



Ellen Winner on Gifted Children

Ellen Winner is a Professor of Psychology at Boston College, and a Senior Research Associate at Project Zero, Harvard Graduate School of Education. She received her Ph.D. in Psychology from Harvard University in 1978, working with Roger Brown on child metaphor. Her research focuses on cognition in the arts in typical and gifted children. She is the author of over 100 articles and four books: *Invented Worlds: The Psychology of the Arts* (Harvard University Press, 1982); *The Point of Words: Children's Understanding of Metaphor and Irony* (Harvard University Press, 1988); *Gifted Children: Myths and Realities* (Basic Books, 1997, translated into six languages and winner of the Alpha Sigma Nu National Jesuit Book Award in Science).

iDiscoveri, a social enterprise with a mission to renew education in India, hosted Professor Winner in January along with her husband Professor Howard Gardner. ParentEdge was lucky enough to get an exclusive interview with Professor Winner, where she shared her expertise and insight, born of years of experience and research in the area of gifted children and child prodigies.

What differentiates gifted children from simply exceptionally talented children?

I believe that there is no such dividing line between a typical talented child, a gifted child, a very gifted child and a child prodigy; I think it's all one continuum. It just gets more and more extreme. Gifted children have three characteristics – the first one is pretty obvious, it's that they have a high ability to learn in a particular area – it could be mathematics, reading, the ability to draw realistically, music, or athletics. Gifted children often have a talent in one of these areas and are not particularly talented in other areas. So it's a high proclivity to learn, starting out with very high ability and learning very quickly.

The second characteristic is what I call 'a rage to master', which is another way of saying passion. These children are extremely motivated to learn in their area of giftedness and you often can't pull them away. Parents are not pushing these children; parents are trying to keep up with these children.

And the third characteristic is something I call 'marching to their own drummer.' So these are children that are different from others and they don't mind being different. Especially when they are young. Sometimes in their teen years, they try to be like others, they don't want to be gifted because they get teased. But they start out non-conformist, they are different from others, and they hardly notice they're different. They just go their own way and they even learn in a different

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way. They solve problems in a different way – not just faster, but in different ways. For example, a child gifted in Maths would solve math problems in unusual ways, not the typical way.

You mentioned that they are non-conformist in their early years, till peer pressure catches up with them. This means that because of who they are, they will feel some amount of social isolation. How do they cope with that, and how can parents and teachers help them cope with that?

I think the biggest social and emotional problem is that they can't find other people like themselves. The more extreme the gift, the more difficult it is to find children like themselves. I always tell parents that the most important thing that they can do for their child is find one other child like their own. And that's often difficult to do. If you are in a big city, it's easier, especially with the Internet, because there are a lot of groups now of parents of very gifted children – they have all kinds of support groups, they talk to each other. It may be possible to log into one of these groups and find other gifted children living near you.

In the US, we also have summer programmes, and you can start these when you are as young as 11. If you score very high on the SATs – either the Math - or the Verbal section – you can qualify to go to these summer programmes for three weeks. You take a very intensive high school course that is for children much older than you, and you take it with other children your age who are also very gifted. And children say that the most important thing they got out of these programmes was not the intellectual stimulation but, discovering other children like themselves.

As a parent, how can I recognise that my child is gifted? At what age will I start seeing the signs?

When you see a gifted child, you know it. I'll give you some very concrete examples. Children who start to read at age two, or three or four, before they go to school, when nobody is teaching them. They just pick it up. Of course, they couldn't do it if they didn't have an adult who read to them a little bit. I had one child who asked his mother to read him a book for one week and to point to each word as she said it. And then he picked up another book and asked her to do the same thing. And after two weeks, he had completely cracked the code of reading! He never wanted to be read to again. If you see a child doing that, you know your child is linguistically gifted. If your child starts to speak in full sentences before a year of age, you know that your child is gifted linguistically. If your child is obsessed with numbers and is always asking for people's birthdays, and saying "oh you were born in 1948 and he was born in 1962, that means you are x years older than him", you can tell that the child is undoubtedly mathematically gifted. I study children who are gifted in drawing and at age two, they are starting to draw things that are what we call representational –they are not just scribbles. And by three and four, they are drawing quite realistically. The drawings look nothing, like the drawings of their age peers. Another example is, children who can sit down at a piano and copy tunes that they just hear. These things are very striking.

