



Temples of learning in the city of temples...

December - 2018

from the Editor's Quill...

"Closing opportunity gaps in education is the only way to close achievement gaps" of any kind. And we as facilitators need to take up the onus not only to inculcate but even foster the same in those we educate. Wishing each one of us perseverance & the resolve to do so in thought & spirit!



Regards : Sangeeta Sehgal

Closing the opportunity gaps



Modernism or Westernisation, which one to choose? This is a seminal question arising before us whose seminality is not been easily comprehended by us. The coeval episteme in which we live is a subject of judicious introspection which is directly related to the gross achievements of the dwellers, dwelling. The most important aspect of it being the availability of adequate opportunities to the youth of nations, India in particular. It is just like a reverie coming true that how would the world look like if the deservers receive what they aspired for it their spine. The world would be no less than. Platonic heaven, rather than the 'ad hoc' happy one.

The corruptive approach of prejudice based modes of employment and employers also make the arena of opportunities a profane one. A proper and mixed amalgamation must be done to gain 'Synthesis' amidst 'Thesis' and 'Anti-Thesis'. This would definitely enhance the quality of

the education system on one hand, and bridge the gap between the opportunities and the youths of a developing country like India.

These parameters try to dismantle the gestural structure of opening opportunities, but could be converted into the trivial if human enlightenment leads in this trench. To boost up, we must listen to Philip Larkin's words which follows,

"Why should I let the toad work Squat on my life? Can't I use my wit as a pitchfork And drive the brute off?"

Closing the opportunity gaps

Mr. Abhishek K. Srivastava
Sunbeam Varuna



How can educators narrow this opportunity gap? These obviously isn't a one-size-fits-all solution: do you have any general suggestion for educators?

In order to close the opportunity gap in math, we must address structure obstacles, such as tracking, that stand in the way of students having access to meaningful instruction. Two of these obstacles are tracking and the use of assessment.

Although tracking is often viewed as a secondary concern, the reality is that "track" in mathematics are often of established as early as the primary grades when students who struggle in kindergarten are placed in a "WOW" mathematics group in first grade. Once placed in these low instructional groups, it is very difficult for students to move to an on grade level group.

The problem is that students in high or grade level groups typically have access to new mathematics ideas concept and problem solving, whereas students in low group tend to repeat the same basic computation skills, putting them further behind their peers in grade-level groups. However, when these student are given access to grade level curriculum and appropriate support evidence shows that they are more than capable of learning the mesial and catching up.

Ms. Shivani Pandey
Sunbeam Indiranagar

CLOSING THE OPPORTUNITY GAP IN DEEPER LEARNING



Closing the opportunity gap in deeper learning is necessary. Students in public schools, especially those in high-risk areas are tracked throughout their academic careers and during this time they are taught to regurgitate information on standardized tests. I was one of these students and I thank each of my gifted teachers and coaches for giving me the time and attention my other teachers could not. In today's world, children need to be taught to think critically and engage with the greater world surrounding them and at this very moment students in high-poverty areas are not getting this. The idea here is to engage with students on a culturally responsive level and stop looking at them through the lens of the deficit theory. I applaud this idea because it promotes educational equity and equips students with the know-how to transcend their cultural or socioeconomic values in order to gain a different and, usually, more useful cultural capital for their future.

Mr. Vinay Kr. Lal
Sunbeam Indiranagar

THEME OF UPCOMING ISSUE : TEACHING SOCIAL RESPONSIBILITY (BIOLOGY)



Why Students need more "Maths Talk"

Want to support your students understanding of Maths? Talking will play a critical role and a good place to start is to talk about math yourself.

By "Math Talk" we mean sharing, analyzing and making sense of math. Students might discuss their strategies for solving a problem, explaining not only what they did but also the reasoning behind their work. They can also make observations, pose questions and express uncertainties.

It's also key for students listen to their peers to understand what they did and respond with a comment or errors might emerge. These are not things to avoid, rather, they are opportunities to extend learning. Engaging in math talk helps all involved understand the ideas at hand.

