

INTERNATIONAL TRENDS: IMPLICATIONS FOR BC SCHOOLS

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Introduction

- Elections mean planning for the future
- New government will ask BCCPAC for input
 - What will your advice be?
- Purpose of presentation:
 - Look at BC from global perspective
 - Identify what we can learn from others
 - Stimulate thinking about education priorities

Part 1

Global Trends



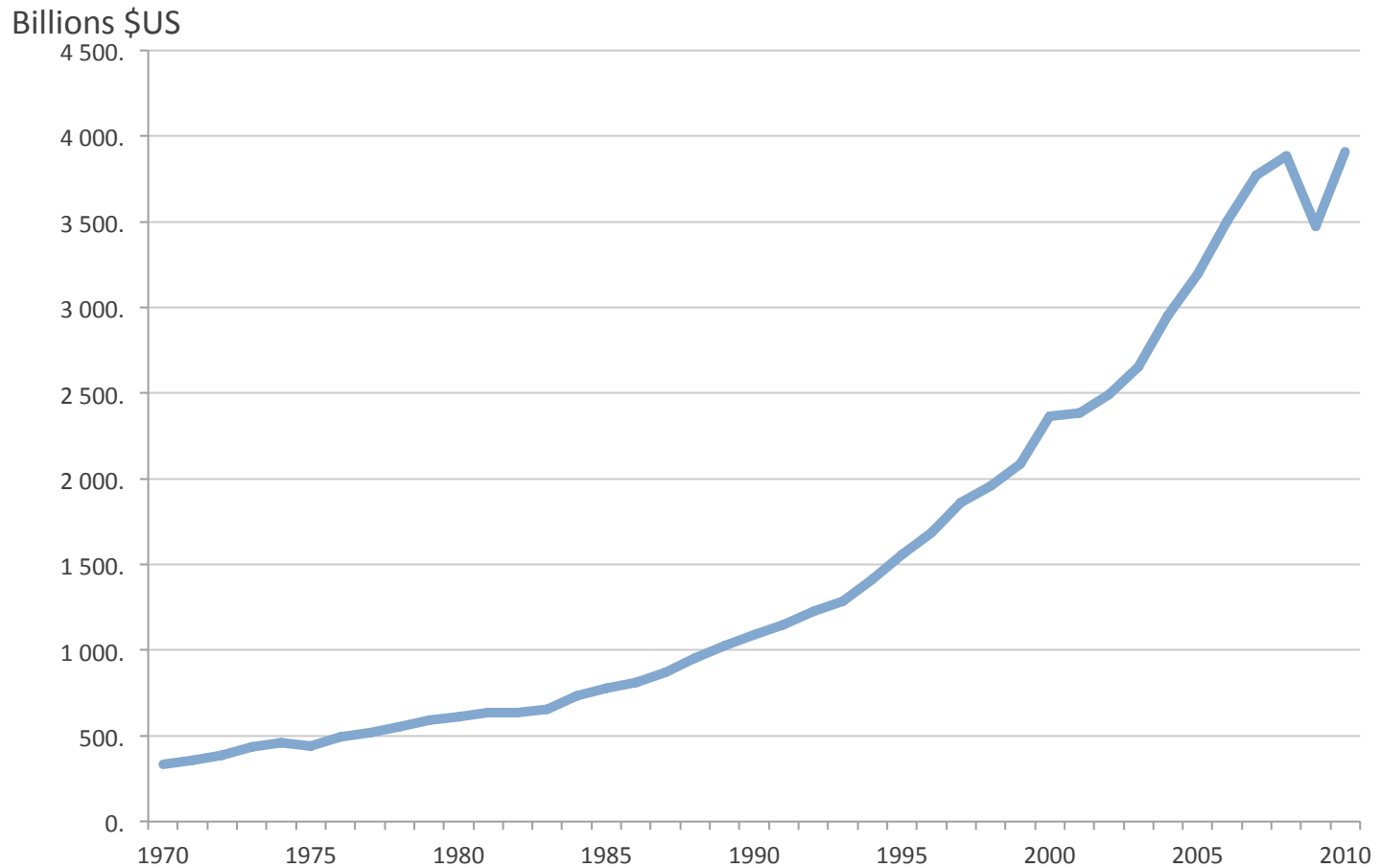
Keep close watch over global trends

- As we develop plans for BC education, we should be keeping a close watch over global trends – they are effecting us now and likely will have a bigger impact on our children's lives.
- These developments are creating great opportunities – and major challenges -- for all of us

