

Appreciation Day Speech 17th March, 2018

Prepared and presented by the Principal

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H.O.M.E.W.O.R.K HALF OF MY ENERGY **WASTED ON** RANDOM **KNOWLEDGE**

The 1960s and 70s

For many countries it was all about building up the economies, military, construction, agriculture and minerals.

For Malaysia too, it was the time to focus on tin, rubber, timber and the start of palm oil production.



The 1980s and 90s

In the 1980s there was a real swing into the engineering, medical and petroleum sectors.

It was the age of new technology and basic computers and telephony. It was when we saw a surge in education beyond year 10 and 11.

University numbers increased and so too did the competition in education. It suddenly became profitable to be the best school with the best students.



From the 1990s to early 2000 we changed again, the pocket pager and mobile phone came of age and suddenly communications technology became the sector to be in.

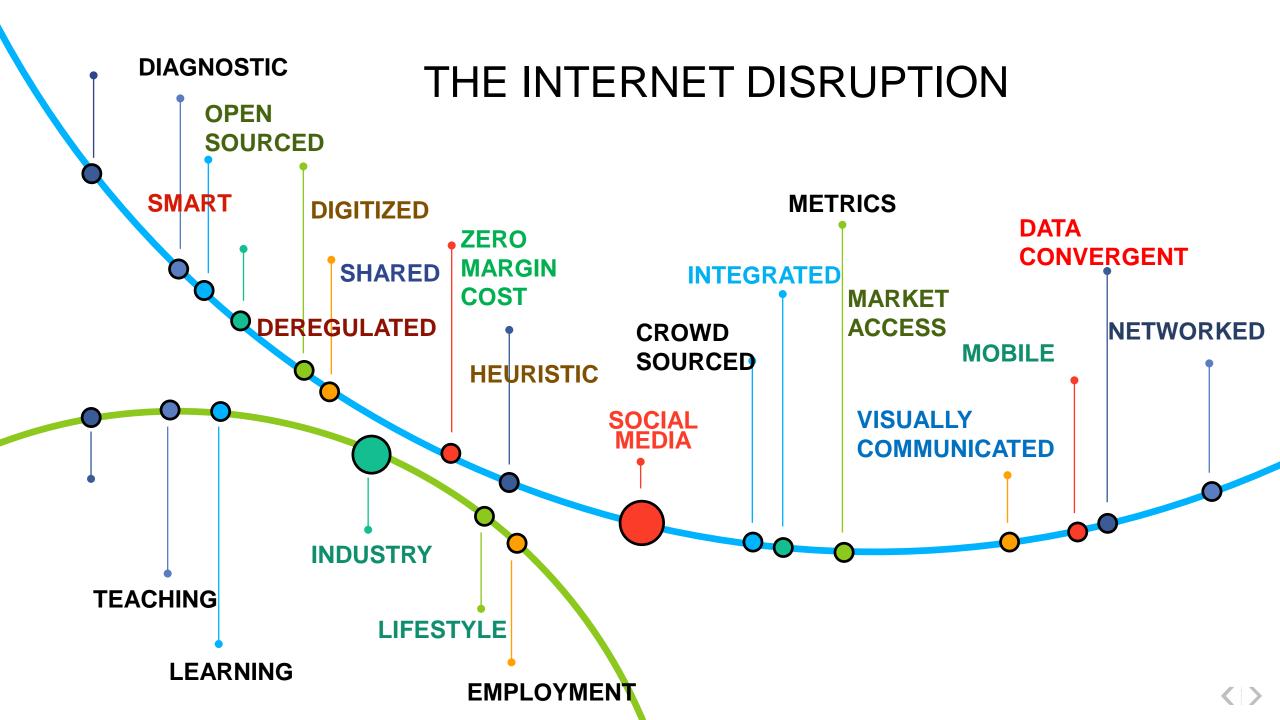


