

## The Role of Education in Development: Overview

Contemporary economics, and particularly Human Capital Theory, sees the main role of public education as providing the labour skills for economic growth.

This role has arguably been accentuated in an era of globalization and the so-called 'global knowledge economy.'

Rapid development in the most successful 'export-oriented' developing economies in recent years - such as those in East Asia - was driven by technology transfer. As endogenous growth theory tells us (Romer, 1996) knowledge and skills are necessary pre-requisites for this. Investment, and particularly investment in human skills, was key to the East Asian Economic Miracle (Stiglitz, 1996; World Bank, 1993).

Nevertheless, the role of education in social and political development has been crucial and, arguably, tends to come first.

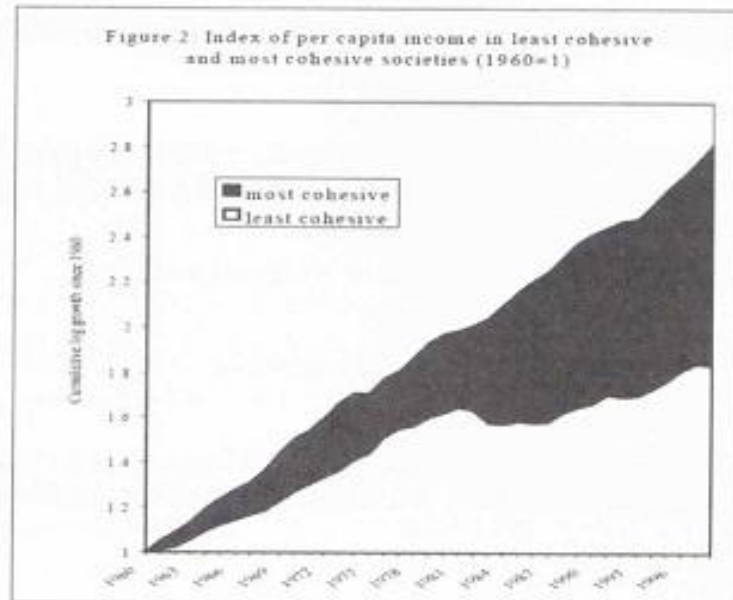
As Amartya Sen (1999) has argued, these views of not necessarily irreconcilable.

## Role of Education in Development - 2

Development economists now increasingly recognize the social and political pre-conditions for growth. Societies require a degree of social integration before growth is possible.

- More socially cohesive societies find it easier to engineer the strong institutions and the efficient, corruption-free governance associated with higher growth rates (Easterly et al, 2006)
- Political stability matters for development, not least in order to attract crucial foreign direct investment (Carnoy, 1993).
- Greater social integration reduces ethno-linguistic fractionalization which is negatively related with faster growth across countries (Easterly et al, 2006).
- Social trust - which reduces transaction costs and enhances economic efficiency - is positively associated across countries with higher long-term rates of growth (Gradstein and Justman, 2002; Knack and Keefer, 1997; La Porta, 1997).

As historians of education point out, the primary objective behind the development of public education systems - both in the West and the East - has been state building and the promotion of social integration (Green, 2013).



## Education and State Formation

National education systems have generally developed as vehicles of state formation. They were designed to achieve collective objectives and to meet public needs.

- Spreading dominant national languages
- Promoting national/state identity
- Inculcating the dominant ideologies
- Forming citizens
- Explaining the ways of the state to the people and the duties of the people to the state.

## Rapid State-Building – Rapid Education Development

National education systems developed most rapidly in countries (like Prussia, France, the USA and later Japan) which were undergoing the most intensive and accelerated process of state formation. Usually

- as a response to external military threats or territorial conflicts
- to rebuild after revolutions and civil wars
- to catch up economically with more advanced states

Where there was little motivation towards state-building – as in 19<sup>th</sup> England and Italy before unification– educational development lagged considerably behind.

## Education and State Formation in East Asia

As in the West in the 19<sup>th</sup> century, the creation of public education systems in East Asia - in Japan in the 1870s and after and in the tiger economies after 1960 – was primarily the work of the state.

It was part of an intensive process of state formation initiated in Japan during the Meiji Restoration and in the tigers after they gained independence (except in Hong Kong).