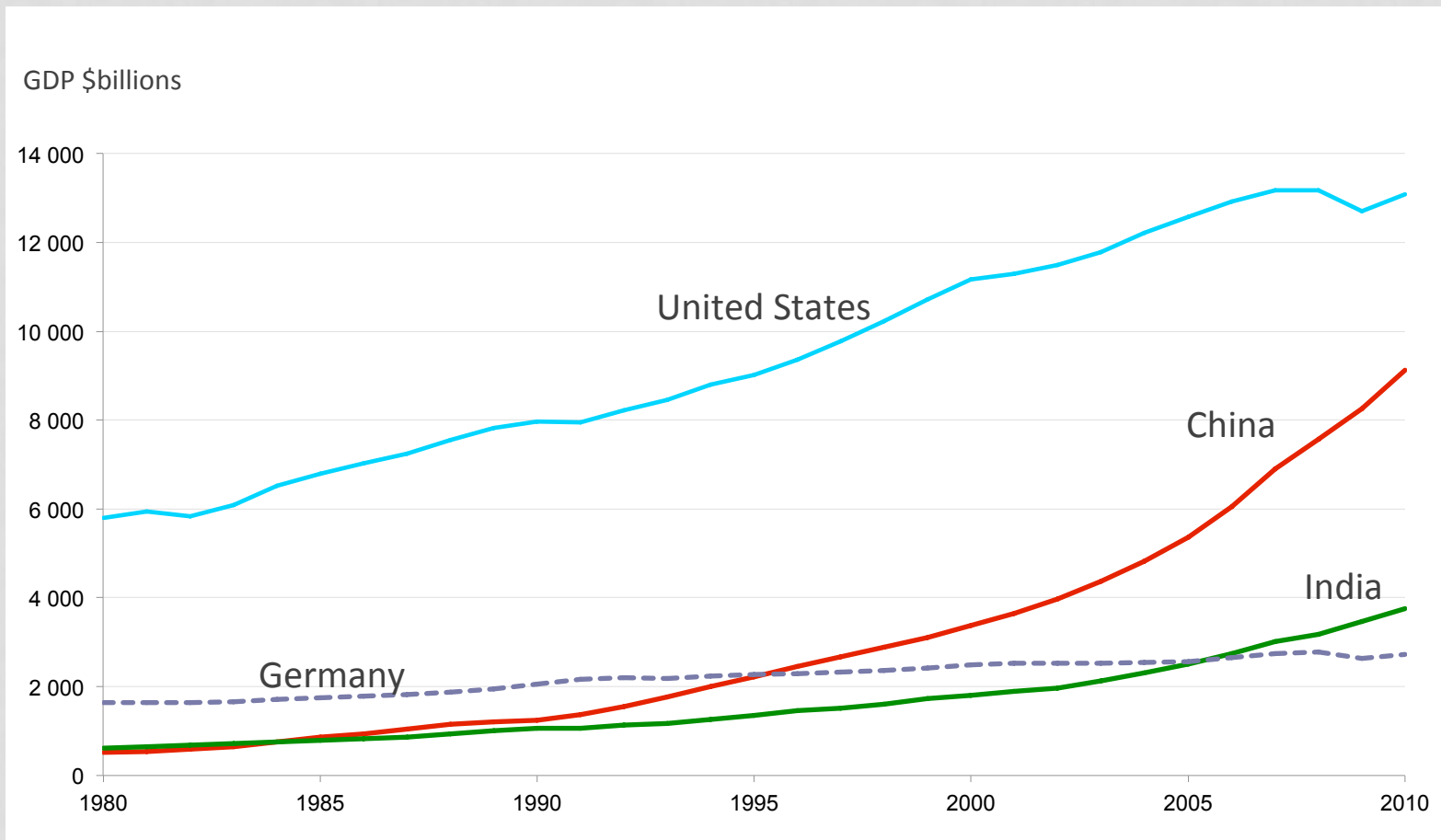
International trade growing

- Total value of goods and services started to accelerate in the mid-1990s.
- Emerging economies of China, India are now among the world's largest economies, with China on track to surpass the US in a few years. Reduction of poverty and a growing middle class are driving change in these countries.
- These changes represent a fundamental transformation of economic power and world finance. Canada and British Columbia, because of our rich natural resources, have thrived on international trade. When the world economy grows, it demands more resources and related expertise from British Columbia.