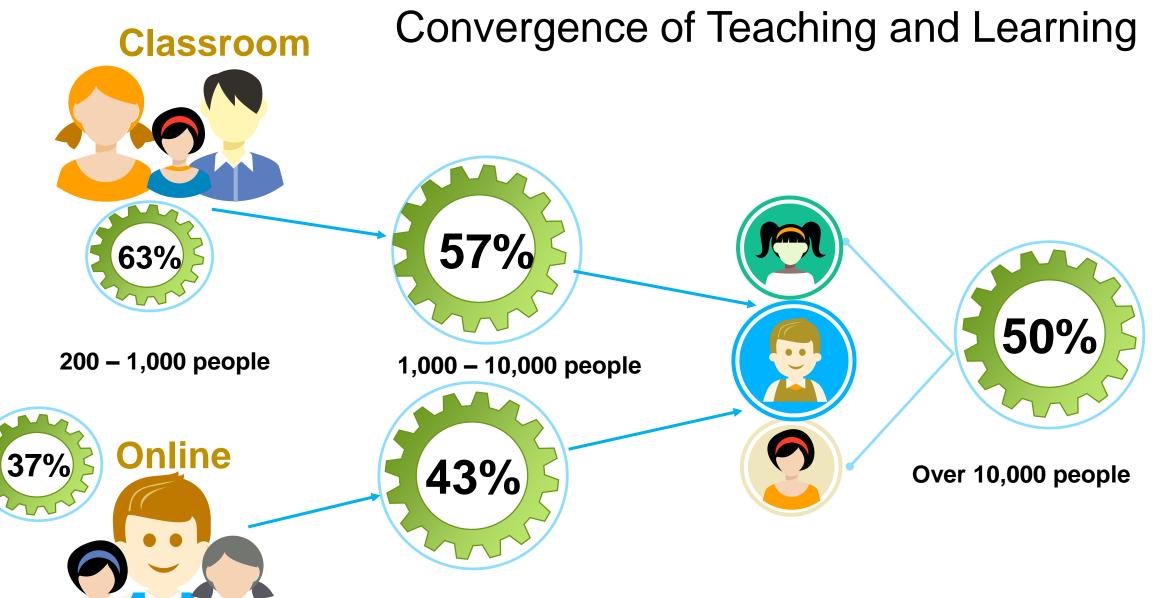


The world of education once again transformed as subjects were introduced to cope with the forecast numbers of students expected to enter the digital revolution.

Then came the INTERNET...







Where will it be in 2030?

For decades, the university degree had been the signal of job readiness

In an article titled "The End of the University as We Know It," Nathan Harden (2012) wrote:

"In less than fifty years, half of the roughly 4,500 colleges and universities in the United States will have ceased to exist. The technology driving this change is already at work, and nothing can stop it. The future looks like this...

World Job Advertisement Survey

By workforce analytics firm Burning Glass 2017



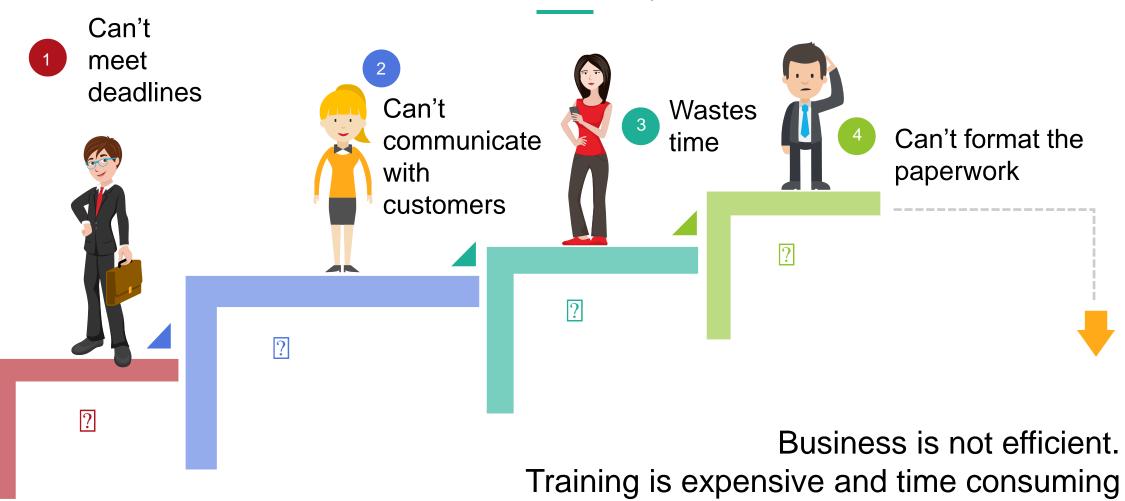
an analysis of over

1 Million job
advertisements worldwide
recently found that most
university graduates
lacked the basic skills
required to succeed in
securing employment.

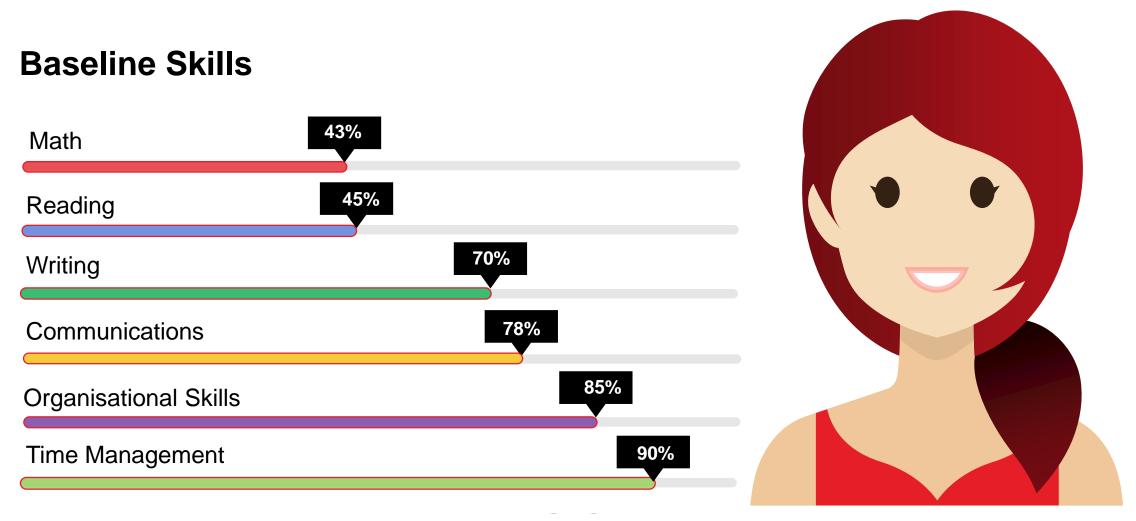


"Works well with others"

