Strategies for Closing Excellence Gaps

Nuremberg, Germany 2nd World Giftedness Center Conference Diversity and Inclusion in Talent Development

Jonathan A. Plucker (a) Jonathan Plucker 29 September 2019

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A podcast about parenting and educating bright and curious kids from the Johns Hopkins Center for Talented Youth

http://ctyj.hu/brightnow

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NATIONAL ASSOCIATION FOR Gifted Children Shining a light on gifted children



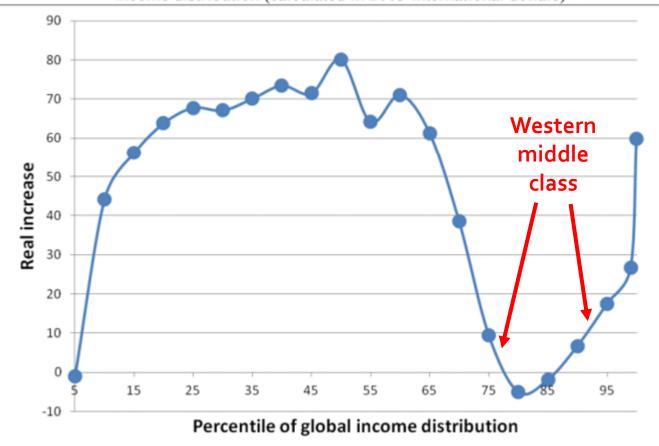
@NAGCgifted

#GiftedMinds

A little background

Milanovic "Elephant Graph"

Figure 4. Change in real income between 1988 and 2008 at various percentiles of global income distribution (calculated in 2005 international dollars)



Note: The vertical axis shows the percentage change in real income, measured in constant international dollars. The horizontal axis shows the percentile position in the global income distribution. The percentile positions run from 5 to

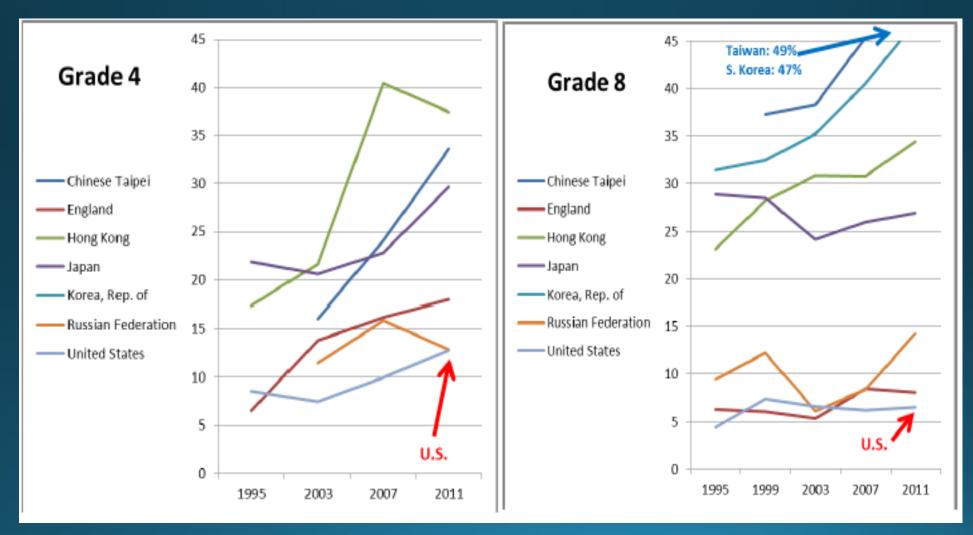
The 21st Century ...

 ... is clearly proving to be a brave new world where skills and talents that previously helped us achieve success need to be rethought.