If a gifted child is not recognised as such, and not given ample training and encouragement, will

he still continue to maximise his potential, or lose all that talent along the way?

If you have an extremely gifted child who is not given any kind of support, sometimes, he will become so bored and frustrated in school that he will stop and lose interest in learning. That is a danger and that's one reason why it's really important to have programmes for gifted children.

projects. I think that's good because these children need other children like themselves, but the problem is that it doesn't give them advanced level instruction. Because then they go right back to the classroom, this is only a kind of a 'Band-Aid' solution.

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Can these children be integrated into mainstream schools or do they need something special?

I think it's probably unrealistic to think that all these children are going to get special schools. The United States doesn't do this either – it's very expensive. So what are the cheaper alternatives? Well first I'll tell you something that we do that I don't think is very satisfactory. We have 'pull-out' programmes that start when the child is about nine. If the teacher thinks that the child is very gifted, he is given an academic test that is numerical and linguistic. If the child qualifies then he is able to go once or twice a week outside the classroom to be in a group with other children like himself who qualify, and then they do special

grades. So a child who is five years ahead of himself may just skip five grades. But that's a problem sometimes because to put an eight year old with 13-year olds is not always a good thing. It's a choice you have to make – do you want your child to be with the same age group, or the same mental level group?

There is no perfect solution. The only ideal solution is to have a special school for these children, but then you would need a special school for the mathematically gifted, for the linguistically gifted, for the artistically gifted so let's face it – it's probably not going to happen.

Another solution that I think would be the best but I've rarely seen it implemented, is if the child could grade-skip just in the area in which he has high ability and then come back down to the regular classroom. I have a friend whose child is a math prodigy. He was in a school in the sixth grade, but he was able to go to the high-school math class every day, during the same time that his sixth grade was having math. And then he came back to the regular class. This was only achieved because the parents were highly sophisticated and educated and they fought for it. The school didn't have a special programme to do this. And this would only work if the schools were organised vertically, so it was always math at the same time, history at the same time. I think that would be a good solution because then children would be with their mental-age peers for the subjects in which they have high ability, and with their age-peers for the rest of the time. But this would only work if the schools were organised vertically, so it was always math at the same time, history at the same time.

And then there is one other alternative outside of school - after-school programmes and summer programmes for the highly gifted, especially if they are in the particular area in which your child is gifted. Don't assume that all gifted children are the same - a mathematically gifted child needs something very different from a verbally gifted child.

Is there any correlation between how gifted a child is and how successful his career will be later?

Very important question - what happens to these kids later? If they get the proper nurturing, education, and parental support, a lot of them go on to become experts; by that I mean he may become a professor of mathematics, a lawyer, a doctor, an accountant, an engineer, or a professor. But not all of them do that. Some of them achieve less. We expect that they are all going to be the Einsteins. But very few make the leap from being a child prodigy to being a great creative transformer. It is much more common to be a gifted child than to be an adult creative genius. Because the skill of

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being a gifted child is the skill of being able to learn very quickly or mastering what is already known. To make the leap to being an Einstein you have to invent, you have to discover something new. That's rare. It's a different kind of skill. So I think that it's unfortunate that we expect our child prodigies to become Einsteins. It's not a fair expectation.

Mathematical and linguistic excellence is more easily assimilated within the school system. But when they are musically or artistically gifted, how do these children fare in academics? Where do they find the balance?

It's been shown that children who are musically gifted tend to do better in school than children who are artistically gifted. We don't really know why that is. One possibility is that musical giftedness involves studying an instrument which means learning to read music notations, and taking private lessons and practising every day; those are very school-like tasks.

But there is no correlation between how a child is at art and how he does at school. And that could be because children who are very good at art are not learning the skills of practising and reading a notation. It could also be that parents who are very concerned about their child doing well at school push their child in music as well because they are of the view that their child should take a musical instrument. They do not, in our culture, have the view that their child should paint. That's considered totally different and unrelated to academics. We have this view that music is related to scholastic ability and so some parents push that and that could be why there's that connection.

Schools in America do nothing for artistically gifted children - they do not have special pull-out classes for artistically or musically gifted children. As you get to high school, there is the opportunity to take more advanced courses in music or art. And that's a kind of self-selection.

What kind of parental involvement and investment do gifted children need to maximise their potential?

