

“Marshmallows and a Growth Mindset: Life Lessons from the World of Education Reform” by Abigail Smith

Yom Kippur presentation for Machar—September 26, 2012

Good morning.

Thank you to Nadine for inviting me to speak today. It’s given me a chance to do some thinking during this reflective time of year, and I thought I’d share some observations and lessons learned through my work in public education reform.

To give a little context for those of you who don’t know me, I’ve spent the last twenty years working in PK-12 public education – as a teacher, designing teacher training and support, as a policy advocate, and a school district official, and during these last 7 years also as a public school parent in DC. My entire career has been focused on low-income communities of color, who continue to sit on the wrong side of an unconscionable gap in academic and life outcomes between them and their white and wealthier peers.

With apologies to those of you who are fasting, I am going to start with a story that involves food. Many of you have probably heard of the so called marshmallow experiment, which was famously done by Stanford researcher Walter Mischel in the late 60s, and replicated many times since. The experiment was done with children – four to six year-olds. Here’s how it works. A researcher brings a child – let’s call her Rebecca - into a room with a one way mirror (unbeknownst to Rebecca, of course), has her sit down at a table, and puts a single marshmallow on the table in front of her. The researcher tells Rebecca that he is going to leave the room for a while and that while he is gone, she can eat the marshmallow any time she wants, or she can wait until he gets back in which case she will get a second marshmallow. The researcher then leaves the room for 15 minutes – or until the marshmallow is gone.

So, Mischel does this with hundreds of kids, and here’s what happens. Relatively few kids eat the marshmallow right away – they mostly seem to want that second marshmallow and make an attempt to hold out. There is a real range as to how long they can delay their gratification, but only about 30% of the kids are able to do so for the full 15 minutes. So – who cares? Hang on to that question for a bit.

Let's shift to another researcher – professor of psychology Carol Dweck, who has studied how people's approach to learning differs and coined the terms “fixed mindset” and “growth mindset”. Here's how she defines those terms for those of you who aren't familiar with her work.

In a fixed mindset, people believe their basic qualities, like their intelligence or talent, are immutable or fixed traits – you ARE smart or you ARE athletic or you ARE artistic; that inborn talent is the key driver of success.

In a growth mindset, people believe that their most basic abilities can be developed through dedication and hard work— intelligence and talent serve as the starting point, but success is ultimately defined by effort. Now to be clear, having a growth mindset does not mean believing that everyone can be Usain Bolt or Meryl Streep, if they just work hard enough. But it does mean believing that in almost any situation any person can get a lot better at just about anything.

So why does it matter which of these learning mindsets someone leans towards? Dweck's research has demonstrated that people's mindset for learning has a strong measurable impact on some critical behaviors – their persistence, their resilience in the face of obstacles – and ultimately on their life outcomes. People with a strong growth mindset for learning are more successful – in their academic and professional achievements and even in their relationships with others and sense of personal fulfillment – than are those with a fixed mindset.

A person with a fixed mindset sets limits on her own potential – without realizing it. She doesn't take risks when it comes to learning – why bother trying that; I'm not going to be good at it. And she views others in the same light – making narrow assumptions about a person's potential. A person with a growth mindset, on the other hand, will take risks to learn something new, will persist when the going gets tough, and will assume that others can learn and improve, as well.

Now most people upon hearing this will say – oh, I have a growth mindset – of course I think that effort matters. But Dweck has found when we look at our own beliefs and actions a little more closely, many of us tend to be closer to the fixed mindset than we would like to believe – I know that is what I've discovered in myself – and it is what I have seen far too often in public school classrooms around the country.

So where you fall on the growth vs. fixed mindset continuum affects all of us in how we approach our lives and perceive others. But as you can imagine, this question takes on greater significance for parents and for educators as they send messages – implicit and explicit - that shape the learning mindsets of their children and students. When we - with the best of intentions – encourage kids to believe how smart or talented they are, rather than encouraging them to believe in their ability to grow and learn, we are reinforcing a fixed mindset. When we believe we are boosting kids' confidence by lavishing praise on their every little accomplishment, we are in fact stunting that very confidence by making them believe that struggle is not valued.

When we, on the other hand, praise children's effort and persistence, when we are honest with them about how far they have come and how much more there is to do, when we demonstrate patience as they wrestle with a challenge, and praise them for sticking with it until they figure out the solution, then we fuel their confidence as learners and as agents of change.

I'd be willing to wager that Olympic sprinter Oscar Pistorius mother, had a growth mindset – which she passed along pretty darn effectively to her son.

Let's get back to Rebecca and the marshmallows. So remember that only about 30 percent of kids were able to hold out for 15 minutes to get that second marshmallow, despite what appeared to be the best of intentions on all of their parts. Turns out that the degree to which these four to six year-olds delayed gratification was a better predictor of their success in high school than was their IQ – independent of race, socio-economic status, gender. If you were able to hold out for the second marshmallow when you were 4 or 5 years old, you were much more likely to be successful when you were 14 or 15 – academically and on a number of other measures, and follow up studies showed the same trends well beyond high school. So what made the difference between the delayers and the kids who just couldn't wait?