In each case it was driven by a form of situational nationalism (Johnson, 1982) born of a need to ensure the survival of states which were threatened from outside or whose survival as newly independent states was threatened by a fragile geo-political situation.

## Nation-Building

The very rapid development of public education systems in all these states was motivated by urgent public and collective objectives.

- Consolidating new national identities
- Integrating communities and fostering social cohesion
- Spreading common languages in diverse communities (English and Mandarin in Singapore)
- Forging a disciplined workforce and developing the skills for economic growth
- Developing the capacity of the state bureaucracies.

## Public and Private

East Asian education systems – excepting Singapore’s - made use of substantial private investments (in secondary school and university fees and tuition in tutorial schools) which allowed provision to grow more rapidly but the development of education was clearly driven and controlled by the state.

- Initially investment in education came mostly from government and fees only became a substantial part of total funding as families became affluent enough to contribute.
- Private secondary schools and universities tightly regulated and part-funded by the state.
- Strong educational bureaucracies at national and regional levels.

## Centralised School Systems

Until quite recently, the East Asian education systems were highly centralized:

- Quite standardized structure of schools - in Japan, South Korea and Taiwan following the US 6-3-3 pattern and with neighbourhood non-selective comprehensive schools with mixed ability classes and strong emphasis on interactive classroom teaching.
- Little school autonomy
- Equal resource distribution between schools (with rotation of head and teachers in some cases).
- National systems of examination controlled by the state
- Strongly prescriptive national curricula with state authorization of textbooks (Japan) and state-provided instruction materials (Singapore).

Centralisation allowed:

- embedding of normative values and standards which helped by drive up educational achievements
- states to plan education development and skills flows (including through quota in different subjects) and integration skills supply with economic demand.

## State-Led Development and Manpower Planning

Economic growth in Japan and the tigers was exceptionally state-led.

Developmental states used their powerful and highly competent bureaucracies to plan economic development and to coordinate skills supply and demand in dynamic ways.

- Industrial Policies for growth in particular sectors tied to
- Manpower planning
- Increasing the supply of skills in particular areas in anticipation of future demand
- Using state levers to drive up employer demand for skills (wage minima, taxes on low pay, deals of skills transfer with MNCs).

## Role of Education in Social and Political Development

Arguably underpinning all of this was the role of education in promoting:

- Strong national identity
- Social integration and cohesion
- Civic responsibilities and work ethic
- Public service and bureaucratic capacity
- Distribution of fruits of growth widely (ie relatively low income inequality in Japan, Korea and Taiwan).



## Research on Social Benefits of Learning in Contemporary Developed Societies

### Individual Level Effects

Studies for various countries demonstrate that more educated people have higher levels of :

- Interpersonal trust and institutional trust
- Civic and political engagement
- Democratic values
- Tolerance

and lower levels of violent crime.

(Nie *et al.*, 1996; Stubager, 2008; Hagendoorn, 1999; Emler and Frazer, 1999; Putnam, 2000). (Nie *et al.*, 1996; Stubager, 2008; Hagendoorn, 1999; Emler and Frazer, 1999; Putnam, 2000; McMahon, 1999).

## Some Findings from Analyses of UK Longitudinal Data (Feinstein *et al.*, 2003).

Compared with those educated to level 2, graduates are:

- 70-80% more likely to report excellent health (males and females)
- 55% less likely to suffer depression (males)
- 3.5 times more likely to be a member of a voluntary association (males) (F=2.5x)
- Between 30% and 40% more likely to hold positive attitudes to race and gender equality
- 50% more likely to vote.

## Education and Social Capital

Education is also found to contribute to the social capital of individuals and groups.

SC defined as 'features of social life – networks, norms and trust – that enable to participants to act together more effectively to pursue shared objectives' (Putnam, 2006)

Putnam (2000) finds that more educated people are more likely to join associations and be civically active. Repeated interactions in Groups increased levels of trust and tolerance.

- Individuals thus benefit from enhanced networks
- Neighbourhoods benefits from more co-operation and cohesion etc



## Education and Social Cohesion

Social capital amongst individuals, families and local communities is not the same thing as social cohesion at the country level.

Intra-group bonding does not always translate into inter-group harmony.