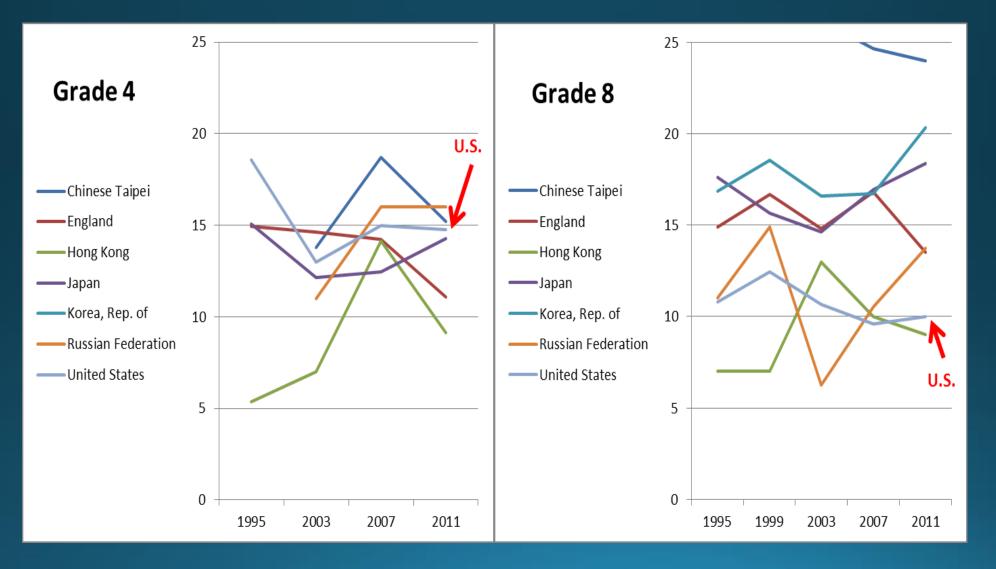
Part of that is rethinking where talent comes from.

A little data

Percent of Advanced Scores (625+) on TIMSS Math Assessments



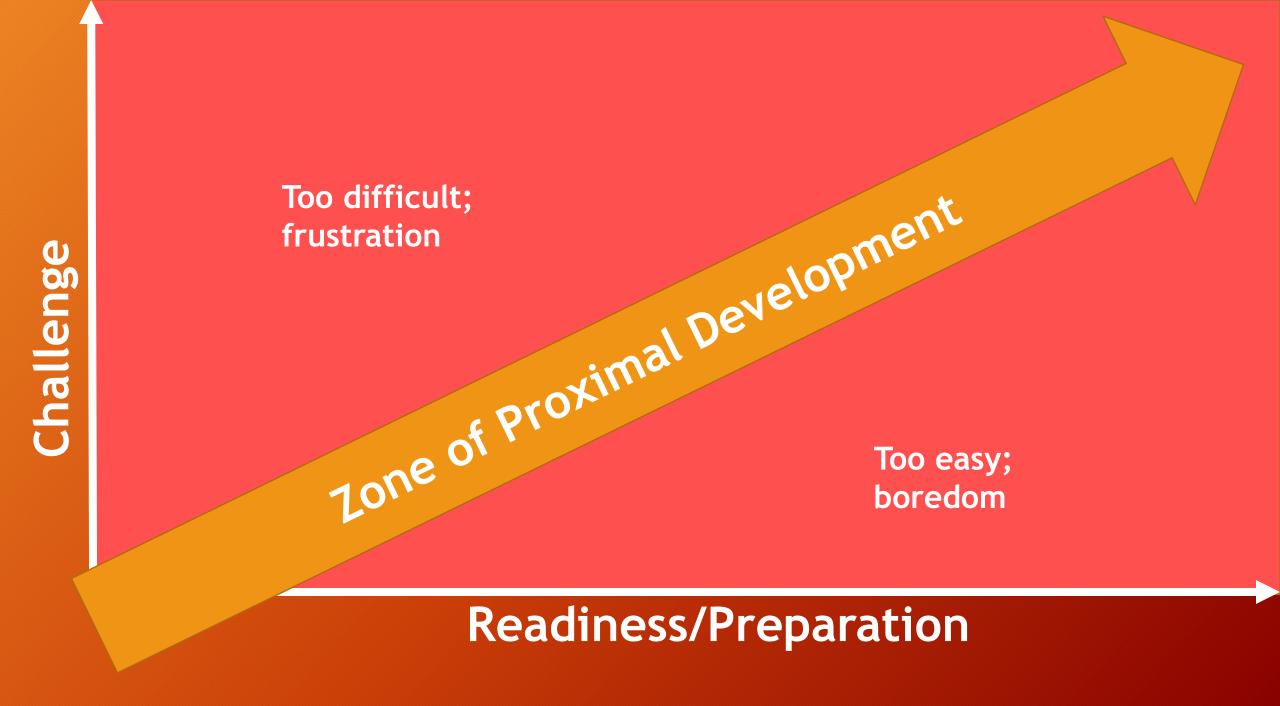
Percent of Advanced Scores (625+) on TIMSS Science Assessments



... well, they aren't. So when people say, "These kids will take care of themselves"... How Many Students Are Performing Above Grade-Level?

