

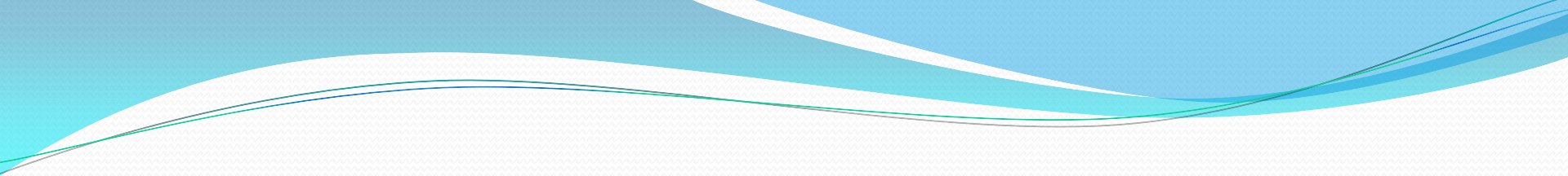


# The Place of Gifted Children at Science Centers



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What *"Perfect"* *"Talented"*  
*"High Achiever"* does *"Possessing a special talent"*  
gifted *"Highly intelligent"*  
*"Prodigy"* actually *"Having exceptional intelligence"*  
*"Capable"* *"Clever"* mean?  
*"Adept"* *"An example to others"*  
*"Endowed with natural ability"* *"Skilled"*

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- Giftedness, intelligence, and talent are fluid concepts and may look different in different contexts and cultures. Even within schools you will find a range of beliefs about the word "gifted," which has become a term with multiple meanings.

- Gifted children often develop different than their peers; their minds are often ahead of their physical growth, and specific cognitive and emotional functions are often at different stages of development.
- Gifted individuals also experience the world differently, resulting in unique social and emotional issues.



Everyone is a genius. But if you judge a fish on its ability to climb a tree, it will live its whole life believing that it is stupid.

-A Einstein



# What are the differences between bright and gifted children?

- Gifted children;
- -ask many questions,
- -highly curious,
- -discusses with details,
- -have strong feelings/opinions,
- -good at guessing,
- -enjoy learning,
- -observer,
- -highly self-critical,
- -initiate projects.

# Why should we identify gifted children?

- 1) Gifted children need appropriate academic challenge.
- 2) Gifted children need to feel they are valued by their education system.
- 3) It is essential that gifted children need peer group
- 4) To be accepted as an individual.



# So, what?

- All of these differences come in one point that these children need special learning environment. How can this be supported?
- This is a big problem nowadays because we have brilliant children in our hands but we do not know how to help them. And if we do not help these children, they will lose their potential IQ level or they will use in a different way. (ex: commit a

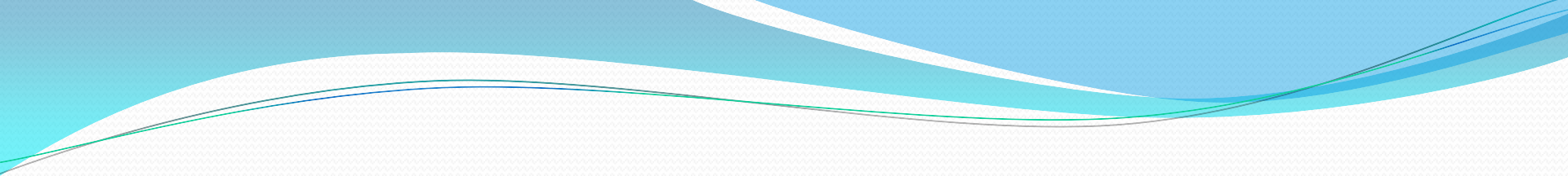
"My mind is always racing, and always going and always working, and it's a gift and a curse."