A country can have high levels of social capital in particular communities but not be at all socially cohesive (eg Northern Ireland would be a good example : see Schuller, Field et al, 2000).

*Individual social benefits through increased learning do not necessarily translate into societal effects or coincide with increased social cohesion.*

## The Illusions of Public Policy

Policy-makers overly optimistic about the societal benefits of education because they assume that the social benefits that accrue to individuals from higher levels of education translate into benefits for society as a whole. However this is not necessarily the case for a number of reasons.

- Education may have a positive effect on individual social outcomes, and these individual level effects may aggregate at the societal level, but they are also affected by national contexts and may be overwhelmed by other non-education factors.
- Education effects may be relative or 'positional' so that the social benefits gained by one individual come at the cost of social losses to other individuals.
- Aggregate levels of education may be less important in generating societal benefits than the way education and skills are distributed.

### Contextual Effects on Tolerance

Research for a number of countries shows that more educated people tend to be more tolerant (eg Putnam, 2000; Nie et al 1996). Education, it is argued, can develop both cognitive resources and values which protect against racial and other forms of prejudice (Hagendorn, 1999). These direct effects of education on individuals should lead to more tolerant societies.

However, this has not always been the case historically, as Inglehart (1990) reminds us with respect to highly educated Nazi Germany. Nor is it the case in contemporary societies. There is no clear-cut relationship across countries between levels of education and levels of tolerance (Green, Preston and Janmaat, 2006). This is probably because contexts effect the relations at the national level and because other factors overwhelm education the statistical relationship between education and tolerance.

The prevailing political climate, for instance, has strong effects on tolerance. Also, Eurobarometer data suggest that levels of tolerance in EU countries vary according to the actual and perceived proportion of immigrants (Halman, 1994).

In a study of EVS data Jasinska-Kania (1999) shows that the impact of education on racial tolerance is greater in countries with higher levels of immigrants (perhaps because there are more circumstantially-driven racist attitudes that can be countered by education).

### Positional Effects of Education on Political Participation.

Where effects of education are 'relative' or 'positional', individual effects may not translate into societal effects at all. This is because it is individual's level of education relative to others that matters, not his or her level of education *per se*.

Robert Nie *et al.* (2006), using OLS regressions over time on US data, find that it is the relative, rather than absolute, level of education that is important in determining levels of political engagement.

More educated people have more opportunity to achieve 'network centrality,' giving access to politicians, thus giving individuals an incentive to participate. However, network centrality is a 'zero-sum' property - the gains for one individual will automatically entail losses for others.

Thus while average education levels may be getting higher in North America this does not necessarily lead to higher level of political engagement.

## Social Trust – Multiple Effects of Education

Interpersonal or 'social' trust has often been considered one of the key measures of social cohesion (Green et al 2006; Uslaner 2002; Reeskens 2007). It relates to people's willingness to place their confidence in a wide range of others, including people they do not know. And it is widely considered to be an important precondition for the functioning of modern societies where there is a highly evolved division of labor and where everyday activities often involve interactions with strangers.

There are various different mechanisms by which education effects social trust.

- Evidence for a number of countries suggests that more educated people tend to be more trusting (Campbell 2006; Putnam 2000). Education affects individuals both directly and indirectly through occupation. Better off people tend to be more trusting.
- Campbell (2006) and Helliwell and Putnam (1999) also claim to find a cumulative effect. Individuals are more trusting because of the education they have received but they also trust more when others around them are well educated.
- Individual trust appears to aggregate at the macro level. Better educated and richer countries tend to be more trusting.

However, there also appears to be a strong distributional effect on trust at the societal level. Countries with less inequality of skills and incomes tend to be more trusting.