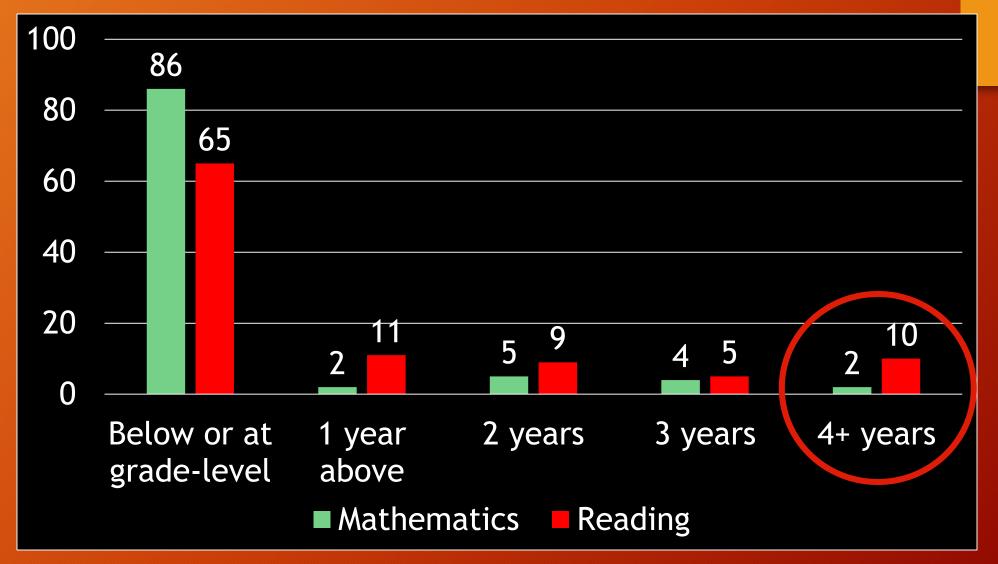
From research by Matt Makel, Michael Matthews, Scott Peters, Karen Rambo-Hernandez, and Jonathan Plucker

Published as a policy brief by the Johns Hopkins Institute for Education Policy and with slightly different data in *Gifted Child Quarterly*, *61*, 229-238.



Percent of Students Scoring Above Grade Level								
		ELA			Math			
	Grade	WI	CA	ТΧ	WI	СА	ТХ	
	3	34%	23%	20%	26 %	19 %	16%	
	4	39 %	29 %	25%	26 %	18%	29 %	
	5	44%	34%	30%	31%	22%	34%	
	6	49 %	34%	24%	36%	27%	32%	
	7	47%	38%	30%	37%	28%	33%	

MAP Test Results



"...students performing above gradelevel are not rare and likely exist in every classroom in every school"

16% of the variance falls between schools - almost all of the diversity comes from the classroom level!

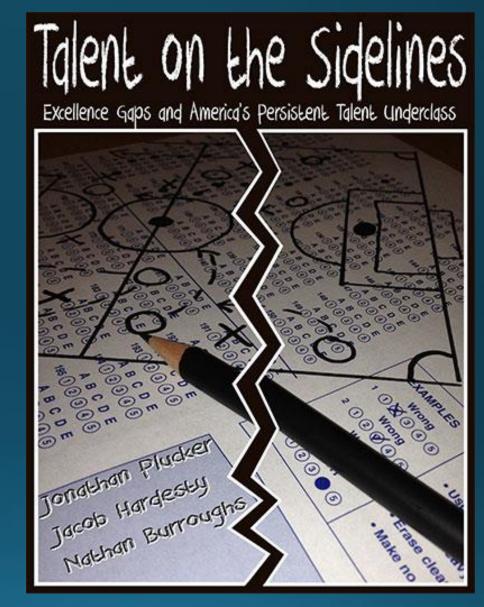
Meaning: Every classroom probably has these students. Every. Single. One.

Two Takeaways:

- Classrooms where large percentages of students already are above grade-level, but nearly all of the teacher's focus is on learners working at or below grade-level, are not going to facilitate growth or further development for advanced learners
- There is little support for the current age-based classroom structure as the optimal organizational structure for fostering student development

... well, they aren't. So when people say, "These kids will take care of themselves"...