is a cliché on a school report card



These skills are in demand across nearly every occupation—and in nearly every occupation they're being requested far more than you'd expect based on standard job profiles. Even fields like IT and Engineering want people who can write.

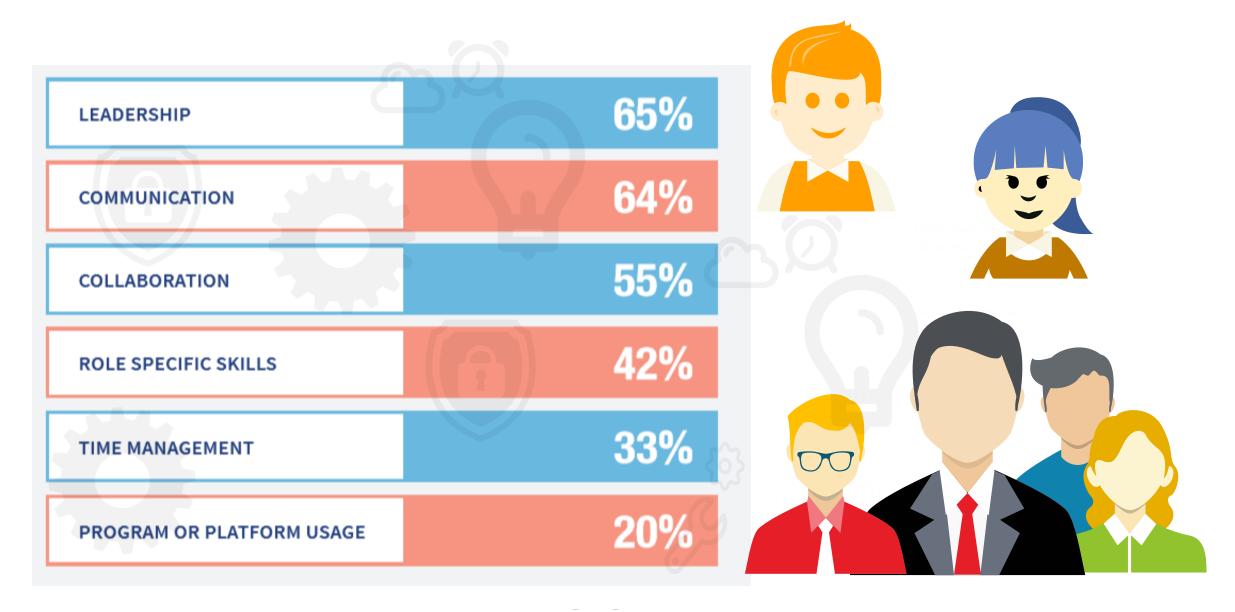


TECHNICAL VS. BASELINE SKILLS BY OCCUPATIONAL GROUP

| Baseline | | Technical |
|-------------------------------|-----|-----------|
| Information Technology | 25% | 75% |
| Healthcare | 26% | 74% |
| Engineering | 29% | 71% |
| Life/ Phys. Science & Math | 32% | 68% |
| Manufacturing & Production | 32% | 68% |
| Design, Media & Writing | 34% | 66% |
| Research, Planning & Analysis | 35% | 65% |
| Personal Care & Services | 37% | 63% |
| Finance | 38% | 62% |
| Marketing & P.R. | 38% | 62% |
| Management & Operations | 39% | 61% |
| Education & Human Services | 40% | 60% |
| Hospitality, Food & Tourism | 41% | 59% |
| Sales | 41% | 59% |
| Human Resources | 43% | 57% |
| Clerical & Administrative | 43% | 57% |
| Customer & Client Support | 51% | 49% |

| Career Area | Baseline Skills | Technical Skills |
|----------------------------------|-----------------|------------------|
| Information Technology | 25% | 75% |
| Healthcare | 26% | 74% |
| Engineering | 29% | 71% |
| Life/Physical Science and Math | 32% | 68% |
| Manufacturing and Production | 32% | 68% |
| Design, Media, and Writing | 34% | 66% |
| Research, Planning, and Analysis | 35% | 65% |
| Personal Care and Services | 37% | 63% |
| Finance | 38% | 62% |
| Marketing and Public Relations | 38% | 62% |
| Management and Operations | 39% | 61% |
| Education and Human Services | 40% | 60% |
| Hospitality, Food, and Tourism | 41% | 59% |
| Sales | 41% | 59% |
| Human Resources | 43% | 57% |
| Clerical and Administrative | 43% | 57% |
| Customer and Client Support | 51% | 49% |

LOOKING DEEPER INTO BASELINE SKILLS



45% of university graduates need a certificate or other qualification

In a US countrywide survey by Harvard university 2017

12- 15 job applications every 3 months

Less than 3 interviews every 3 months

3 86 percent have no job offers in their related fields in the first year.



