JCC) Early Childhood Center (ECC) serves 175 infant, toddler, and preschool-aged children throughout Boulder County. The program is built around the Reggio Emilia philosophy and operates independently from, while integrated into, the new 53,000-square-foot Boulder Jewish Community Center.

The facility accommodates an early childhood program that is designed to “enhance the social, emotional, linguistic, cognitive, and physical development of each child. The ECC offers opportunities for exploration and discovery in a play-based, educational environment. It strives to nourish children’s innate sense of wonder, curiosity, imagination and self esteem.”

Executive Summary
As a play and constructivist-based Reggio Emilia inspired school, the ECC at the JCC views education as a process, brought on by each child’s interaction with their immediate world. It is through playing in this world that each child is encouraged and stimulated to wonder, explore, experiment and to discover, using their own unique learning style and interests. As a Jewish school, the ECC approaches their work with children through Jewish lenses.

Taking cues from its educational philosophy, the building was designed to be simple in form to enable the activities and learning taking place within the school to become the primary focus. Making up one half of the JCC, the ECC includes eight early childhood rooms, two toddler rooms, an infant room, tumbling room, flex space, art studio, separate ECC administrative area, a dedicated ECC gathering room, and exterior early childhood play areas.

Source: (1) Quoted from the JCC ECC website. (2) Summarized from the JCC ECC website. Inset images from the JCC website.
The ECC entry area is just beyond the JCC’s main lobby and gallery space. A receptionist greets visitors to the main space and directs them to the secured doors down the hall. The entrance to the ECC wing is complete with its own administrative suite and security measures.

Type of Project
New Construction

Size
20,000-Square-Foot Early Childhood Facility

High Performance Certifications
LEED Certified

Delivery Method
CMGC

Occupancy Date
5/9/16

Grades Housed
Infant through Preschool

Pupil Capacity
175

Project Size
Site Size: 9.77 Acres (entire project site)
Gross Area: 20,000 SF (ECC only)
Area per Pupil (gross): 114 SF/Pupil

Final Construction Cost
$19,286,277 ($368/SF)*

*Construction Cost is for entire 52,444 SF building and site infrastructure (including streets). Since the ECC encompasses 38% of the total square footage of the JCC, 38% of the total construction cost is $7,328,785.
History
The Boulder JCC and ECC had been in the planning stages for 10 years prior to our design firm being brought on board. As the first building to populate the Boulder Jewish Commons at the southeast corner of Arapahoe and Cherryvale Roads in west Boulder, the JCC embodies the timeless quality planned for architecture in that development with the use of local natural materials, simple forms and qualities of solidity, permanence and integrity found in Jewish tradition. The ECC was to encompass these same design qualities while providing a comfortable, flexible, and light-filled space for the littlest of learners. [3]

Key Players
The project included a large building committee comprised of the JCC Executive Director, members who were parents of students or past students, as well as donors. The ECC Director and Past Director were involved as part of the focus groups. (The committee is diagrammed below.)

Process
The client had authored a very thoughtful program plan that was used as a starting point to design, which was based on their existing facility and their plan for growing their ECC program. The discovery process used interviews and in-person observation to understand what worked and what didn’t in their current facility. Other new facilities were studied and staff interviews took place. Once design began, the design team came up with multiple options that continued to evolve and develop with client input.

Central Themes
Two main outcomes of the planning process centered on the concepts of “Gathering” and integration of the Reggio Emilia philosophy. Both informed the shape of the building, and the character of the children’s spaces became a backdrop to the kids’ inquisitive play.

The planning team continued to be involved throughout the design, construction and post-occupancy phases. A core group of the team attended every project meeting (including construction meetings). They were responsible for selecting furnishings and playground equipment and have continued to be involved in the operation of the facility after move-in.

Communicating the Story
The planning and design process spanned several years (at the client’s direction). Throughout this time, diagrams and three-dimensional renderings were used to help illustrate the design for fundraising purposes, renderings, materials mockups, and various other techniques helped to share with donors and future users what their new ECC would feel like.

Source: (3) Summarized from “Design Patterns, Standards and Guidelines” developed for the project.

Clockwise from top left: JCC planning team members make design selections; community members get engaged by touring the building under construction; ribbon cutting; community engagement event at the grand opening.
Community Environment
The main premise of the Boulder JCC is that it is, “Open to Everyone”. This same concept of inclusivity is extended through the ECC program. Light and transparency visually communicate this message so that even though the ECC is secure, it still feels inviting and accessible.

Since the ECC has access to the JCC’s larger community hall, they can accommodate large group gatherings connecting the community with the children in this space. One example is when the Boulder Symphony Orchestra comes in and hosts a “play along” with their instruments for the kids.

Partnerships
Community use and partnerships are a significant part of the organization through programming. The adjacent Boulder Jewish Farm is one example where kids visit, grow plants, then make food from the plants, play with goats, and learn how bees make honey. This space encourages interaction between the kids, but is also accessible to the community as well.