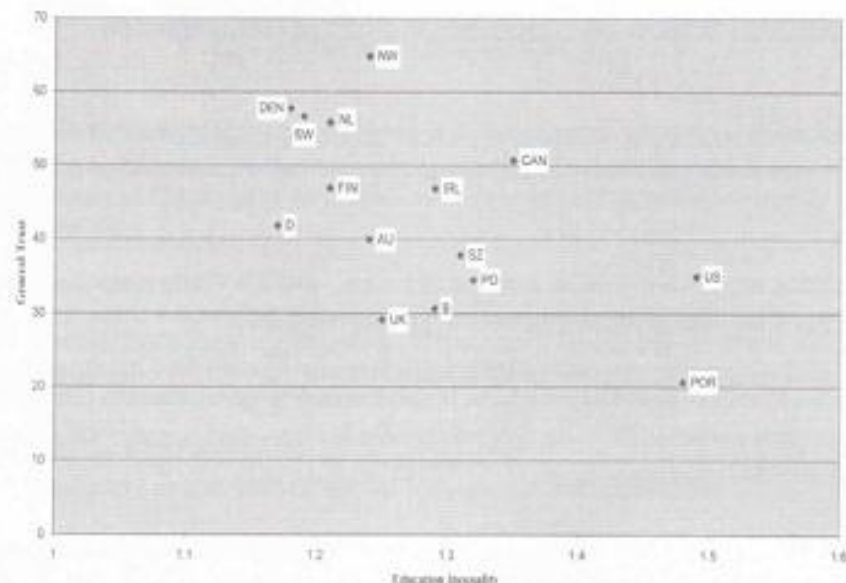
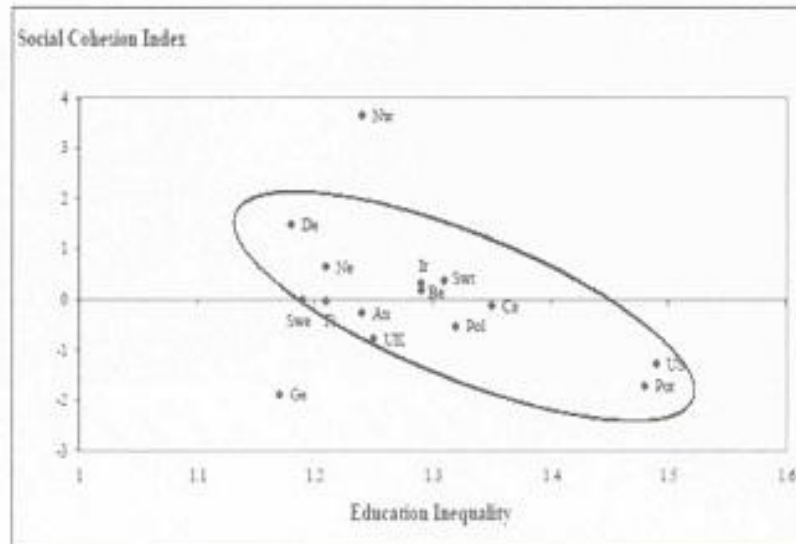
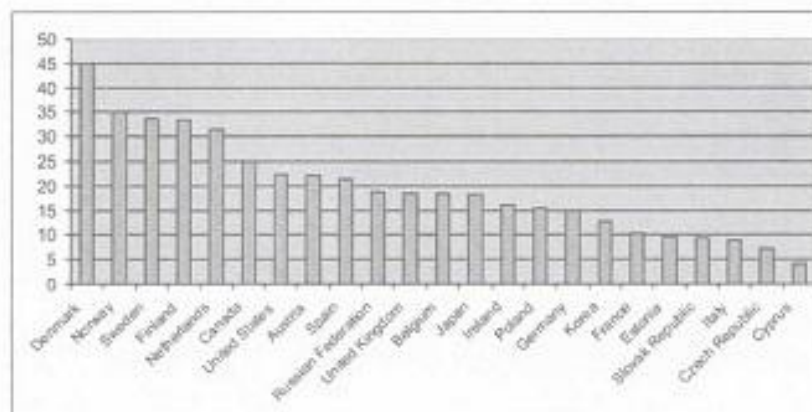