Either unemployed or working in an UNRELATED non-professional job Have professional jobs, but are looking for a new one or working a second job.

Education and Work Choice

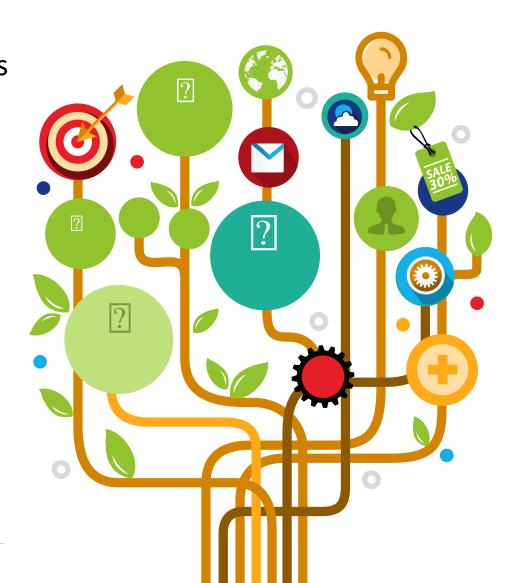
In a US countrywide survey by Harvard university 2017

"I don't know what positions are a good for me."

"Seldom get career advice."

46 "I don't know what to do with my major."

35 "Never investigated the career choice properly."



LinkedIn data from 500+ million members (2018)

MOST COMMON JOBS COMPANIES ARE SEEKING TO FILL

| Cloud and Distributed Computing Statistical Analysis and Data Mining Data Engineering and Data Warehousing Middleware and Integration Software Storage Systems and Management Web Architecture and Development Framework Electronic and Electrical Engineering User Interface Design Algorithm Design Electronic Automotive Services, Parts and Design Shell Scripting Languages Software Revision Control Systems Economics Data Presentation Business Intelligence SEO/SEM Marketing Software QA and User Testing Mobile Development Virtualization Network and Information Security Database Management and Software | | | |
|---|--|---------------------------------------|--|
| Middleware and Integration Software Web Architecture and Development Framework User Interface Design Electronic Automotive Services, Parts and Design Software Revision Control Systems Data Presentation SEO/SEM Marketing Mobile Development Storage Systems and Management Electronic and Electrical Engineering Algorithm Design Shell Scripting Languages Economics Business Intelligence Software QA and User Testing Virtualization | Cloud and Distributed Computing | Marketing Campaign Management | |
| Web Architecture and Development Framework User Interface Design Electronic Automotive Services, Parts and Design Software Revision Control Systems Data Presentation Business Intelligence SEO/SEM Marketing Mobile Development Electronic and Electrical Engineering Algorithm Design Shell Scripting Languages Economics Business Intelligence Virtualization | Statistical Analysis and Data Mining | Data Engineering and Data Warehousing | |
| User Interface Design Electronic Automotive Services, Parts and Design Software Revision Control Systems Data Presentation SEO/SEM Marketing Mobile Development Algorithm Design Shell Scripting Languages Economics Business Intelligence Software QA and User Testing Virtualization | Middleware and Integration Software | Storage Systems and Management | |
| Electronic Automotive Services, Parts and Design Shell Scripting Languages Economics Data Presentation Business Intelligence SEO/SEM Marketing Software QA and User Testing Mobile Development Virtualization | Web Architecture and Development Framework | Electronic and Electrical Engineering | |
| Software Revision Control Systems Data Presentation Business Intelligence SEO/SEM Marketing Software QA and User Testing Mobile Development Virtualization | User Interface Design | Algorithm Design | |
| Data Presentation Business Intelligence SEO/SEM Marketing Software QA and User Testing Wirtualization | Electronic Automotive Services, Parts and Design | Shell Scripting Languages | |
| SEO/SEM Marketing Software QA and User Testing Wirtualization | Software Revision Control Systems | Economics | |
| Mobile Development Virtualization | Data Presentation | Business Intelligence | |
| | SEO/SEM Marketing | Software QA and User Testing | |
| Network and Information Security Database Management and Software | Mobile Development | Virtualization | |
| | Network and Information Security | Database Management and Software | |

Trends in Productivity



GDP has been dropping around the world for over 20 years as a result of less productivity.