Safety and Security
Biometrics (fingerprint readers) are used for ECC entry from the JCC’s main lobby/gallery. Security is constantly on the minds of this population; coupled with being an educational setting, this emphasis is amplified. Physical security measures were incorporated into the design, such as utilizing a solid privacy fence around the playgrounds, and posting a security guard at the main entry to the building. Transparency is evident in the arrangement of the administrative area, opening onto the main entry courtyard of the JCC facility. Parents are greeted here when they drop off and pick up their children.
Overall Main Floor Plan

EDUCATIONAL ENVIRONMENT Overview
The ECC encompasses the eastern wing of the JCC and has its own secured playgrounds, outdoor learning areas, and gardens. The ECC program includes classrooms, gathering spaces, art studios, and a tumbling room. The heart of the ECC is the ECC Gathering Room that serves as the center of all children's activities. Natural light enters the space through large, round skylights in the roof. The ECC wing is securely separated from the rest of the JCC facility.
Gathering
The ECC gathering space allows for parents and children to engage in activities together, like the weekly Shabbat Sing. Food, which is an important part of many Jewish celebrations, is accessible via the built-in kitchen and cooking demonstration area. “Mini-chefs” and adults use the appropriately-sized, dual-facing counter space to bake challah bread for celebrations. Children experiment with different tastes, textures, colors and fragrances of ingredients. Some they have grown and harvested themselves from the adjacent Milk and Honey Farm. The kitchen opens to the ECC gathering space and is an accessible height for kids on one side and higher on the other for staff comfort. Another common activity in the Gathering Room is group story time, with books available for families to read here or take home. Although this is an interior space surrounded by classrooms and administrative offices, it feels connected to the outdoors by the clerestory windows, skylights and use of log columns.
Reggio Emilia Philosophy
The learning environment’s main premise is that the physical space should serve as a background for the children’s learning. It is designed to be neutral and as natural as possible, allowing emphasis to be placed on learning and play rather than elaborate furnishings and decor. Children make their own selections during learning and provide the spark and color to the educational space.

Kid-Sized Design
Features like kid-sized windows being located lower on the wall help the space feel adequate in scale for kids. There are many nooks throughout the facility where a child can make a space their own. Various learning styles and instructional delivery methods are supported in this setup. Much of the ECC’s play includes use of natural materials (water, mud, sticks) to encourage a connection with the natural world.

Educational Environment
Rooms are designed to be flexible and open so that future changes can be accommodated. All spaces are a single flooring surface so that furnishings can be rearranged without feeling restricted and the room can accommodate changing of configurations.
With abundant natural daylighting, classrooms are bright and airy. Built-in acoustic treatments such as acoustic metal roof deck and tectum wall panels help soak up sound from the other hard surfaces in the rooms.
Educational Environment

Mud rooms, cubbies, and restrooms are shared between pairs of classrooms. Sliding glass doors between classrooms provide casual but physical connections for team teaching or shared supervision. In-room sinks, built-in shelving, and preschool-sized furnishings make the space comfortable for even the smallest learners. Transparency is a theme throughout the building, and is evident through child-height windows into the hallway and glass in all the doors.
Recognizing that outdoor play is just as important as indoor play at this age, the facility also includes outdoor spaces such as a community garden, play structures, outdoor classrooms, and play facilities. Surfaces are varied with different materials and textures, to encourage exploration.
The playground is divided by age group with similar age-appropriate experiences for each group: caterpillar, dragonflies, and butterflies. Play choices offer opportunities for exploration and discovery with both constructed play equipment and natural areas for free play. The school strives to nourish the children's innate sense of wonder, curiosity, imagination and self-esteem.
Educational Environment
Educational Environment

Expansive views of the Flatirons instill a sense of wonder at the natural surroundings. Exterior learning and play areas are accessed from each of the individual classrooms.
Security is always an issue with children’s facilities, and when threats and attacks are made on other Jewish facilities, this community’s awareness and concern is heightened. Outdoor play areas must be open and airy for comfort of the kids, but also extremely secure.
Sustainability
The LEED Certified building incorporates numerous high performance and environmentally responsible features. This community takes their role of environmental stewardship very seriously and felt that should be reflected in the building. Without changing the design or spending additional funds, the design team was able to achieve LEED Certification.

Indoor Play
The tumbling room is large enough for children ages 5 and under to run, jump, and climb, but small enough that parents and caregivers can easily keep an eye on them. This room may be rented out for parties and is also used for the parent/tot classes.

Benefits of Rough and Tumble Play (4)
Although rough and tumble play tends to be discouraged and viewed as aggressive or dangerous, it is a viable part of a child’s play during development from infancy through primary years. Rough play is beneficial to children in many ways:

- Providing opportunities for children to learn to “read” peers’ body language and facial expressions
- Building friendship and expressing positive emotions in children who aren’t comfortable hugging others or verbalizing, “I like you.”
- Promoting positive peer relationships
- Fostering peer interactions
- Turn taking

- Problem solving
- Empathy
- Fairness
- Practice dominance relationships
- Taking on adult roles
- Learn rules to games
- Learn cooperative skills

Physical Environment

Materials
The palette in the ECC is neutral. Natural materials act as a backdrop to the children to instill a sense of calm and avoid overstimulating them. Play and art materials are stored artfully within sight of children, so they see what is available to be used throughout their learning.
Environmental Relationships
The connection with nature—through the use of design principles like wood, stone, and natural daylighting—is important in tying the interior of the facility back to the outdoors. The central gathering area has large daylit openings that allow for the shifting of light beams to fill the space. Children play games with reflective, colored, and translucent materials in this area, instilling a sense of whimsy to their day.
RESULTS OF THE PROCESS & PROJECT
While the JCC (and ECC in particular) incorporate Jewish traditions and values, it is open to all ages and ability levels of children, parents and families throughout the year. Openness, acceptance and caring are reflected in the facility’s culture and the ECC’s educational themes.

One way students are connected back to their community and the environment is the Sombrero Marsh. This outdoor space was an important part of the development of the overall property. It was deeded back to City of Boulder as dedicated Open Space. Now, children are able to observe wildlife in this setting right next to their ECC school.

Conclusion
The new JCC and ECC facility has amplified the reach of the Boulder Jewish Community Center throughout the Boulder community for all ages. The new Early Childhood program has grown from serving 90 children to more than 175. The summer day camp for kids now accommodates 300 campers, more than twice as many as were served previously. All of these results illustrate how the ECC is an important asset that is meeting the needs of young learners and the Boulder community alike.