Talent on the Sidelines Results

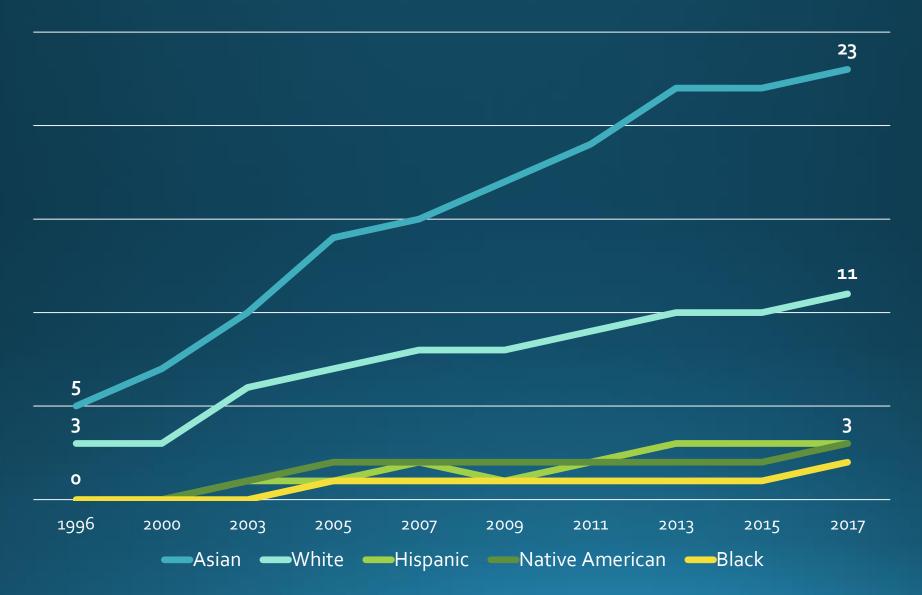


http://cepa.uconn.edu/mindthegap

NAEP % Advanced Math Grade 4



NAEP % Advanced Math Grade 4



... well, they aren't. So when people say, "These kids will take care of themselves"...

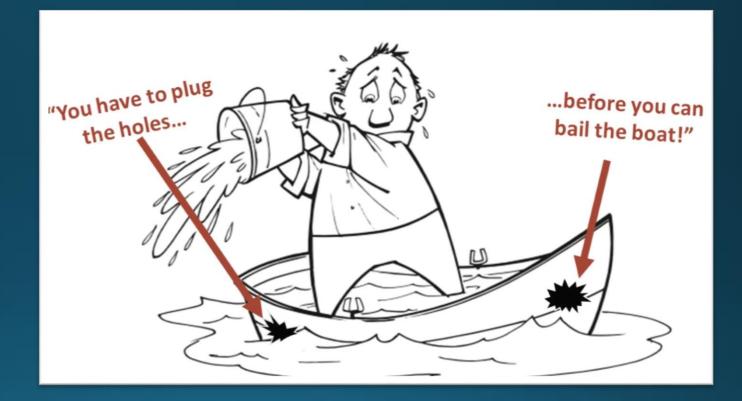
Big Implication

- We can predict with high accuracy that a talented student who is poor and/or Hispanic, Black, or Native American will not perform at advanced levels in K-12 education.
- Hence "persistent talent underclass."

Some potential solutions

What about rising tide arguments?

Empirical evidence that instructional strategies that get students to grade-level are distinct from those that get students to above grade-level.



From book with Scott Peters:

Published by Harvard Education Press

go.uww.edu/peterss



Few arguments against universal screening ...

• Primarily due to cost (extra round of testing!) or efficiency (not relevant for vast majority of children tested).

• Cost:

- Why not use existing data?
- Efficiency:
 - Less of an issue if costs are contained.
 - Trade-offs feel worth it if you identify more low-income and minority students.

Lots of arguments against local norms ...

Lowered standards

Portability

activity all

- Portability:
 - Concern local-norm-identified students will move to districts with higher standards.
 - Disadvantaged students move a lot, but do *that* many move into upper-class neighborhoods?
- Standards:
 - Concern students will "water down" level of rigor (can be code for something else!)
 - Then frontload to ensure they're ready. Will come back to this later.
 - Concern students will struggle when put in environment where national norms are used, such as college and the workplace.
 - If it works*, why would they struggle when put into an environment where national norms are used?
 - *Research suggests it works.
- Recent study:
 - Using local norms in concert with universal screening can increase low-income and minority representation MASSIVELY.