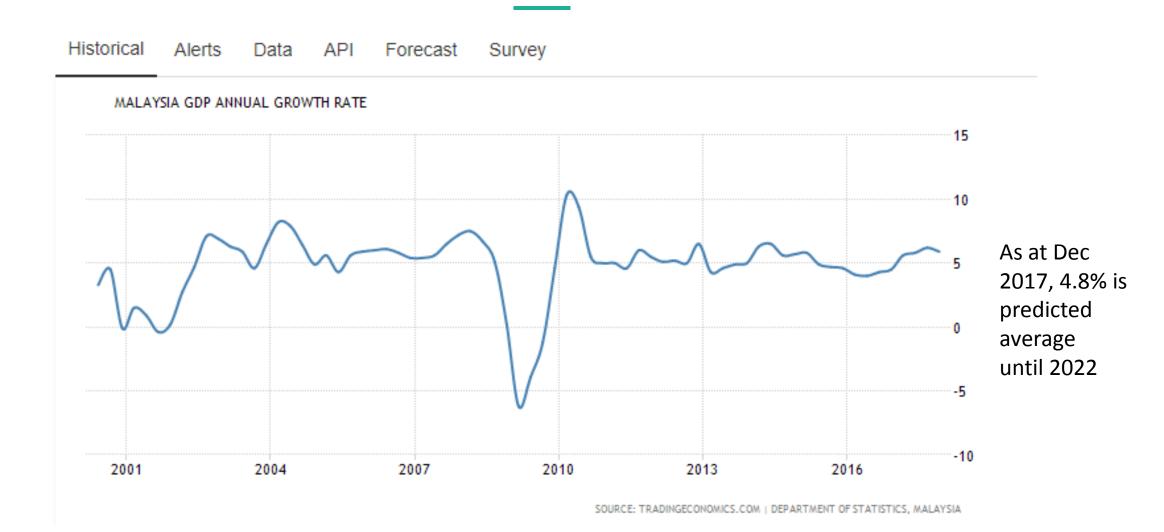
Unemployment is very high everywhere especially in the millennials coming into the workforce.

The next 20 years are predicted to be the same



Malaysia's GDP is stable

But is it growing?

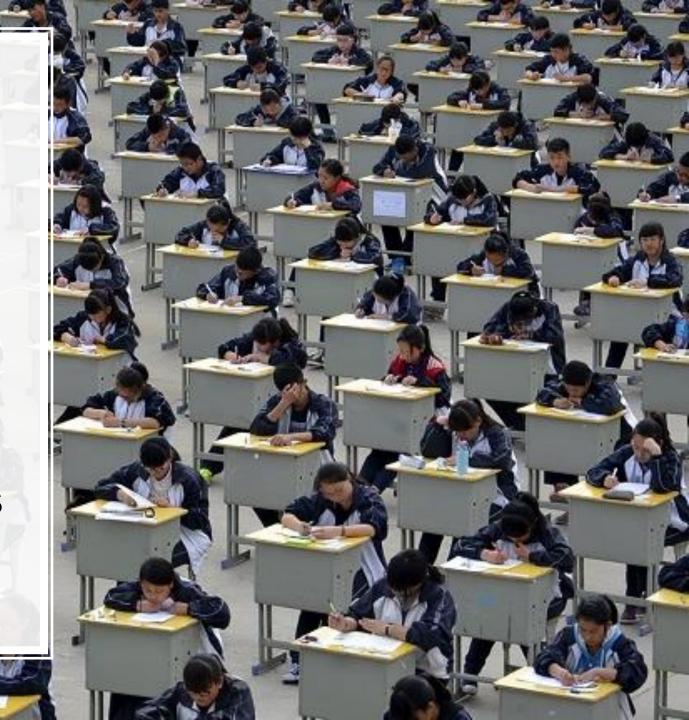


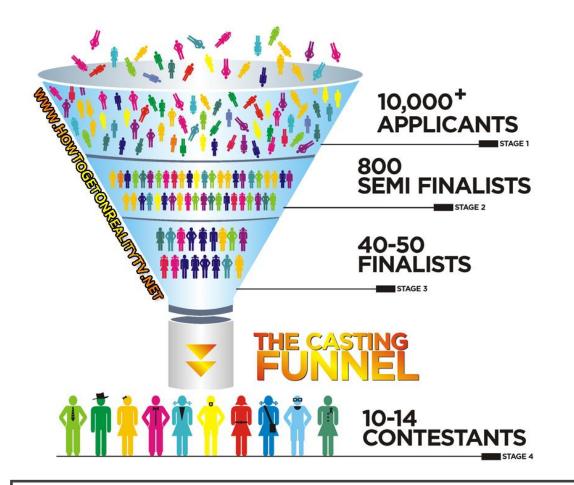




Un-schooling is shaking the education system

Schools are institutions from the 19th century, employing teachers from the 20th century that are teaching students from the 21st century - something is out of balance.







Reality TV

The new way to educate the masses



Is it fair to the thousands of apprentice chefs who work hard each day and do 3 or more years of culinary schooling?

Compare the number of celebrity chefs on TV (those who never attended full time cooking schools) to the number of real chefs on TV (those who attended years of professional cooking schools).

We are not valuing education as much as we value the notion of celebrity.