Maths talk support learning. It can improve memory and understanding; aid the development of language and social skills and best confidence and interest in maths.

Research, such as the work led by education researches Suzanne Chapin and Beth Herbel Eisenmann, has shown how math talk support learning. It can improve memory and understanding; aid the development of language and social skills; and boost confidence and interest in maths.

Maths can be found in anything in ways that are appropriate for different ages. Say you are out shopping; How many people are in the store? How high is the ceiling? How many beach balls would it take to fill up the room? How do you know? Taking the time to engage with your student around any of those questions is math talk.

Reena Sharda
Sunbeam Lahartara



Closing the opportunity gaps

Referring to various dictionaries, one may find that opportunity gap refers to inputs - the unequal or inequitable distribution of resources and opportunities. Generally speaking, opportunity gaps can be noticed or identified in various forms - some of them are as mentioned below which can give rise to opportunity gaps-

- * Often minority students develop prejudices that believe them equal and equitable access to learning opportunities .
- * Sometimes students raised by the parents with low academic achievement and qualifications fail to value the post secondary education and as often seen are not given genuine familial encouragement and support which are available to other students properly cared for by the aware parents .

* Children raised in a non-English speaking family and ambience are subject to having the experience of having limited education opportunities .

* So far the measure to be used for closing the opportunity gaps are concerned , creating a school climate including academics, social and emotional development of all students must be put at the top . It means that every section must have the opportunity to stay in a place that feels safe and supportive and where all sorts of conflicts are handled in productive ways . This is the need of the hour that instead of practicing exclusionary disciplinary forms including suspensions and expulsions, the focus should be there to create a school culture in which conflicts are resolved quickly and maturely and where priority is given to healing damaged relationship . Laying emphasis on building a culture of mutual respect amongst students and faculty is another key solution .

The students coming from lower income families must be provided with more and better learning time during the school years and vacations as well . Schools should focus on creating partnerships to provide for unaddressed health issues including physical and mental particularly from low income families . The school should employ effective strategies such as providing all teachers with professional development about the unique needs and strengths of language based minority students ensuring that they have access to qualified bilingual teachers .

In a school not all the students come from same or similar family background . So, the teaching fraternity needs to be proactive to know about students basis and specific needs so that a good learning ambience and opportunity can be created for them .

Mr. Manish Srivastava
Sunbeam Lahartara

Closing Opportunity Gap



The term opportunity gap refers to the ways in which race, ethnicity, socioeconomic status, conjugate proficiency and familial situations contribute to lower educational aspirations and achievement for certain groups of students. The discussion around the discrepancy in academic progress of students in Mathematics can be more fruitful in the light of the above statement. Closing the opportunity gap in the learning of mathematics is the key to bridge the consequent 'achievement gap'.

One of the problems with the phrase 'achievement gap' is that when it is used some people interpret it to mean that the student is to blame for the gap. However, if we refer to the 'opportunity gap', then the responsibility is clearly on we as educations to address the learning opportunities we provide students that lead to learning differentials.

Mathematics learning outcomes must not be solely viewed through the lens of test results; they must also be seen through the lens of experience. Learning outcomes are in large part a function of how students experience mathematics learning, participate in it and are motivated to do it. For us as teachers, one key point is that we must help students see themselves as capable of learning and using math.

Much of the focus of assessment in mathematics teaching and learning is on the end of the year tests used for accountability purposes.

The focus, instead, should be on the results of classroom-based assessments and view those results as a reflection on how effective we have been in the classroom, how students have experienced mathematics in the classroom and the opportunities we have provided to students. In order to close the opportunity gap in maths, these structural obstacles must be addressed.

Students who've been engaged in thinking, problem solving and discourse-focused classroom, tend to be more open to ideas from others and better at understanding that they may approach a problem in a different way from their peers. It is important to make students believe that they are not only as smart as when they were born, but that working on challenging problems can make them smarter; intelligence has as much to do with effort as with the genes one is born with. The notion of growth is very essential.