Growing importance of international trade



China and India catching up



The internet expands

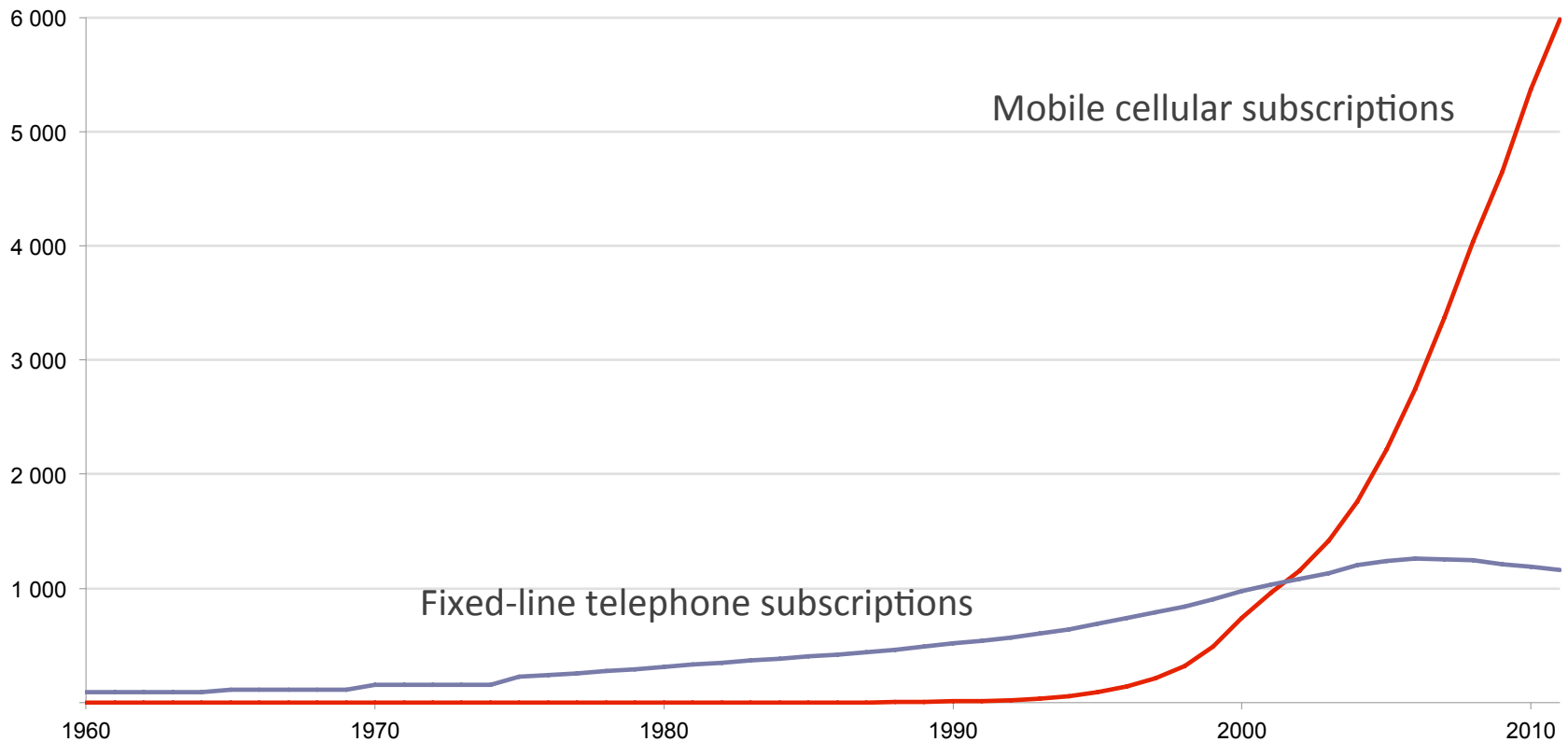
- International trade and economic growth has been supported by a growing network of computers and Internet connections throughout the world.
- Information technology has helped accelerate global trade, but it has also become – in short order -- an integral part of our daily life. It's part of our work life, our entertainment, and our social interactions.

Growth of mobile phones

- Rapid rise of global internet activity and the proliferation of mobile cell phones.
- By 2002 the number of mobile phone subscriptions outnumbered fixed line subscriptions for the first time. And by 2011, there were nearly 6 billion mobile phones, with many people using more than one phone.
- Internet connectivity is almost complete: 90% of the world's population is within range of G2 cell phone reception.

More and more people connected

Subscriptions (Millions)