DISRUPTION

The world is changing faster than ever

Car Ownership

Career Length

Energy Sources

Borders

Where will we be in 2030?

Open

Shared

Merged

Streamed

Online

Online

Online

Online

PUBLISHING

MUSIC

RADIO

TELEVISION

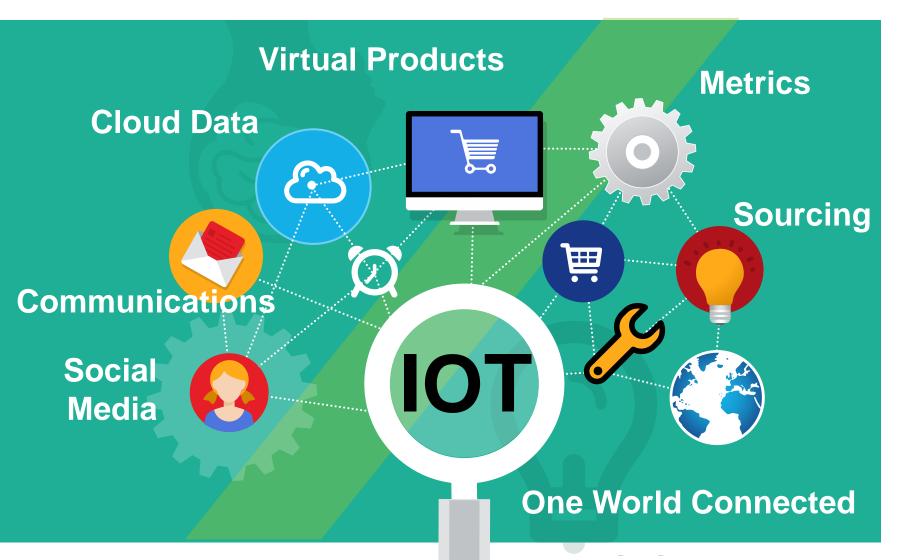
In less than 10 years the affects have been devastating on TV, radio, music, book publishing, newspapers

Mutiara International Grammar School

25

The Internet of Things

The 3rd Industrial Revolution according to some.