All the most lucrative jobs are directly or indirectly related with mathematics. Government departments, semi-governments, PSU's, research organizations, banking sectors, colleges, universities, DRDO, ISRO, NAL etc. are always on the look for trained mathematicians. There is a wide array of career opportunities for students, in mathematics, and opportunity to learn remains the key factor in deciding whether the child will achieve his/her coveted career.

Research indicates that all students can learn mathematics when they have access to high-quality mathematics instruction and are given sufficient time and support to master it (Slavin & Lake, 2009). It's all about giving more students access to learning mathematics-it's all about closing the opportunity gap.

Mr. Rahul Kr. Roy
Sunbeam Bhagwanpur

8 Most Popular Maths Teaching Aids for Kids



The best way for kids to learn a subject such as mathematics is to make it as tangible as possible. Whilst this includes ensuring problems have real-world application and using a student's own set of knowledge to contextualise questions, it also involves using teaching aids. Over time these aids have evolved through curriculum development and are now highly effective and integral pieces of equipment that teachers and tutors use to support children in their learning of new mathematical concepts. Here are the ten most popular maths teaching aids

1. MAB – place value cards and physical items such as matchsticks, buttons, ping pong balls, corks.

The iconic MAB wooden prisms, columns and blocks have been used to support children's developing ability to work with numbers that are hypothetical i.e. numbers in a maths problem. Each piece represents a number value that they are working with (hundreds, tens or ones) and for processes such as subtraction they are an excellent way to practice

borrowing and paying back. Children who struggle with the concept of visualising numbers and problems in their mind can continue to use the physical items to assist with their counting early into high school.

2. Online and Worksheet resources for primary aged students

Whether you are a teacher, parent or tutor sometimes having some ready-made worksheets can be a great jumping off point to begin lessons. There is no point in reinventing the wheel and the convenience of printable sheets is a tried and tested aid both at home and in the classroom.

3. Food such as pizza, cake, pie etc.

Telling time is taken for granted especially as technology brings the ease of digital clocks. However, telling time with analogue clocks, as well as counting and subtracting timings can be a much-needed skill for a variety of other mathematical problems such as problem solving. It is also an essential life skill.

4. Clock dials, stop watches and sand timers

Telling time is taken for granted especially as technology brings the ease of digital clocks. However, telling time with analogue clocks, as well as counting and subtracting timings can be a much-needed skill for a variety of other mathematical problems such as problem solving. It is also an essential life skill.

5. Protractors, set squares and compasses

This type of mathematical aid may seem a little specific, but it is another essential skill that leads on to more advanced mathematical concepts and problems. Geometry – measuring angles, determining area and size is a very important life skill. These aids are essential classroom kit for students entering into a high school math environment.

6. 2D and 3D shapes – tangrams, pattern blocks and attribute blocks

Linked to geometry, shape blocks are another math aid which are especially useful, particularly for younger children identifying shapes. These types of aids also allow students to use the shapes to problem solve area puzzles, create and breakdown patterns, learn about symmetry and classification.

7. Dice, cards and counters and spinners

Probability plays mostly into the skill of problem solving. Many students have a difficult time with this type of mathematical skill as there is much innate knowledge and natural ability linked to its mastery. Dice, cards, spinners and the like are interactive and engaging math aids to get children involved in learning about probability, chance, number patterns and statistics.

8. Beakers, funnels, cylinders, scales and weights

Learning about mass, weight and volume, younger students benefit enormously from visual representations. Being able to see the elements of the question i.e. the volume of water supports their understanding of not just calculating the answer, but also understanding the parameters of it.

Mr. Ashish Gupta
Sunbeam Annapurna

Opportunity Gaps



"The opportunity to learn - the necessary resources, the curriculum opportunities, the quality teachers - that affluent students have, is what determines what people can do in life."

Opportunity gap" draws attention to the conditions and obstacles that young students face throughout their educational careers. It

therefore accurately places responsibility on an inequitable system that is not providing the opportunities for all kids to thrive and succeed.