If you look at videos of the kids who were the best delayers, you see that they do all different things to distract themselves – singing, there's a lot of smelling the marshmallow or squashing it. Some kids look away from it; some sit on their hands or put their hands on their mouths. But they all used strategies that are part of what early childhood folks call "self-regulation" and what neuro scientists call "executive function" – the set of brain functions that allow you to make reasoned rather than emotional choices, to resolve conflicts, to control impulses, to delay gratification. Self-regulation is not at all the same

thing as compliance. So in other words, it was NOT about their ability to follow directions given by the adult researcher, but rather about their internal ability to override an instinct or impulse with a conscious strategy.

So where does that leave us? Do we just give our kids the marshmallow test at age 5 and then sort them into groups of those who are going to thrive as adults and those who won't? Well the good news is that, like reading and math, self-regulation and executive function can be effectively taught – just as the growth mindset can be nurtured and reinforced. We can teach young children to develop self-regulation skills – though guided and self-directed play and specific opportunities to learn and practice those strategies in rich and increasingly complex situations. And in doing so, we can change those kids' life outcomes.

We can teach older children about brain development and the control they have over their own learning. And we can reinforce the growth mindset in children by celebrating their effort - not their innate talent - and encouraging them to risk failure as an important and valuable part of learning. And we can do all of that successfully across lines of race and class that continue to be so starkly correlated with education outcomes. But we can't do any of that unless we as the adults are truly operating with a growth mindset.

I think it's safe to say that almost no one in this room would look at a challenging social issue – whether it's climate change, or racism, or income inequality – and say “it's in God's hands”. We are at Machar because we believe that the direction of our own lives and that of our society are, in fact, in human hands. I actually took the opportunity of preparing for this talk to visit the Secular Humanistic Judaism website to find out exactly what it is that we say we believe, and right there it says “that we as human beings have both the power and responsibility to shape our own lives,” and that “We each take responsibility for our own behavior, and all of us take collective responsibility for the state of our world.” The power and the responsibility.

This is not to say, of course, that we have direct control over everything in our world. But we can each take seriously the responsibility to do the things that are in our power that can have a positive impact.

I think often about this concept as it relates to public education. Among the hundreds of conversations I have had over the last 20 years with a wide variety of education professionals working in low income communities (teachers, principal, social worker, advocates, etc.) a significant portion of them have

started or ended with a statement something like this: It's unreasonable and unfair to expect these kids to be prepared to succeed in college; and so it's unreasonable and unfair to hold me responsible for moving them towards that. The reasons they cite are varied – many of them indisputable facts about the kids in question:

- They see violence in their neighborhoods on a regular basis,
- No one in their family has ever gone to college
- They have no books in their home or no quiet place to study
- They have no study habits
- They're already so far behind; it's too late

And the catch all – and perhaps most compelling argument is:

- It is impossible to fight the forces of poverty – until we fix poverty, we cannot change the educational outcomes of these children

Now it is a fact – a horrifying but true fact – that if you are poor and of color in this country today you are statistically likelier to go to prison than to college – so if you're looking at those odds, one can understand how the statement "It's unreasonable and unfair to expect these kids to be prepared to succeed in college" can come from a place of genuine sympathy and caring – not from a place of disdain. It's easy to get stuck in that place – where you just feel like it's unrealistic to fight those odds, and it's more humane to lower the bar, to manage expectations. A place where a committed educator – ends up saying, "It's unreasonable and unfair to hold me responsible for moving them towards that outcome".

As I've been reflecting on this over the last few days, I kept thinking about a children's book called *That's What Friends Are For* – by Florence Parry Heide and Sylvia Van Clief, with illustrations by Holly Meade. It tells the story of an elephant – Theodore – who breaks his leg and so can't visit his cousin at the end of the forest. All of his animal friends provide him advice – the monkey suggests swinging from tree to tree, the crab says he would grow another leg, and so on. And as the elephant thanks each one in turn for their heartfelt advice, they reply cheerfully "that's what friends are for!" Finally, the opossum comes along and breaks it down for everyone else, saying: Nonsense – that's not what friends are for - friends

are to help. And he leads a procession of the friends to go to the other end of the forest and fetch Theodore's cousin.

When we know the immense impact of poverty – and it is immense – it can be easy to forget the immense power that we as humans have to change things. Easy to forget that demography is not destiny; that as human beings we have the power and responsibility to change things for ourselves and for others. To forget that despite the statistical odds, the end of the story is not written. We write it.

I don't want to leave everyone with the facile notion that if enough adults just had a growth mindset and nurtured executive function skills in 4 year olds, and were secular humanists, we would reverse those statistics. It's obviously not that simple. But I do know – with lots of data to back me up – that adults in schools have the power to alter the life trajectory of children who have the odds stacked against them – and therefore those adults have, I believe, the responsibility to do just that. And the rest of us have the responsibility to help make their jobs easier, by simultaneously addressing what is in our power to change.

And in that spirit – and to borrow from Rabbi Ben's theme of covenants last week, I make two pledges to myself as we begin this new year.

First: That I will work to embody the growth mindset in how I approach challenges, in how I praise my children, and in how I set expectations for myself and for my friends and colleagues.

And second: That I will not allow sympathy – however heartfelt and bolstered by data – to serve as an excuse for inaction. Cause that's not what friends are for.

Thanks and Shana Tova.