Well, I don't think you have to be rich to nurture a gifted child. You have to be knowledgeable. You have to recognise that your child is above his age level. And you have to show the child that that's good, that you believe it, and that it's a wonderful thing. And, you have to provide the child with materials. So what are these materials?

If it's a child who is linguistically gifted I would read to the child, and give the child books to read. If it's a child who likes to draw – you don't need expensive and fancy art material, but you need paper and markers. You need to encourage the child and also expose the child what other artists have done.

And there are other things that parents can do – if they don't have the expertise themselves to work with their children,

they can find a student who will be child's tutor. Of course that would cost money. But if you have a mathematical genius child and you don't know how to work with him, and the school is not providing the adequate stimulation, and you live in a city that has a university, then you can find a university student who is studying math and ask that person to come once a week and work with your child.

What are some of the things that schools should typically be doing to encourage gifted children?

Well, schools should realise that it's okay to recognise giftedness. In the United States, it's considered elitist! There's a feeling that we should put our resources into the poor and the learning-disabled children. Of course that is extremely important, but I don't think that we should have to choose. Schools should realise that every child should be educated at the appropriate level of talent. And to take the most high-ability children and educate them at a level below

their ability is unfair to the children. It's also a self-destructive thing for a nation to do because those children have the greatest potential to be our leaders.

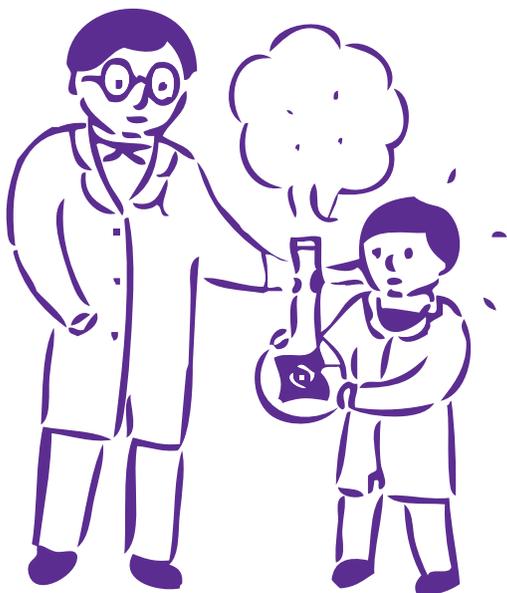
So first schools need to recognise that giftedness exists and then they need to figure out what to do about it. And I think the best thing they can do, if it is a large enough school that there are enough children with the same kind of gift, they could have special classes for them – they could have an Advanced Math class, for example. But if I were designing a school I would make it such that there was no age grouping, only ability grouping. You would take math at the appropriate level, reading at the appropriate level – whatever level you're at and it would be a mix of people with a big age range. So first schools need to recognise that it exists and then they need to figure out what to do about it. And I think the best thing they can do, if it is a large enough school that there are enough children with the same kind of gift, they could have special classes for them – they could have an Advanced Math class. But if I was designing a school I would make it such that there was no age grouping, only ability grouping. You would take math at the appropriate level, reading at the appropriate level – whatever level you're at and it would be a mix of people with a big age range.

When should parents of gifted children push them more, and when should they stop?

I think parents should encourage their children, all children, no matter what level they are at, to want to do well in school. Usually with very gifted children, the parents don't need to push, these children are self-motivated. The schools don't realise this and they think that the parents are training their children at home.

If you look at home environments of very gifted children, they tend to be enriched environments with lots of books and stimulation. Even if the parents don't have lots of money, they have very high values in education. They have lots of stimulating

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materials around. People say “oh, that’s what causes the giftedness,” but I think another more reasonable explanation is that these children are demanding stimulation and the parents are trying to find it. Of course I’m sure that there are many gifted children who are undiscovered because they come from extreme poverty, their parents are not educated and they don’t recognise it in their children. If you look at who qualifies for gifted programmes, its way slanted towards the upper income and Caucasians and Asians. And the problem is that African American and Hispanic kids and poor kids from all races are left out. And this is not because of racial differences, it’s because these children are not recognised since their parents don’t have the means and the education to recognise it and fight for them and stimulate them.

So are you born with giftedness or is it something that is inculcated in you because of who your parents are?