While a shift in terminology will not solve the pervasive inequities students face, words have meaning. We believe it's important to use language in a solutions-oriented way that promotes systemic reform and empowers communities to demand more.

* The opportunity gap is the disparity in access to quality schools and the resources needed for all children to be academically successful.

* If every child is to have an opportunity for success, every student must have a true Opportunity to Learn.

We must close the opportunity gap in education if we want to close achievement gaps.

* Closing the opportunity gap is the only way we will make progress toward closing academic achievement gaps .

* We must commit to eliminating the opportunity gap if we are going to build a stronger, safer and more prosperous nation.

* Wealthy districts often are able to replace lost resources- which widen opportunity gaps- through increased tax support, but poor districts cannot.

We can close the opportunity gap.

* We must do everything possible to make sure that each baby born today has the Opportunity to succeed tomorrow .

* We can close the opportunity gap by guaranteeing every child's right to a public education based on high-quality early childhood education, effective teachers, college preparatory curriculum and equitable instructional resources and policies.

* In every town, city and state, public schools will help our nation fulfill its potential.

* Raise your voice. Get connected. Take action.

Mr. Amit Pandey
Sunbeam Suncity

The need to close opportunity gaps



What is Closing Opportunity gap?

The term "opportunity gap" refers to ways in which race, ethnic, socioeconomic status community wealth and family situations contribute to or perpetuate, lower educational aspirations achievement and attainment for certain group of students. It also describes sensible policies grounded in

evidence that can restore, and enhance educational quality for all students, moving beyond conventional academic discourse. It will spark vital new conversations about what schools, parents, educators and policy makers can and should do to give all students a fair chance to thrive.

Why is it important ?

Closing opportunity gap are often attributed to the poverty status of students to avoid addressing race. The opportunity gap between racial groups persists even among low income and non-low income students. While poverty can compound the opportunity gap for students, we must acknowledge that our middle and upper income students are still in opportunity gap. The system must address the needs of the students.

India is a land of contradictions we have among the highest number of millionaires in the world, but a large percentage of the population lives in poverty. We churn out doctors, and engineers but have a high illiteracy rate.

On an average a student from a low-income family studying in a government school will not do as well as a student from an affluent family who studies in a high and private school. This difference in result as attributed to the difference in the opportunities that both the students access from their education. If we give every child an excellent education then the comparison would give us different results.

Of course this is not true in each and every case but there are a lot of examples out there to prove that this is not just a theory. Once the opportunity gap is closed, the achievement gap will close as well as and slowly but surely that will lead to the wealth gap narrowing down.

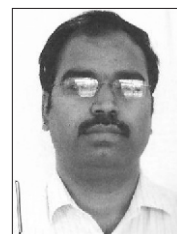
Thankyou and Jai Hind !

Ravindra Kumar Bharti
Sunbeam Annapurna

Closing the opportunity gaps

There are two words opportunity gap and achievement gap. Opportunity gap refers to inputs of unequal or inequitable distribution of resources, while achievement gap refers to outputs of unequal or inequitable distribution of educational results and benefits.

It means, it is matter of input and output. And there are lots of input from government, either it is in form of semi government or autonomous body. And things do not end here. It depends through which hand (person or institution) these inputs (resources) reach to our beneficiaries (learners). I want to clarify my opinion with an example- Government started mid-day meal, free education till age of 14. In a few states it works very well, while in some states its a matter of 'work on paper' only. Due to this a community (teachers or mentors) is not able to develop the skills in learners. And output (achievement gap) is - learners are able to encash the opportunity, which are available around them. Another fact is that due to unawareness of opportunity, learners are not able to reach their goals. We can do lots of things to make learners gap the bridge between opportunity gap and achievement gap like , we can enhance cultural competencies, comprehensive support for learners, outreach to learners' families, extended learning oppurtinities and provide healthy classrooms that support learning.



Mr. Srikant Dwivedi
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