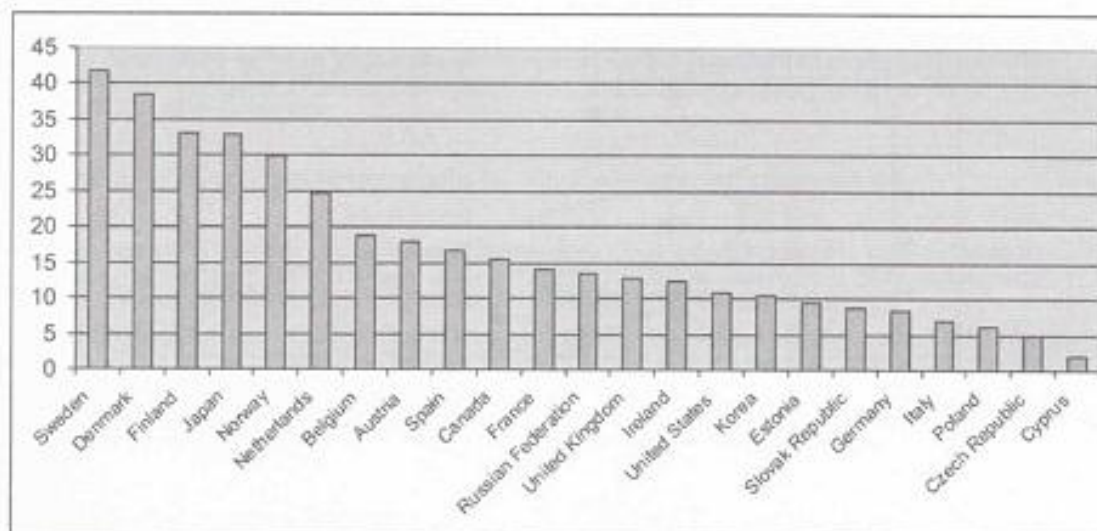
Figure 1: Relationship between Social Cohesion and Education Inequality



**Few People Can be Trusted Completely (percentage disagreeing plus strongly disagreeing)**  
Data from OECD PIAAC

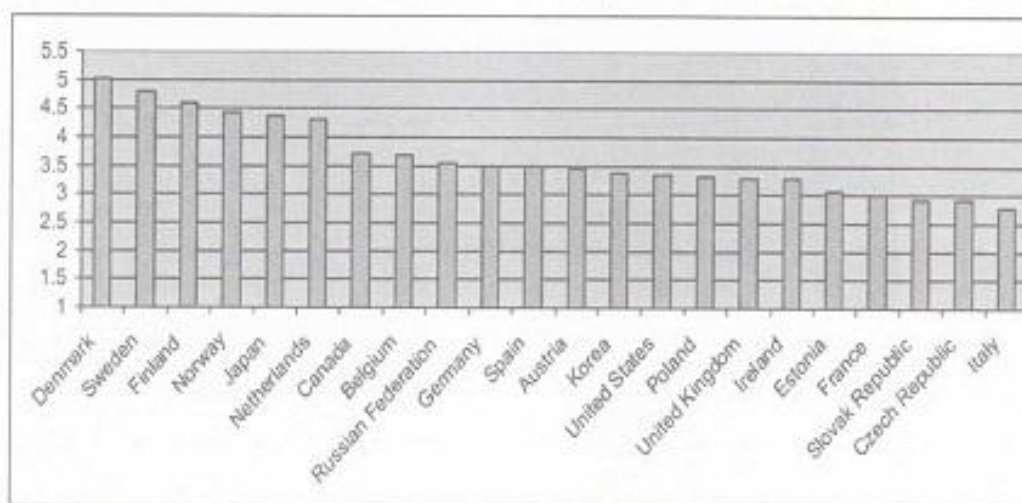


**Other People Take Advantage of You (percentage disagreeing plus strongly disagreeing)**



**Social Trust (mean levels on combined measure)**

(Data from OECD PIAAC)



### Numeracy Skills Inequality and Social Trust in Western Countries



### Why Does Inequality Undermine Social Trust?

Inequality of incomes and skills is strongly negatively correlated with levels of social trust across countries. Why?

Social epidemiologists, Wilkinson and Pickett (2009), argue that high levels inequality generate high stakes competition between individuals that increases anxiety and social tension – which are bad for health and undermine trust in others.

Skills inequality contribute to these effects of income inequality, at the same time as increasing the social distance between individuals which makes trusting more difficult.

## Policy Lessons

Education can bring enormous social benefits to individuals and societies. But only in certain contexts.

How education and skills are distributed probably matters as much for social cohesion and many other social benefits as average levels of education.

