Excellence is not a Goal. It's a Journey.

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Excellent researchers require an environment that is just as good as they are.

Ideal Environment Nurtures Excellence
Singapore airlines (SIA)

“best business class”, “best cabin crew service”, “best in-flight food”, “best for punctuality and safety”, “best for business travelers”, “best air cargo carrier” and “Asia’s most admired company”.

Excellence, is a dynamic phenomenon and not a point of arrival.

Because even the highest standards for the service provider soon become the minimal standards for the customer.

This is why excellence is not a goal, but a journey.

SIA is one of the most profitable airlines: Excellence can be profitable
What is the secret behind excellence?

The secret to building a culture of excellence starts with a focus on people.
Excellence is people driven

Where are the excellent people?

The Israeli Problem

7 millions vs 7 billions.
The pool of talent: 7 millions vs 7 billions.
Science and Engineering degrees in the US

The US keeps it’s edge by importing excellent people

Figure 2-18

Degrees (thousands)

NOTES: Foreign includes permanent and temporary residents. Minority includes Asian/Pacific Islander, black, Hispanic, and American Indian/Alaska Native. Degree recipients with unknown citizenship omitted.


Science and Engineering Indicators 2006

Figure 2-20
Foreign share of U.S. S&E degrees, by degree and field: 2002 or 2003

NOTES: Doctoral degree data are for 2003; other data are for 2002. Foreign includes temporary residents only. Natural sciences include physical, biological, agricultural, computer, earth, atmospheric, and ocean sciences and mathematics.


Science and Engineering Indicators 2006
The pool of talent: 7 millions vs 7 billions.

Israel doesn’t import any more many excellent people.
Be people driven, not subject driven

Academic Research as an Example

Educate
The People Driven Method

Scientist

Proposal

Independence:
The Kimmel Award at the Weizmann Institute of Science

Proposal

Financial support

Laboratory
Excellent people work in excellent field, and they can often provide answers to questions that cannot be asked.
The Israeli Problem
7 millions vs 7 billions.

Be people driven, not subject driven

Academic Research as an Example

Educate
How to educate so that people can provide answers to questions that they cannot ask?
How to Educate Excellence?

Curiosity leads to motivation, which leads to excellence

Is curiosity innate, or is it learned? No clear answer to this question.

But there must be a Biological Basis: Self-Preservation and Survival

So what should we do so that we don’t kill our kids curiosity?

It is not what you learn, but very often how you learn it, and who is the teacher

Since excellence is not a goal, but a way of life, it should be taught by role model
Weizmann Approach: Excellence Landscape

Basic Science only

Physics

Imbedded multidisciplinary approach

Mathematics

Graduate school and Public Education

High level education program

Chemistry

Intellectual Property rules and technology transfer

Biology
The secret to building a culture of excellence starts with a focus on people.
Is basic research changing our world?

“The world we have created is a product of our thinking. It cannot be changed without changing our thinking.”