

# Engineering Lens and Reggio Emilia Comparison

| Reggio Emilia  | Engineering Lens  | Comments   |
|--|---|--|
| Children must have some control over the direction of their learning   | Children own their design challenge   | Not scripted   |
| Children must be able to learn through experiences of touching, moving, listening, seeing, and hearing   | Project and collaborative process   | Hands on   |
| Children must have endless ways and opportunities to express themselves.   | Children to; Problem framing, research, tinkering, design, collaboration and reflection | Improve use of booklets and more pictures, and hand-outs       |
| Tradition of community support   | Teach parents how to ask questions to engage with their child's activity                | Need to develop a better connection with community and parents |
| Program is a vital part of the community   |   |  |
| teachers facilitate children's explorations  | Teacher acts as the guide on the side   |  |
| Teachers and parents encourage the children to:<br><br>- Be creative and imaginative<br>- Be independent, foster self-help skills<br>- Solve problems<br>- Experience success<br>- Explore their curiosities<br>- Deal with frustration and disappointment |   | Enjoy themselves while pursuing their natural interests        |

<http://www.mindfordschools.org/resources/healthy-habits-of-mind/>

## Approach

- Children must have some control over the direction of their learning;
- Children must be able to learn through experiences of touching, moving, listening, seeing, and hearing;

- Children have a relationship with other children and with material items in the world that children must be allowed to explore and
- Children must have endless ways and opportunities to express themselves.

The topic of investigation may derive directly from teacher observations of children's spontaneous play and exploration. Project topics are also selected on the basis of an academic curiosity or social concern on the part of teachers or parents, or serendipitous events that direct the attention of the children and teachers

## **The role of teachers**

In the Reggio approach, the teacher is considered a co-learner and collaborator with the child and not just an instructor. Teachers are encouraged to facilitate the child's learning by planning activities and lessons based on the child's interests, asking questions to further understanding, and actively engaging in the activities alongside the child, instead of sitting back and observing the child learning. "As partner to the child, the teacher is inside the learning situation"

## **Documentation**

Using a variety of media, teachers give careful attention to the documentation and presentation of the thinking of the children. Rather than making judgments about the child, the teacher inquires and listens closely to the children. An example of documentation might be a book or panel with the student's words, drawings, and photographs. By making learning visible, the teachers accomplish several things. They are able to study the thinking and feeling of the students in order to gain insight into their understanding.

## **Long-term projects as vehicles for learning**

- Feed the World
- Heal the World
- Clean the World

The curriculum is characterized by many features advocated by contemporary research on young children, including real-life problem-solving among peers, with numerous opportunities for creative thinking and exploration. Teachers often work on projects with small groups of children, while the rest of the class engages in a wide variety of self-selected activities typical of preschool classrooms.

## **Conclusions**

Reggio Emilia's approach to early education reflects a theoretical kinship with John Dewey, Jean Piaget, Vygotsky and Jerome Bruner, among others. Much of what occurs in the class reflects a constructivist approach to early education. Reggio Emilia's approach does challenge some conceptions of teacher competence and developmentally appropriate practice. For example, teachers in Reggio Emilia assert the importance of being confused as a contributor to learning; thus a major teaching strategy is purposely to allow mistakes to happen, or to begin a project with no clear sense of where it might end. Another characteristic that is counter to the beliefs of many Western educators is the importance of the child's ability to negotiate in the peer group.

One of the most challenging aspects of the Reggio Emilia approach is the solicitation of multiple points of view regarding children's needs, interests, and abilities, and the concurrent faith in parents, teachers, and

children to contribute in meaningful ways to the determination of school experiences. Teachers trust themselves to respond appropriately to children's ideas and interests, they trust children to be interested in things worth knowing about, and they trust parents to be informed and productive members of a cooperative educational team. The result is an atmosphere of community and collaboration that is developmentally appropriate for adults and children alike.