Amazon...doesn't need shops

Airbnb...doesn't need hotels

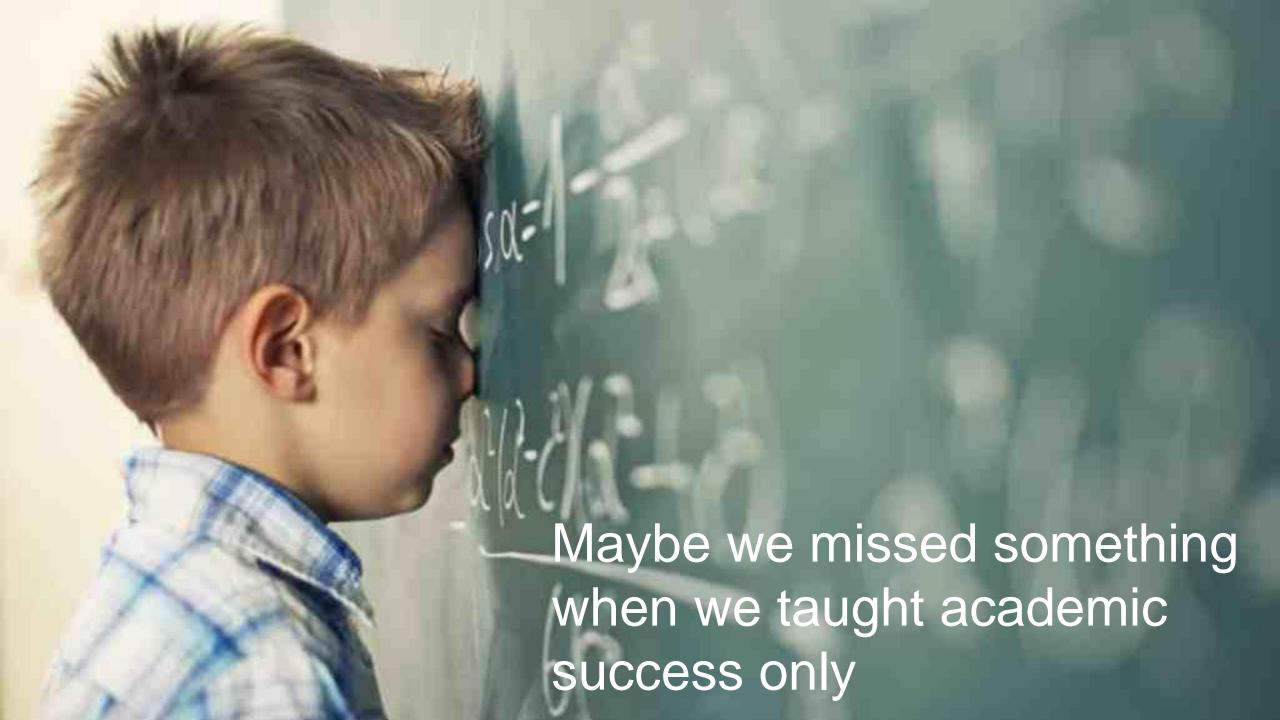
Uber/grab...doesn't need taxis

Wikipedia...replaces textbooks

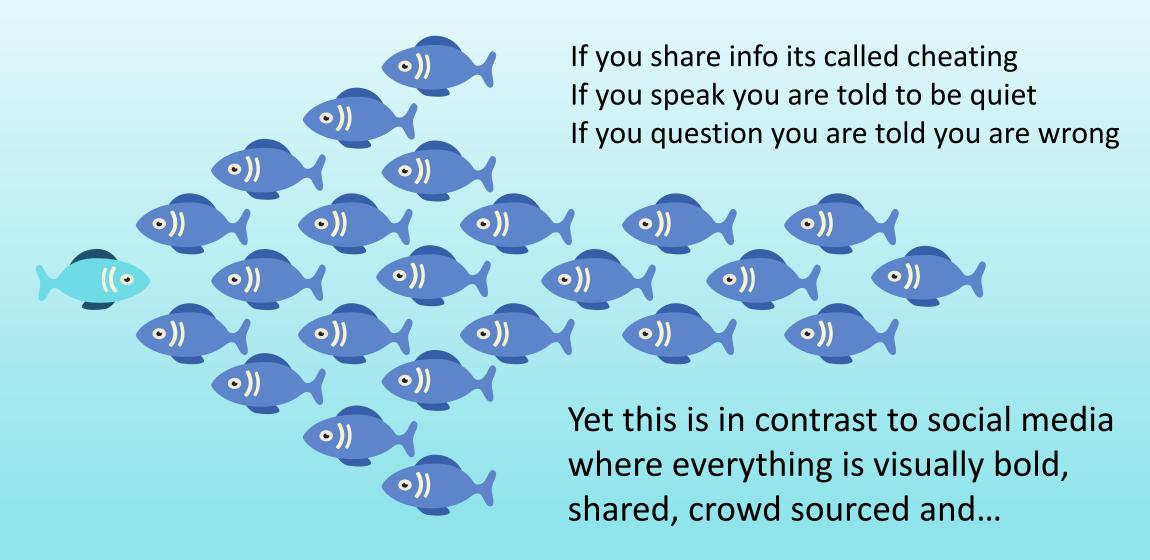
Mutiara International Grammar School

As we move in the 2020s and 30s

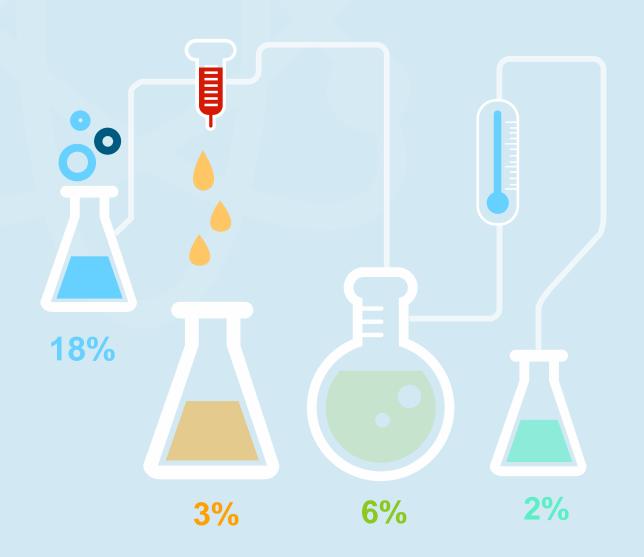
The IOT will affect all industries including retro fitting of construction, transport, communications, logistics, telecom and cable, real estate, health and medicine, consumer electronics, ICT and education.



Schools are like a factory...one central authority



WE ARE ALREADY AT THE NEXT LIFE CYCLE IN EDUCATION



The way students learn, share ideas, get access to content, create and collaborate is fundamentally different.

Their mind sets are different, and the workplaces we are preparing them for are different.



Some kids have never been more than a few seconds away from the answers to their questions, with everything just a quick search away.

They are able to teach themselves about any topic they are interested in without even leaving their bedroom.





Students are increasingly advanced users of technology even as they enter school for the first time.

Many classroom 'technology classes' confuse children by attempting to teach them about programs, websites and hardware that are no longer relevant or that they (the students) understand far better than the teacher does.