5% Norms

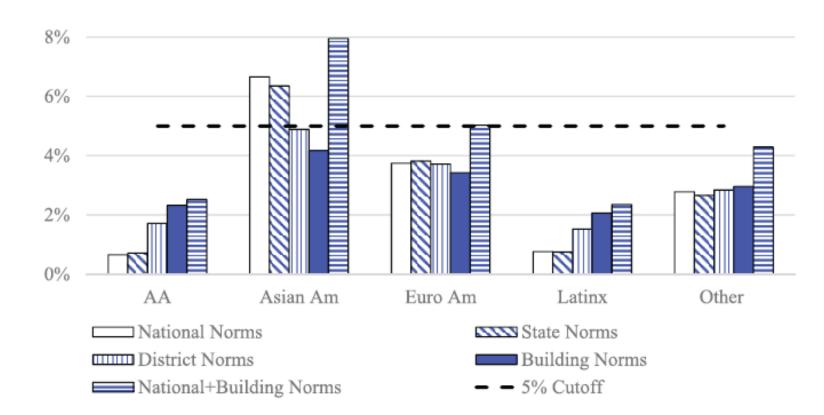


FIGURE 1. Proportion of each race/ethnicity that was identified as gifted in reading by scope of norm at 5% cutoff. AA = African American.

15% Norms

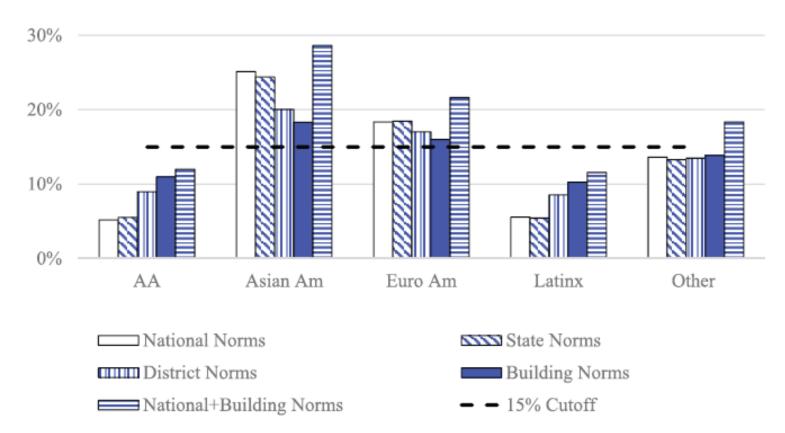


FIGURE 2. Proportion of each race/ethnicity that was identified as gifted in reading by scope of norm at 15% cutoff. AA = African American.

GROW THE PIE!!!



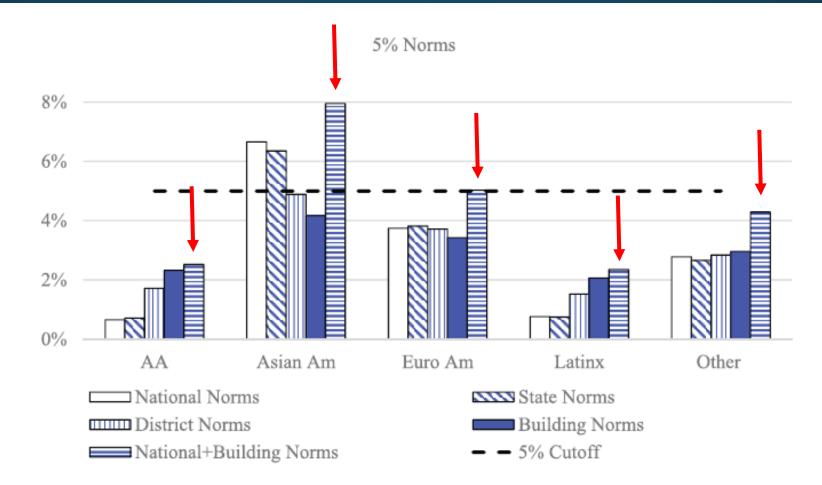


FIGURE 1. Proportion of each race/ethnicity that was identified as gifted in reading by scope of norm at 5% cutoff. AA = African American.

