Learning Outcomes and Indicators for the Bay Area Discovery Museum

In support of Bay Area Discovery Museum’s mission to transform research into early learning experiences that inspire creative problem solving, the Center for Childhood Creativity (CCC) created the following list of research-backed learning outcomes.

All BADM experiences will inspire and support children to...

- Be curious
- Come up with ideas and try them out
- Make thoughtful decisions
- Take risks and persist through challenge
- Learn to collaborate
- Build STEM knowledge

To make these outcomes more visible to visitors, staff, parents, and educators, the CCC also provided examples of specific behaviors that indicate children meeting these outcomes. This list of indicators, across the age span of 0 to 10 years, show what adults can expect to see when children “Come up with ideas and try them out” at BADM.

Come up with ideas and try them out

0 - 18 Months:

Children in this age group demonstrate this when they:

- Engage in repetitive play
- Act with intention (e.g., reach for an object, move/crawl, attempt to roll over)
- Explore new materials (e.g., make marks using chalk or markers, pour and scoop water, squeeze and dump sand)

18 - 36 Months:

Children in this age group demonstrate this when they:

- Experiment and test results with greater intention (e.g., stack blocks and see what happens)
- Begin to use symbolic thinking in imaginary play (e.g., pretend a block is a phone)
3 - 5 Years:
Children in this age group demonstrate this when they:

• Come up with a design or idea to solve a problem (e.g., “I think the smooth ramp will make the car roll faster”)
• Carry an idea to fruition (e.g., testing and timing the car going down the smooth ramp)
• Initiate or engage in complex and collaborative imaginary play (e.g., a tea party, an imaginary friend)

6 - 8 Years:
Children in this age group demonstrate this when they:

• With support, define a problem (i.e., who the problem impacts, why it’s a problem) and think about how to solve it
• Use evidence to refine ideas (e.g., notice that the car went slower on a rough track and then create a race track with smooth surface to improve the race time)
• Independently tinker and experiment with tools and materials

8 - 10 Years:
Children in this age group demonstrate this when they:

• Synthesize multiple ideas or concepts (e.g., combining knowledge of electricity and fashion to design and create light-up clothes)
• Plan and carry out fair tests (e.g., control variables, conduct multiple trials)
• Determine specified criteria for success or constraints (e.g., materials, resources, time, cost)

Contact us at CCC@badm.org to boost the creative potential in your organization and with the children you serve.