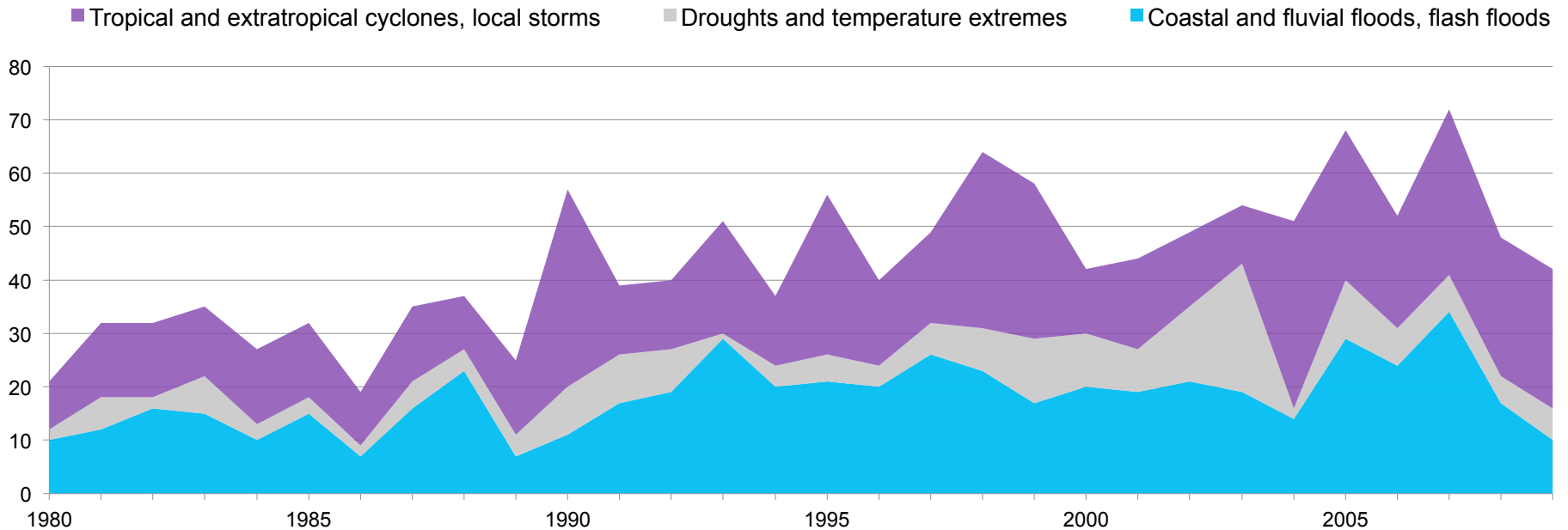
Positive impacts

- People are now talking about the unleashing of a huge store of human capacity as students in remote villages have access to the best resources and top teachers and professors in the world.
- Also seeing a reduction in poverty and a growing middle class in developing countries, especially China, India, Brazil. New types of exciting jobs. New ways of learning. New ways of communicating and staying in touch with family and friends.
- But there are downsides to growth and technology.

The downside

- Growing gap between rich and poor countries. And within rich countries, we see the same pattern: growing gap between rich and poor, as the poor don't progress much, but the rich get richer, faster.
- And, significantly, natural resources are being harvested in more intensive ways to support economic growth. As a result,
 - The global forest cover, an important indicator of biodiversity, is decreasing in size, much of this in developing countries that contain a significant proportion of untouched forests.
 - And there is ever-growing demand for energy to fuel our lives which is creating high levels of CO₂. Scientists are linking this to another key measure:
 - the number of weather-related natural disasters, such as hurricanes, droughts and floods has doubled world wide over the last three decades

Natural disasters more commonplace



Part 2

International Assessment



PRESENTED BY:
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The following types of questions being raised globally

- Increasing competition on global markets means that we need constant innovation to improve or even to maintain our standard of living. Does our school system foster creativity to be innovative?
- More women are working ... creating a demand for high-quality day care and early childhood programs. How can we support young families with quality day care, especially those struggling with poverty?
- What is the role of our schools and parents in managing children's activities on the internet? We know who's in charge on the school playground, but who's in charge in the online world?
- How well do young people develop an awareness between their daily decisions and possible long-term consequences ... not just for themselves as individuals but for society as a whole? How can our education system support this awareness?

Most countries are now saying

1. Education is critical to our nation's success. We must develop knowledge, skills & attitudes so that our young people are able to:

- compete in global marketplace
- contribute to social development
- become knowledgeable, responsible citizens

2. We must strive for excellence and equity

- Gone are the days where we focus only on the best and brightest
- Now: all children are important. It's important that we develop their individual talents to the maximum

Nobody happy with K-12

- The other thing I notice is that nobody is happy with their education system. Everyone seems to be scrambling to improve k-12.
- Shanghai China, Singapore, Japan, South Korea. Not happy.
- Even Finland, described by many as having a model school system, is worried about its education strategies for the future. They are struggling with a youth unemployment rate of 20% .
- All of this angst has led to more and more countries wanting to look at what's happening elsewhere. What can we learn from other countries that will help us improve our school system?
- This openness has led to a growing interest in international student assessment.