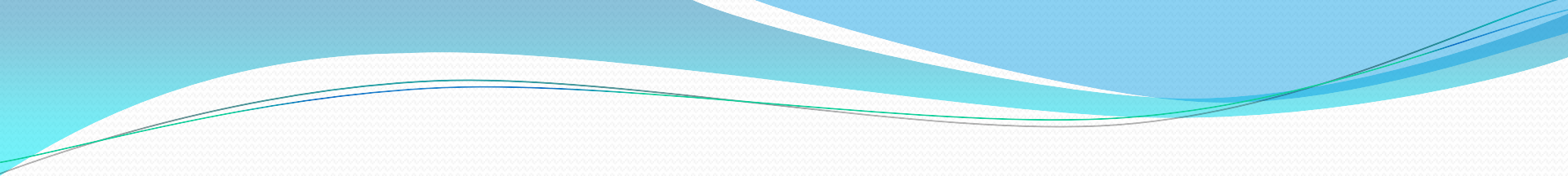
- Puff Daddy

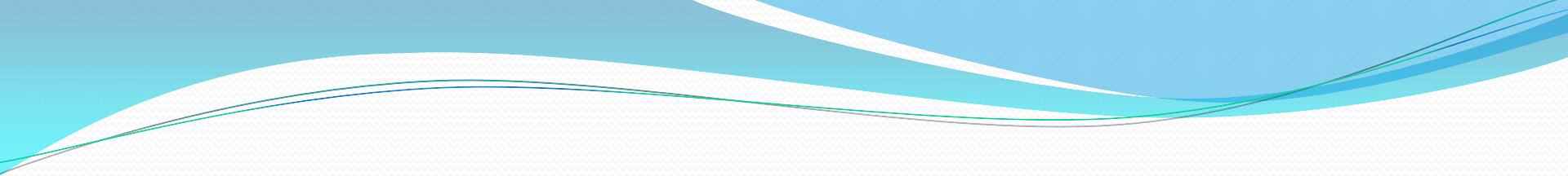


# How?

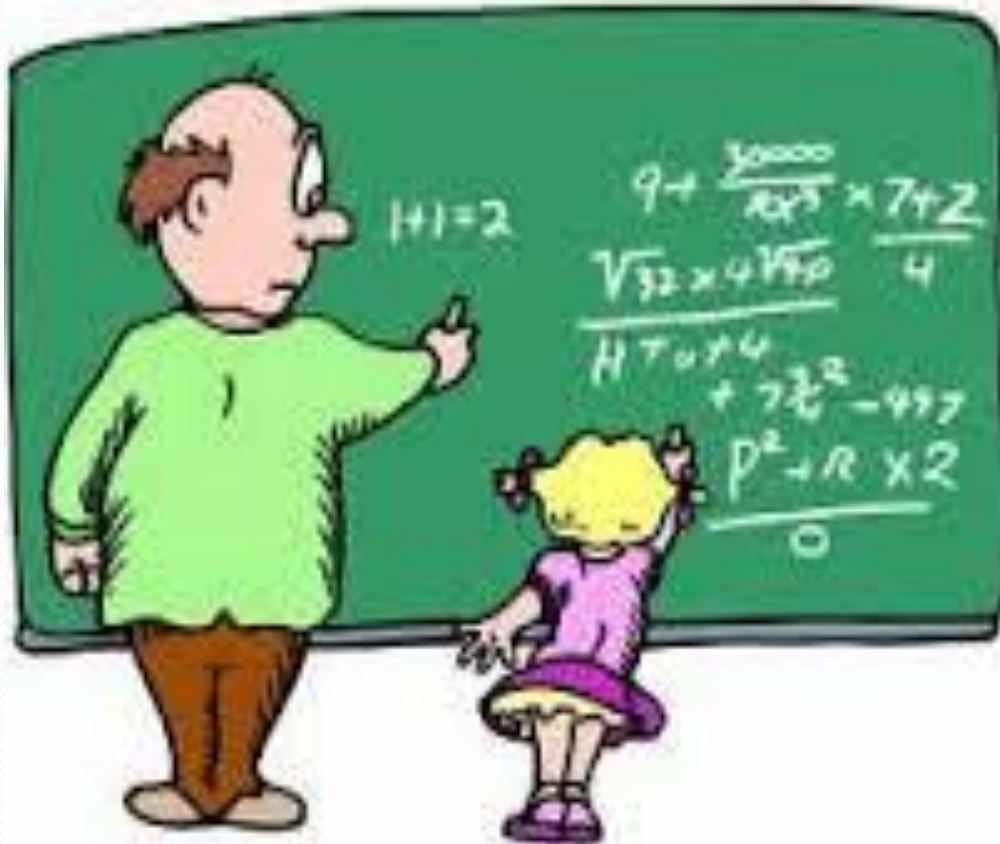
- As a science center education coordinator, I ask this question to myself many times? How can we help these children?
- First of all, we need to educate our educators about gifted and talented. Many of the teachers do not know about them, their needs, behaviors, and skills. Many of the teachers are not aware of these kids, they think that they are clever enough and they do not need help. But this is wrong! In contrast they need help to survive themselves. They will be the people who are producing sustainable things for the future. And science centers need them!