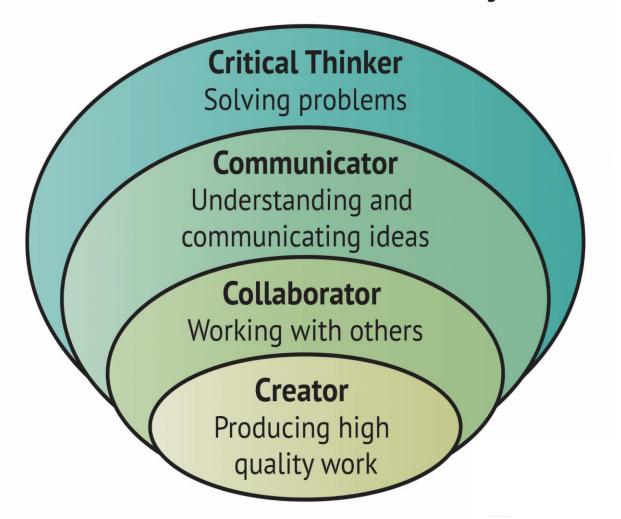
Outdated employment models are dying

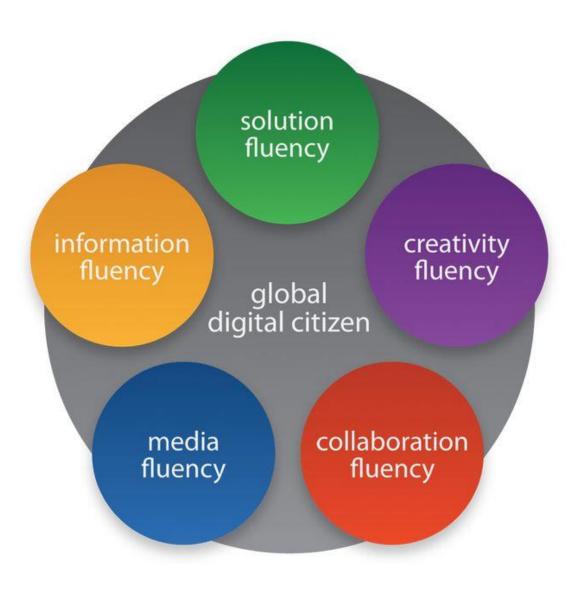
Does it still make sense to work from 9 to 5?

To be in the same room - or even country - as your boss and colleagues?



The Four Cs of 21st Century Skills





A teacher recently commented..."we don't need to teach ICT at senior level because it's not very popular". That teacher was wrong!



The Technology Job

Gap

forecast: **BY 2018**

190K

unfilled data analytics jobs

OVER THE NEXT 10 YEARS, THERE WILL BE 1MILLION MORE **COMPUTING JOBS**



THAN STUDENTS TO FILL THEM ... A POTENTIAL LOSS OF \$500 BILLION

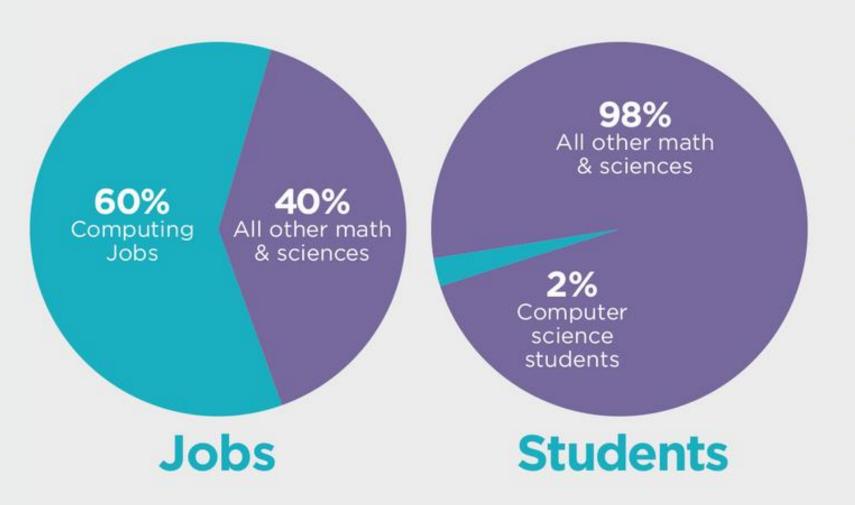
Of the 6 industries expected to grow the most by 2020, **TECH** currently pays the *highest*

IN HIGH SCHOOL

9 of 10 HIGH SCHOOLS DO NOT OFFER COMPUTER SCIENCE CLASSES



The job/student gap in computer science



Less than 2.4% of college students graduate with a degree in computer science. And the numbers have dropped since last decade.

MIGS...The way forward.



YOUR GRADES DON'T DEFINE YOUR INTELLIGENCE.

STOP. THINK. CONNECT

It's how you think about things and apply the information for your benefit

MIGS...The way forward.

Stability

Communications

Better resources

Clarity of subject choices

Empowering others

Keeping abreast with trends & info

Solutions based

Collaborative

Creative



MIGS...The way forward.

This presentation represents my personal approach to how educators need to adapt for the future. Welcome to the 21st reality: a world of ever increasing change, innovation and disruption in all facets of society.

Fear and hatred are now manifest in every day news; most of it without rationale. We need to awaken from past teachings and adapt to a faster paced society where information sharing and cooperation is now key to success. We are data driven and with that comes greater stress on resource use, efficiency and performance. We all need to change our ideas and be part of the IOT revolution.