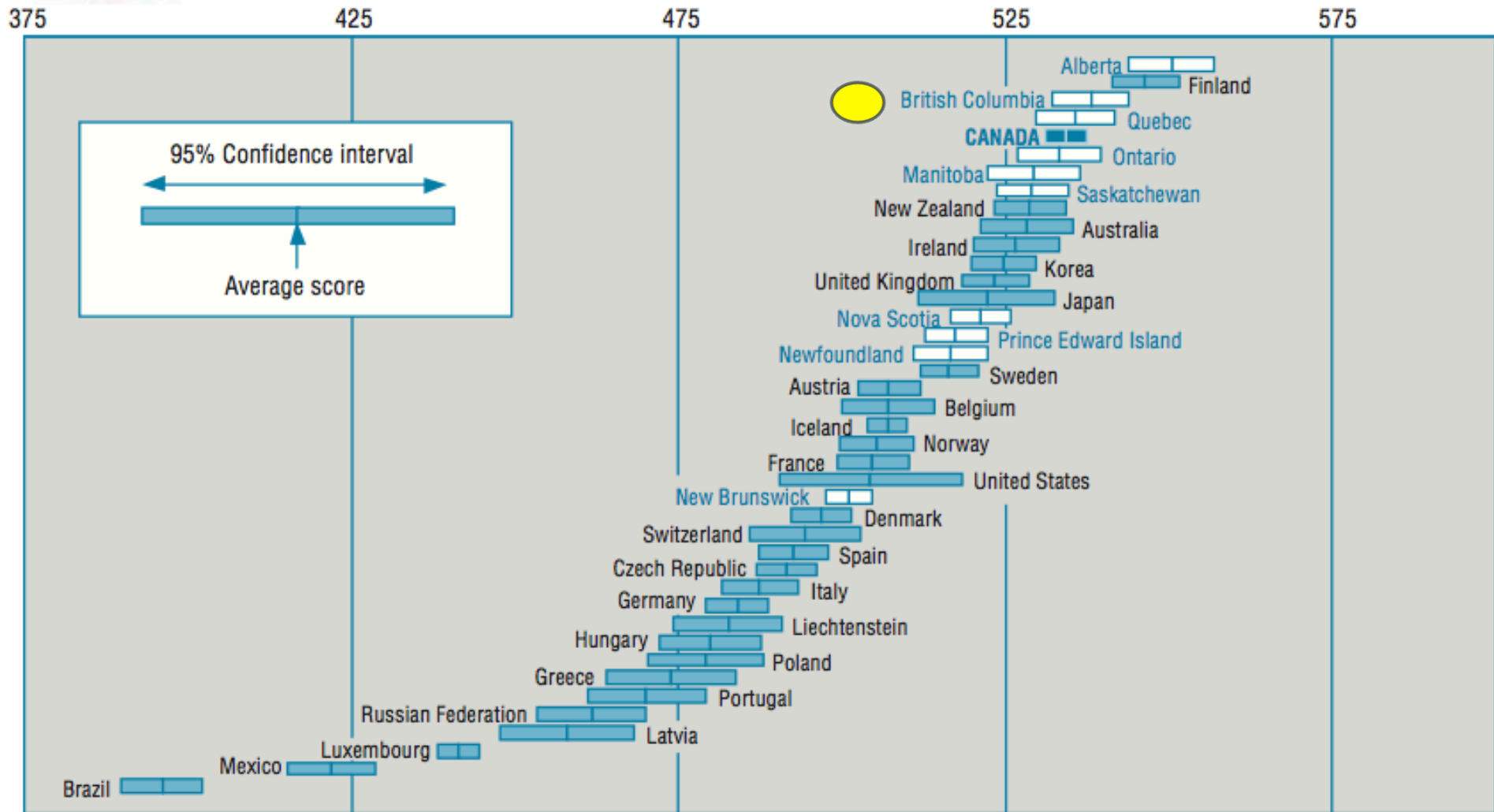
PISA begins in 2000

- In 2000, the Organization for Economic Cooperation and Development (the OECD) launched its first international assessment which involved testing of reading, mathematics and science skills across 25 industrialized nations.
- This was an important step for Canada because all 10 provinces agreed to participate and have their results published.
- PISA doesn't measure everything schools are responsible for. But it does measure a set of reading, math and science skills that are important foundations for success.

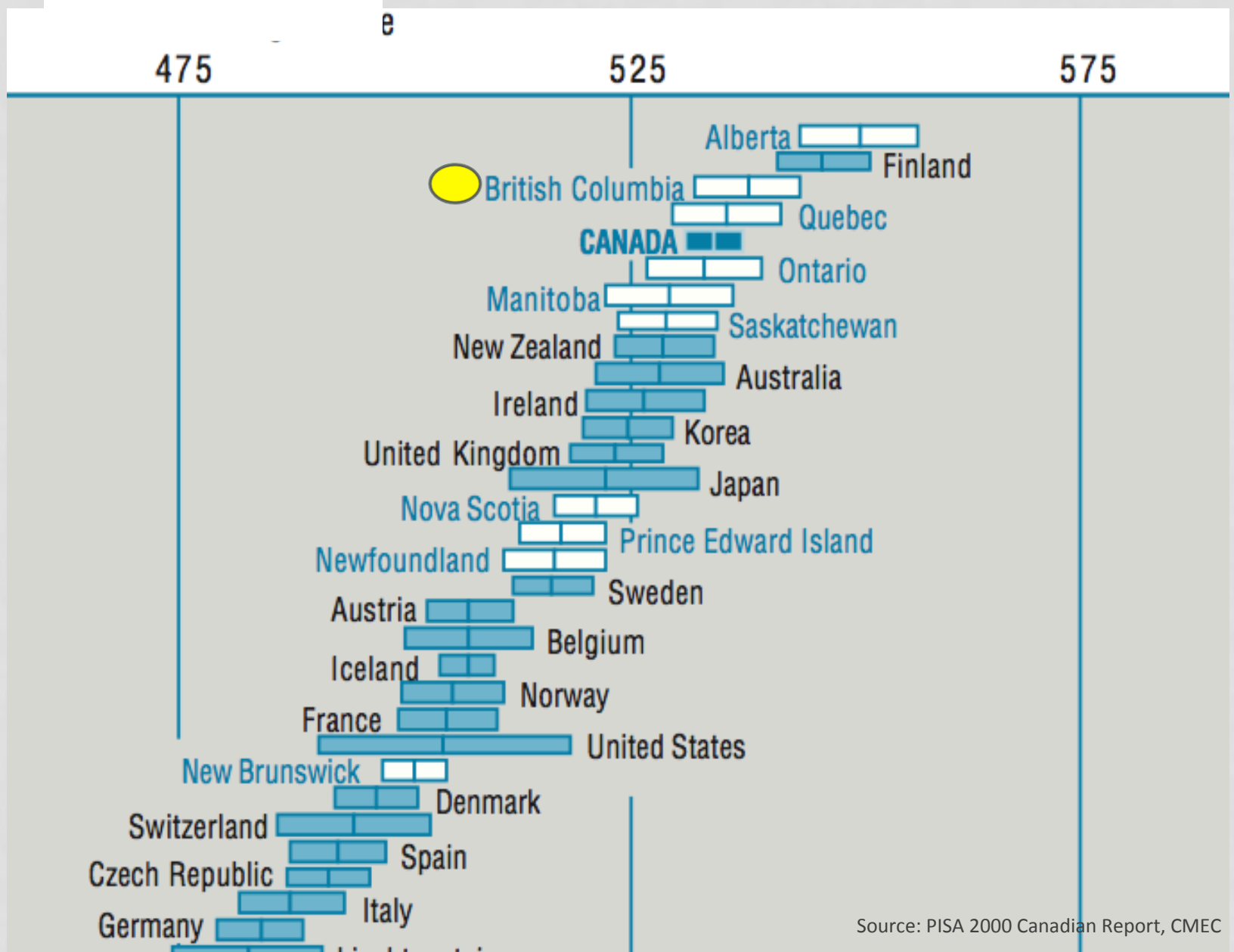
Do you remember?