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- How do teachers develop an instructional plan that will be challenging, enlightening, and intriguing to students of different abilities, and still maintain a sense of community within the classroom? This is the central question for educators as they begin the quest of bringing sound instruction to gifted students in regular classroom settings.

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- Research tells us that a large majority of gifted and talented students spend most of their day in regular classroom settings (Cox, Daniel, & Boston, 1985). Unfortunately, instruction in the regular classroom setting is generally not tailored to meet their unique needs (Archambault et al., 1993; Cox, Daniel, & Boston, 1985; Westberg, Archambault, Dobyys, & Salvin, 1993). This situation is putting gifted students at risk of failing to achieve their potential. Achievement scores below what might be expected from our brightest population provide the evidence (Callahan, 1990; Kantrowitz & Wingert, 1992; Ness & Latessa, 1979).

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- The challenge for educators is twofold. Our gifted and talented population must have a full service education if we expect these students to thrive in the manner in which they are capable. Second, these students must be involved in educational experiences that are challenging and appropriate to their needs and achievement levels. The place to begin is in the regular classroom.

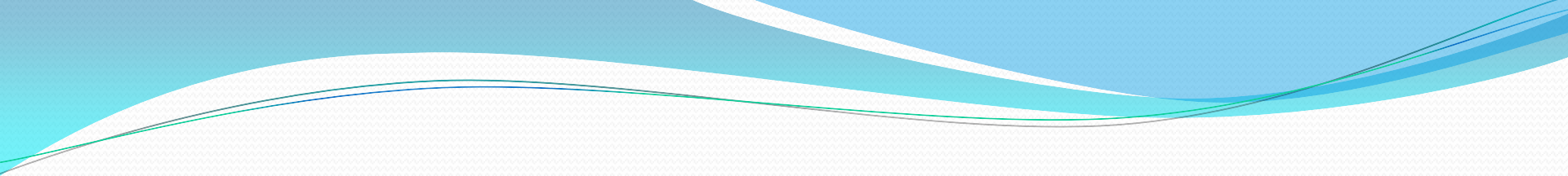
# Educate to Educators



- This is not the situation we would like to see. Teachers should have enough capability to answer students' questions and able to orient them.



- Instead of previous picture, this should be the scene for gifted student and teacher.

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- Technically all students, according to developmental psychologists Abraham Maslow and Howard Gardener, are gifted at something. But within the realm of what happens in the classroom, a teacher can help those superstars shine even brighter by simply adding a few additional strategies to their teaching repertoire.



# Science centers can be a step

- These students are thinking out of box. They need different areas than classroom to express their ideas, show their skills and make projects.
- Nowadays, science centers are better example for gifted&talented students.



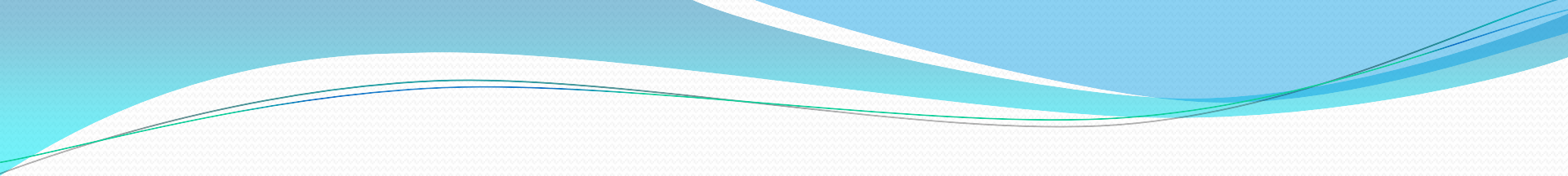
# How can you see/understand giftedness in public?

- Populations underrepresented
- Girls mostly good at math/science
- Talented in arts
- Non-english speakers
- Who speak non-standard English
- Who do not 'fit in the mold'

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**"I can suck pudding up my nose and blow it out the corner of my eye, but they *still* won't put me in the gifted class at school!"**

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- You all know that if you have different, extraordinary ideas, most of the times people look at your face pointless and even do not care you. But mostly these ideas are coming from gifted/talented people. The thing that come pointless to you is called ‘CREATIVITY’ and that underlies science behind innovation.

