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You: What's the 1st EdTech story that all should know ?

Me: One Laptop Per Child (OLPC)

You: Why ?

Me: Many have heard of it, few know the details of it's shocking failure & it is a great example of what I call:  
"The iceberg theory of EdTech"

But its start was full of promise... <https://t.co/1bF2LenPJ6>



Great sounding idea: One Laptop Per Child ■

Charismatic leader: Nicholas Negroponte ■

Famous University: MIT ■

Press adoration: NYT, Time & others ■

Lauded designer: Yves Béhar ■

Hit TED talk ■

Millions in funding ■

UN Secretary General does your demo: Priceless ■

This demo is a great place to start.

It's 2005 & Nicholas Negroponte is with UN Secretary-General Kofi Annan.

They are demoing a prototype laptop which they announce as a technology marvel.

It will cost \$100 (1/10th of competition) & will transform education in poor countries.

An innovative feature of this laptop is its power crank.

Turn it for 1 min. & the laptop runs for 40 mins.

The audience begs Annan to give it a turn.

Annan rotates the crank &...

The laptop does nothing but the crank immediately falls off.

A metaphor if there ever was one.

Sadly this repeated with most of the flashy features:

- So rugged that it won't break: they broke a lot
- Mesh networking so 1 laptop could give internet to others: didn't work
- Built for creation: Struggled as battery drained quickly, screen was poor, processor was slow

In the end the OLPC's XO-1 laptop which shipped in 2007, was a far-cry from those early pitches.

And by then PC makers had introduced their own version of cheaper laptops: netbooks.

They worked much better than OLPC's laptop & made OLPC look like an outdated toy in comparison.

But the challenge of designing, manufacturing & maintaining laptops was not the only thing they had under-estimated.

Their distribution plan was that governments would buy & give these to their students.

Anyone who has worked with governments can guess what happened...

Countries said yes then said no.

There were long delays & endless meetings.

Orders were placed & then cancelled.

Negroponete finally admitted: "I have to some degree underestimated the difference between shaking the hand of a head of state and having a check written."

These are common challenges in working with governments with no simple solutions.

But what surprised everyone was how unprepared OLPC was for these issues.

An early supporter "We were excited about the prospects, but kind of scared by the over-simplistic plan, or lack of plan,"

Negroponete had predicted initial sales of 5 to 15 million & then 100s of millions.

But Year 1 was only 600k & in the end only 3M laptops were made.

What followed were huge funding & staff cuts, many re-orgs & then Negroponete left.

OLPC now exists as a shadow of its past self.

But this is not where the story ends.

Because there is one big questions we haven't covered till now.

A question that must be on most educators' minds:

What happened to all the students & schools that actually received the laptops?

Well for a long time we didn't know...

Negroponete was so convinced in his vision that he dismissed all evaluations as a waste of time.

So all OLPC shared were anecdotes & distribution numbers.

But this has changed in recent years with some independent evaluations & [@morgangames](#) brilliant book: The Charisma Machine

She is one of the few people to have done extensive field work on OLPC.

She spent a lot of time visiting schools in Paraguay which was seen as one of the most successful OLPC models.

She also visited Uruguay & Peru where ~75% of all OLPC laptops were deployed.

She shared:

In Paraguay there was a lot of enthusiasm.

There was a committed local NGO managing the project and schools-teachers-parents were excited for it.

Yet within a few years only ~ 40% of children had working laptops.

Even from them, more than half barely used them.

Most children had other interests (like football) or other responsibilities (like helping family).

The few children that used their laptops used it to go to the internet, download music, watch videos & play basic games.

Similar to the things that most of us use our devices for.

Others had similar findings:

From a 2012 controlled study in Peru: “there is no evidence that the program increased learning in Math or Language.... The program did not affect attendance or time allocated to homework.”

Studies in Uruguay also found no impact.

But this was not the pitch.

Negroponte claimed, “We can hand these laptops out and walk away and the kids will take them up fully and learn.”

In fact the full vision was that children would then turn around & teach their parents & teachers.

It was a shockingly poor understanding of the problems they were solving.

Their solution was a generalisation of their own unique experiences (hacking a computer as a child)

It ignored the varied interests that children have & the challenges children from poor backgrounds face.

In fact Ames shared that in Paraguay she found that only 40 of the 40,000 students served by OLPC were doing interesting things with their laptops.

Some had photoblogs, others played around with the Scratch tool & learnt some technical skills.

What was common for most of them?

‘Enthusiastic Teachers & care-givers who gave support & encouragement to the children to use their laptops for creation & not just for consumption.’

Caring mentors & supporting environment are important.

Who knew!

Experienced educators must be pulling their hair by now.

But many EdTech enthusiasts see it differently:

- OLPC focussed on hardware. We are software & cloud based.
- OLPC had infra issues. We are riding the Mobile-Internet-Covid wave.
- OLPC had distribution & funding issues. We have that sorted.

All fine points.

All incomplete.

There is no re-visiting the utopian & untested educational ideas behind OLPC.

No stopping to check if they have actually understood the challenges students-teachers-schools face.

No pondering over this:

Why was there no impact even in places where the project worked well ?

This brings me to my 'Iceberg theory of EdTech.'

All the focus is on the 1/10th part which is visible: The TECH of EdTech

When we sell the promise of EdTech: we focus on Tech

When we analyse the failure of EdTech: we focus on Tech

The part that is constantly ignored is the 9/10th part of the iceberg.

The part which is hidden from view: The ED of EdTech

This is why it seems like we are stuck in an endless loop with EdTech.

Every decade we try the same ideas that failed in the past.

Why ?

Because the tech is now better.

And when the ideas fail again, we conclude:

'too early, lets wait for the tech to get better.'

Maybe the issue is NOT with how well the Tech works.

Maybe the issue is with how well we know what works in Ed & how well we apply it.