- Some of you may recall that in the 1980s and 1990s we had gone through a long period where the business community in Canada was slamming the K-12 school system for being weak – for not producing graduates that could compete on the world stage. Where our graduates were underperforming students in Japan and other advanced economies.
- The PISA 2000 results came as a surprise to many Canadians, and to many British Columbians. Our scores in Reading, Mathematics and Science were among the top of the class.

PISA READING 2000



PISA READING 2000



Canada's strengths

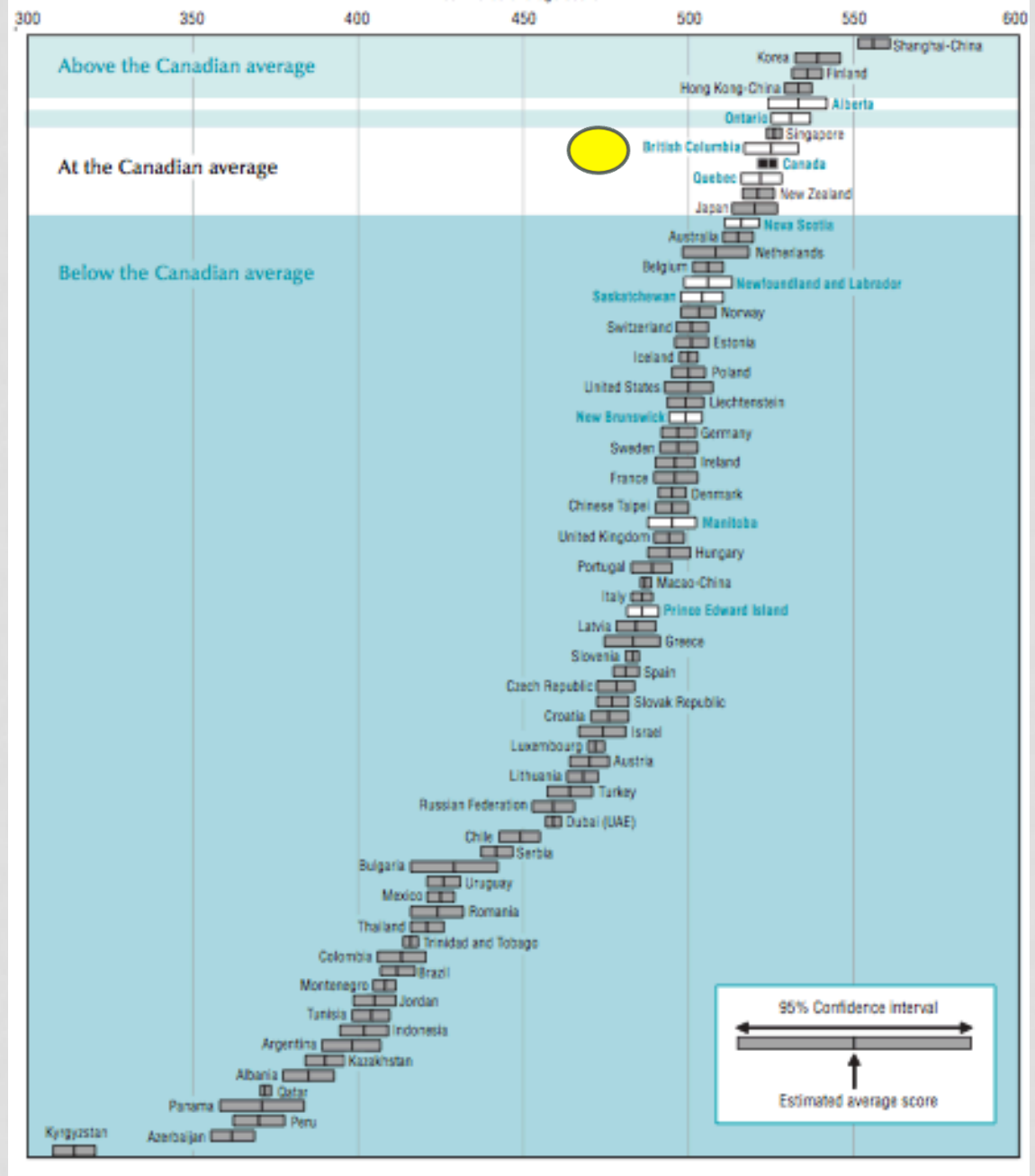
Various studies have been carried out trying to explain why some countries perform at a high level. For Canada, a couple of reasons keep popping up:

- We seem to do a good job – compared to other countries – in combining high performance with high equity.
- Our performance gap – difference in average scores between students from wealthy, educated families and students from poorer families ... the gap in Canada and BC is smaller than almost all other countries.
- One reason for this is that our Education finance policies allocate more money to those students who have the highest need. Not the case in some other countries.
- Another reason: Canada is a multi-cultural nation and does a good job integrating new immigrants in its schools and society. This is of real interest to many European countries who struggle with immigration issues.

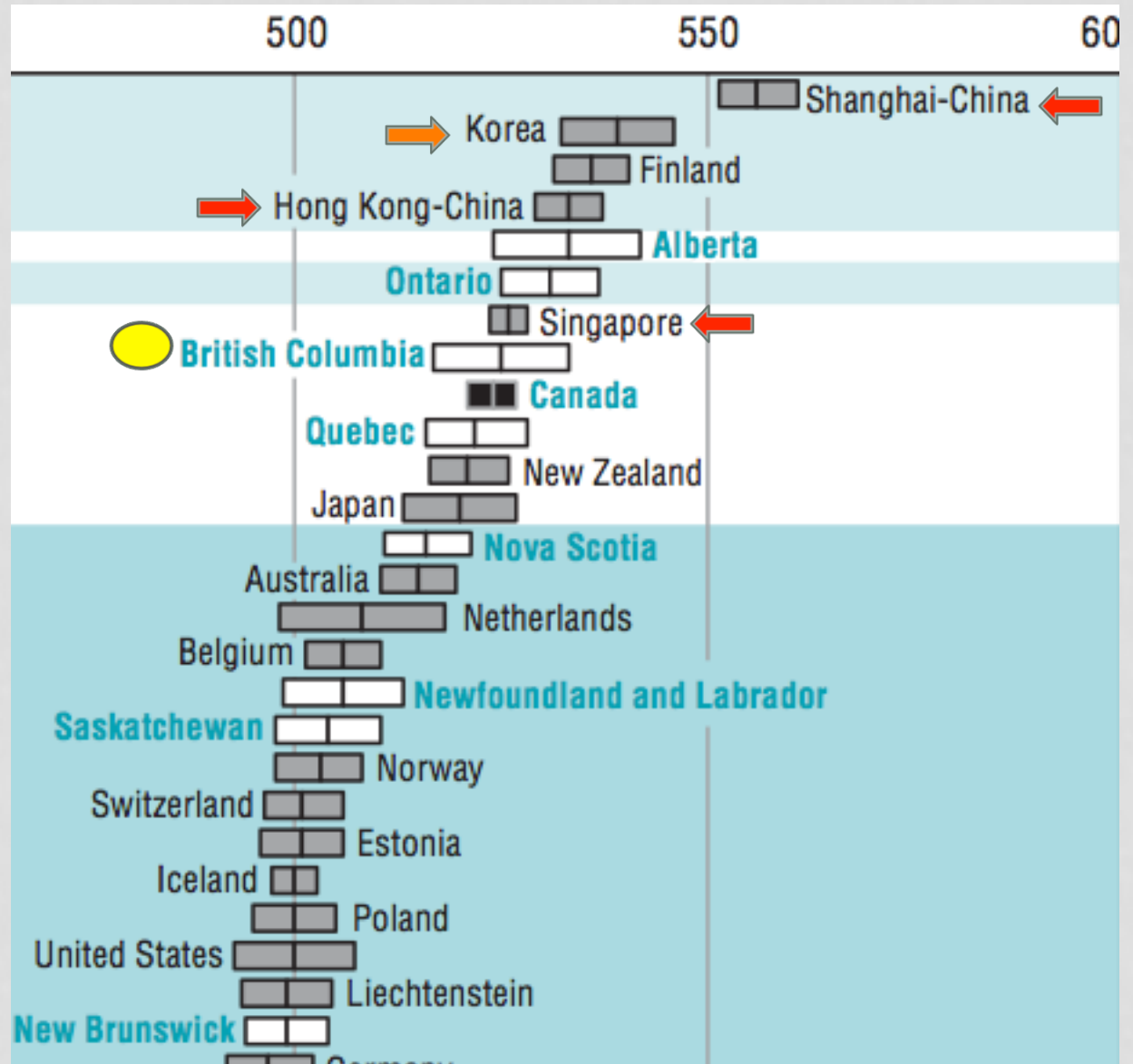
Quality teaching

- Internationally, there seems to be consensus that the quality of education in a country cannot exceed the quality of its teaching. You can have fancy buildings and the latest technology and the best curriculum, but if you don't have good teaching, students will not do as well as they should.
- The PISA data suggests that our teachers and principals are among best in the world. Certainly not perfect. But overall among the best in the world.
- What's happened over the past ten years?

PISA Reading 2009



PISA READING 2009



Are we beginning to slide?

- In 2009 British Columbia still ranks high, but it appears our relative standing has dropped. Reasons for this:
 - Three jurisdictions new to PISA in 2009 – Shanghai, Hong Kong and Singapore – all attained higher average scores.
 - Fewer BC students attained top reading scores, lowering BC's average between 2000 and 2009
 - In Science there was no difference between 2000 and 2009, but in Mathematics there was a drop in average scores that was statistically significant.
- The declines in performance are not large. We are still among the top performing countries.
- But it should cause us to ask some questions: Are we beginning to slide? ... Are we in the early stages of a decline?

Possible reasons

I believe a number of actions taken over the past ten years have weakened standards in the province's school system and have impacted student learning:

- Grade 12 academic exams dropped
- Provincial curriculum ignored
- School accreditation system cancelled
- FSA tests undermined
- College of Teachers removed

And ... there is the never-ending labour conflict between BCTF and successive provincial governments. It's pretty clear that any large organization, such as a school system, that devotes so much energy to internal conflict is not going to function well in a global society.

On the positive side

- The MoE has launched the K-12 Education Plan which is attempting to address many of the education policy issues.
- And on the labour front, discussions are underway to resolve the corrosive labour relations.

These are positive steps forward and I hope BCCPAC is engaged.

Part 3
Improving Student Learning



Analyzing success