Do you know any gifted person around you?





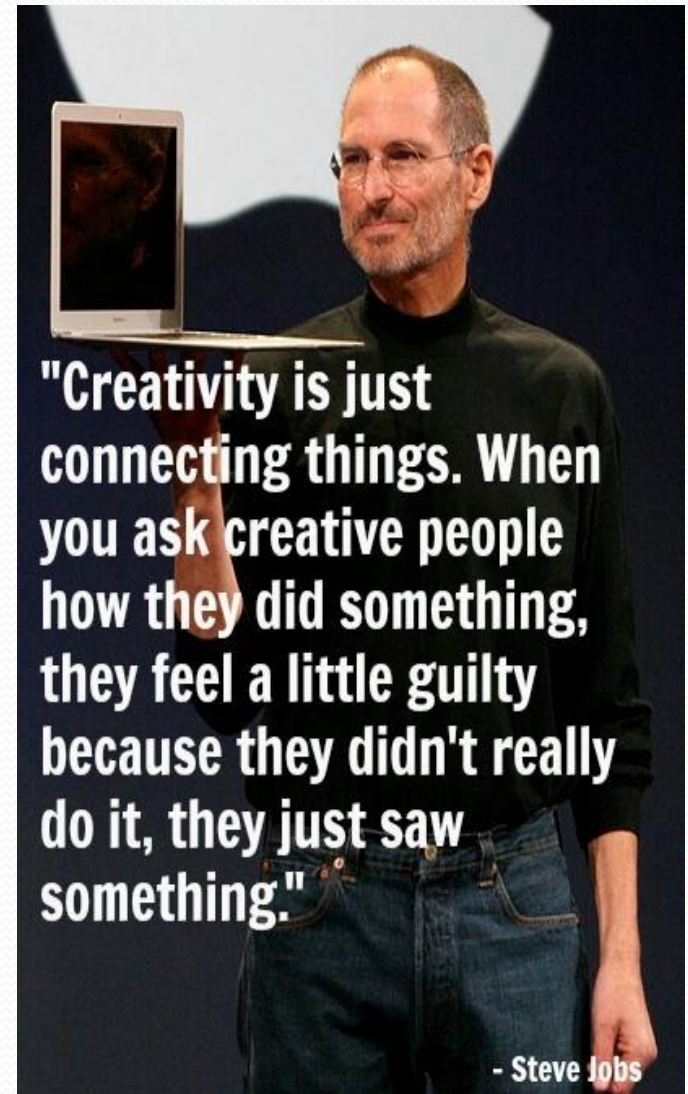
# CREATIVITY

- **Creativity** is a phenomenon whereby something new and in some way valuable is created (such as an idea, a joke, a literary work, painting or musical composition, a solution, an invention etc).





- Taking in the relationship between creativity and general intelligence, mental and neurological processes associated with creativity, the relationships between personality type and creative ability, the potential for fostering creativity through education and training, especially as augmented by technology, and the application of creative resources to improve the effectiveness of learning and teaching processes.





# INNOVATION

- We all know what does innovation mean, but let's look at together one more time!
- To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. Innovation involves deliberate application of information, imagination and initiative in deriving greater or different values from resources, and includes all processes by which new ideas are generated and converted into useful products.

INNOVATION: The term innovation can be defined as something original and, as a consequence, new, that "breaks into" the market or society.

- Innovation is synonymous with risk-taking and organizations that create revolutionary products or technologies take on the greatest risk because they create new markets.

Examples are IBM with its PC against Apple Computer, Compaq with its cheaper PC's against IBM, and Dell with its still-cheaper clones against Compaq.



# What is the relationship with science center?

- The idea is, if we have these brilliant students in our own countries. Why do we not use their creativity and innovative ideas giving an opportunity to use science center? You may ask what will be the benefits?
- Intelligence is a potential power, but if it's not used in a right way, it can also be dangerous. Many of the crimes are happening because gifted people cannot find a place to use their intelligence. But, we can definitely change this a benefit for our society. We can improve society's education level. Industries will develop their production progress and this will contribute government's economic growth. This will increase the welfare of society and allow the community to live comfortably.