I do believe that you are born with giftedness. Children who are born with very gifted abilities have different brains – we don’t know what is different about their brains but they have a capacity to learn in a way that other children don’t. However the environment also plays a role. For example, the claim that Asian or Chinese children are more gifted musically is bogus. There is no evidence that they are born this way. We do know that the culture and values of hard work, discipline and sticking to something and high achievement encourages talent - when the whole culture is behind you pushing, you’re going to achieve more. In America, we have very low expectations of our children, and our children, therefore, don’t do very well. In China, Singapore and Japan, the parents have very high expectations and it’s accepted that children work very hard. This is also true of Russian and Jewish cultures. So it all has to do with culture and what you value. If you look at East Asian schools, and I’m sure the best schools in India, and the best schools in Europe, they challenge children much more than in American schools. Challenge everybody more and then take

the children who are still way ahead of their peers, and give them something different and more advanced.

How do you ensure that gifted children lead somewhat normal lives?

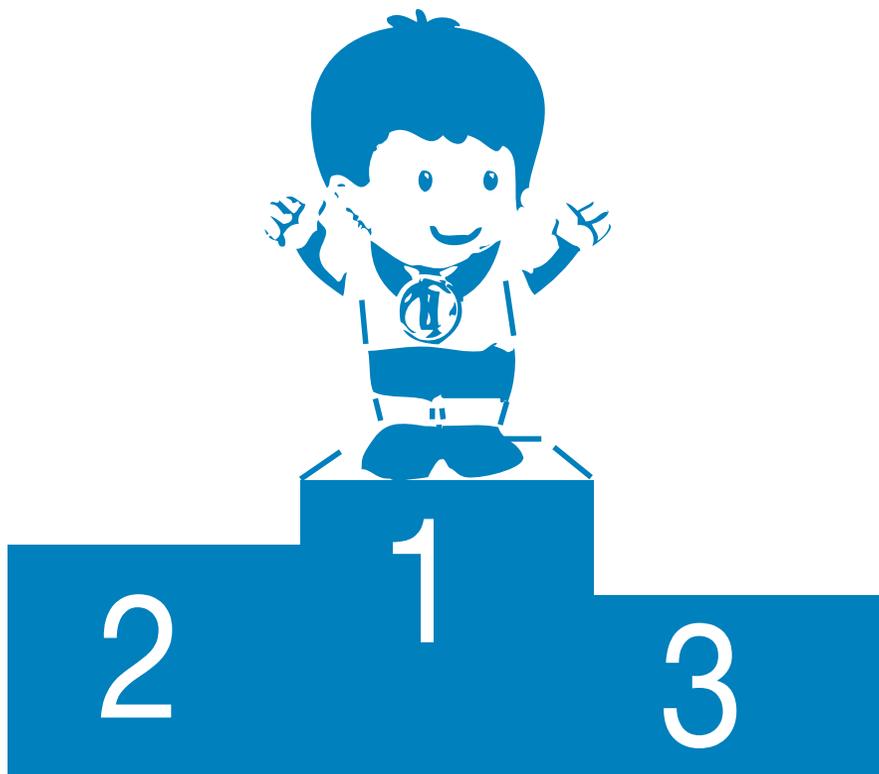
Great question! So what do we mean by normal lives? You really can’t make these children normal. That’s the first thing that parents have to understand – their children are not normal. It’s not a bad thing, and they need to find other non-normal children like them. I do think it is important to ensure the emotional happiness of these children and so one thing I recommend is that parents not put their children on the public stage. That means making a young child play piano at a place where only adults play just to have people say, “Oh my God! Look at that eight-year old performing at Carnegie Hall!” or putting them on radio quiz shows. I think that’s too much pressure.

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I think the most important thing that parents can do is to let the child know that she is loved not for the fame she is bringing their parent, or her gift, but for herself. Some parents are so excited by the fame that their children bring them that the child may get the idea that she has to keep being famous to make her parent happy. That's dangerous.

And then finding other children like themselves – they discover that there are other children who are not normal, whom they can relate to. The older the child gets the easier it is because they get to self-select into their niche. So when you choose a university, if you are of high ability, you are going to go to a place where there are other kids just like you. But at a younger age, parents need to try and make their environment as normal as possible.

- As told to Kritika Srinivasan, Editor

If you are interested in reading more about gifted children and finding out if your child is gifted, be sure to pick up a copy of Professor Winner's book "Gifted Children: Myths and Realities" (BasicBooks, 1997). You can also email her at winner@bc.edu with your questions. ■■■