- When we look at what others are doing, history and culture very important. Can't pick one specific thing and expect similar outcomes. But are there general trends that can help inform us?
- McKinsey and Company, the global consulting firm carried out a comprehensive study of a range of countries and identified those countries that were improving performance over time.
- McKinsey describes what they call a country's Journey of Improvement ... from "poor" to "fair" to "good" to "excellent"

Key steps

- For countries moving from “poor to fair” education systems, governments establish the foundations (e.g. finance, curriculum, school supervision, student assessment and information system)
- In countries moving from “fair to good”, school systems place emphasis on shaping the professional. This includes improved training and enabling teachers and principals to engage in school-based decisions and self evaluation at the school level.
- “Good to excellent” systems build on the first two levels and place greater emphasis on peer learning: teachers learning from experienced/highly trained teachers; schools learning from each other ... sharing ideas about how to improve student learning. Teachers provide local and national (provincial) leadership. Information systems used to document progress.

Journey of Improvement

POOR TO FAIR

Foundations

- Finance
- National curriculum
- School supervision
- Learning assessment



FAIR TO GOOD

Shaping the Professional

- University training
- In-service training
- School decision making
- School self-evaluation



GOOD TO EXCELLENT

Professional leadership

- Teaching & Learning
- Peer-led improvement
- School collaboration
- System leadership

Key Success Factors: (Tucker)

- Quality teaching force
- Use of instructional systems aligned with external exams that measure complex thinking skills
- Use of professional work organizations
- Funding systems supporting students hardest to educate
- Coherence in the design of the education system ... clear sustained priorities.

What the research says (John Hattie)

Factors contributing to student learning

- Synthesized 800 meta-analyses.

Divided factors into two categories:

- Major impact on learning
- Minor impact on learning

Impacts on learning (examples)

Major impacts:

Teaching

- Quality of teaching
- Teacher-student relationships
- Providing feedback
- Metacognitive strategies

Minor Impacts

Structures and work conditions

- Adding more funding
- Reducing class size
- Ability grouping
- Multi-grade/age classes

Summary

Key points

1. Social, economic and environmental changes are elevating the importance of education in all countries
2. BC has a very good school system, but it must continue to improve to ensure our children can thrive in a changing global society
3. Priority for the next government?
 - Repair the foundations (e.g. curriculum, assessment)
 - Focus resources on improving quality of teaching ... biggest impact on student learning.