Important caveat

- Districts with even distribution of student demographics across schools will likely not benefit from the use of local norms ...
- ... but it's still probably a good idea to place services locally for the opportunity reasons discussed earlier.

We use local norms all the time without hesitation ...





National Merit Semi-Finalists Uses Local Norms: 2019 PSAT Score Cut-offs

- 223 CA DC MD MA NJ
- 222 CT DE VA WA
- 221 CO IL NY OR TX
- 220 AZ GA HI MN NC PA RI
- 219 FL IN MI NH OH TN
- 218 KS KY NV

- 217 LA ME MO
- 216 AL IA NE SC VT WI
- 215 AK MS NM OK SD UT
- 214 AR ID MT
- 212 ND WV WY

Upcoming paper by Van Tassel-Baska & Hubbard

- Observed multiple high schools and evaluated presence and depth of differentiation.
- Rarely saw differentiation.
- When they saw it, it was generally done well.
- Quality differentiation was most common in AP courses.
 - Me: Is differentiation outside of ability grouping impossible?
 - JVTB: I don't want to speak beyond our data ... but we may often be asking teachers to do the impossible.

Ability Grouping

- "First, all trends are positive. As class sizes decrease, information gain increases over baseline, sometimes substantially (up to 80% in some conditions). Second, gains due to ability grouping are most apparent for less extreme target concepts – that is, the more students differ in their initial knowledge/abilities with **respect to these concepts, the more grouping matters**. Third, class size plays a relatively small role: beyond two or three teachers, additional gains are marginal. Thus, within our teaching games, our simulations show that – for teachers with perfect knowledge – grouping students into even just a few "tracks" based on their prior knowledge will produce substantial benefits, especially for concepts where students' starting points are variable."
- Lawrence Liu & Michael C. Frank (2018), preprint, *Modeling classroom teaching as optimal communication*.

What's Your District's Talent Development Plan?



EQUAL TALENTS, UNEQUAL OPPORTUNITIES:

A Report Card on State Support for Academically Talented Low-Income Students

> Dr. Jonadum Placker, University of Connecticus Dr. Jennifer Giancola, Jack Kenn Cooke Foundation State Healey, David Armli, and Chen Wang, University of Connecticus

> > March 201

2015 Report Card Study

Funded by the Jack Kent Cooke Foundation

Identified key excellence and excellence gap policies and outcomes

Determined how each state ranked on those policies and outcomes

New edition to be published in January

Big Take-Away of New Report:

 States and districts have a range of important excellence policies ... but they're NOT connected.

• Key questions:

- How does a talented young child move through your schools from K-12?
- How would you describe the process/services to a parent of a talented child?
- Do you include ALL of your excellence programs in your TD plan?
 - Gifted, honors, AP, acceleration, grouping, academic counseling, dual credit, aid for economically vulnerable families, etc.
- Does your TD plan address transitions among grade levels? (Biggest parent concern)

Learn from the Mistakes of Chinese



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http://blogs.wsj.com/chinarealtime/2016/03/25/thousands-of-injuries-mishaps-at-chinese-marathon-prompt-alarm/

CHINA REAL TIME REPORT

Thousands of Injuries, Mishaps at Chinese Marathon Prompt Alarm

Mar 25, 2016 2:31 pm HKT

Frontloading Matters!

土 收起 Q 查看大图 つ 向左旋转 C 向右旋转



If we focus on ID vs. frontloading ...

- We will never truly close excellence gaps.
- Feel-good equity only makes adults feel good!
- Sameness vs. Equity

To Recap:

- Create a talent development plan for your district
- Universally screen, preferably using local norms
- Align ID system with your programming
- School-based/site-based programming to extent possible
- Ability group (flexibly) whenever possible
- Ensure all staff have basic understanding of giftedness and talent
- Frontload, frontload, frontload

[Rene] Villalobos, 59 year-old plumber from Ft. Worth, who has run over 1,000 marathons and 150 100-milers:

"It's adventure. Adventure, that's what it is. It's terrible to live life normal. You need to try to be awesome."

> Profile by Brooke Stephenson, December 2018 issue of Trail Runner magazine, https://trailrunnermag.com/snowball/the-king-of-the-trails.

THANKYOU!

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