

JOHN S. DANIEL

open &
flexible
learning
series



MEGA-SCHOOLS, TECHNOLOGY AND TEACHERS

ACHIEVING EDUCATION FOR ALL

ROUTLEDGE





Frances
Ferreira



Asha
Kanwar



Abdurrahman
Umar

Special Thanks!



Thank you for the stimulating environment



Thanks for your practical help
(and to Annette, Helen and Jasmine
who don't have photos on the website)

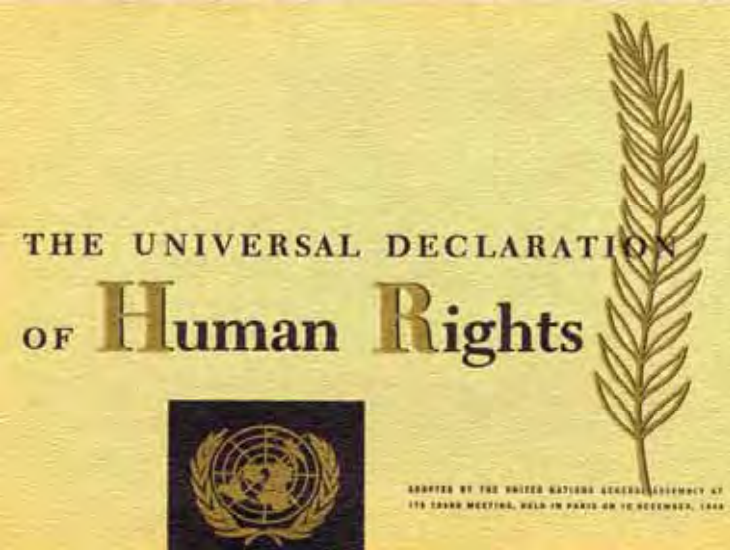
Education for All
*Unfinished
Business*

Education as a Human Right

THE UNIVERSAL DECLARATION
OF **H**uman **R**ights

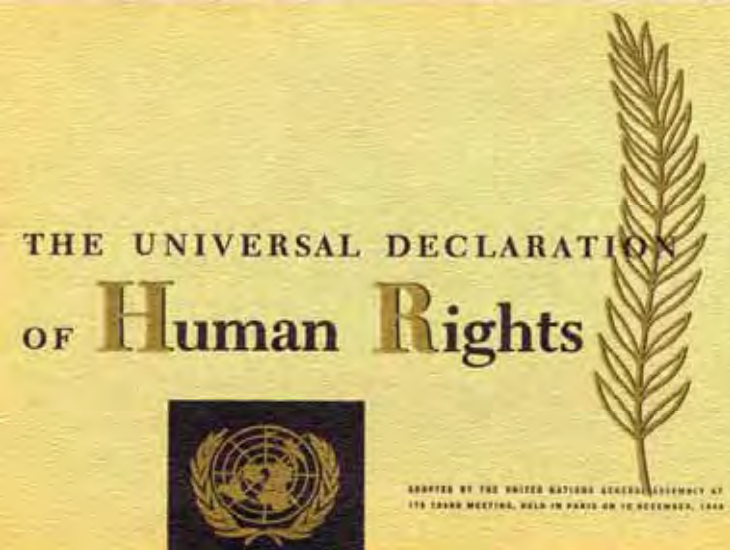


ADOPTED BY THE UNITED NATIONS GENERAL ASSEMBLY AT
ITS 183RD MEETING, HELD IN PARIS ON 10 DECEMBER, 1948



Article 26

(1) Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.



Article 26

(3) Parents have a prior right to choose the kind of education that shall be given to their children

- Why Education for All?



Adam Smith
1723-1790

'The more (ordinary people) are instructed the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. An instructed and intelligent people, besides, are always more decent and orderly than an ignorant and stupid one... They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition, and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of government...

In free countries, where the safety of government depends very much upon the favourable judgment which the people may form of its conduct, it must surely be of the highest importance that they should not be disposed to judge rashly or capriciously concerning it.'

Adam Smith

The Wealth of Nations

1776

'The more (ordinary people) are instructed the less liable they are to **the delusions of enthusiasm** and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. An instructed and intelligent people, besides, are always more decent and orderly than an ignorant and stupid one... They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition, and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of government...



Adam Smith

1723-1790

'For a very small expense the public can facilitate, can encourage and can even impose upon almost the whole body of the people, the necessity of acquiring those most essential parts of education'



PEACE, ORDER AND GOOD GOVERNMENT

Education as a Human Right

THE UNIVERSAL DECLARATION
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ITS 183RD MEETING, HELD IN PARIS ON 10 DECEMBER, 1948

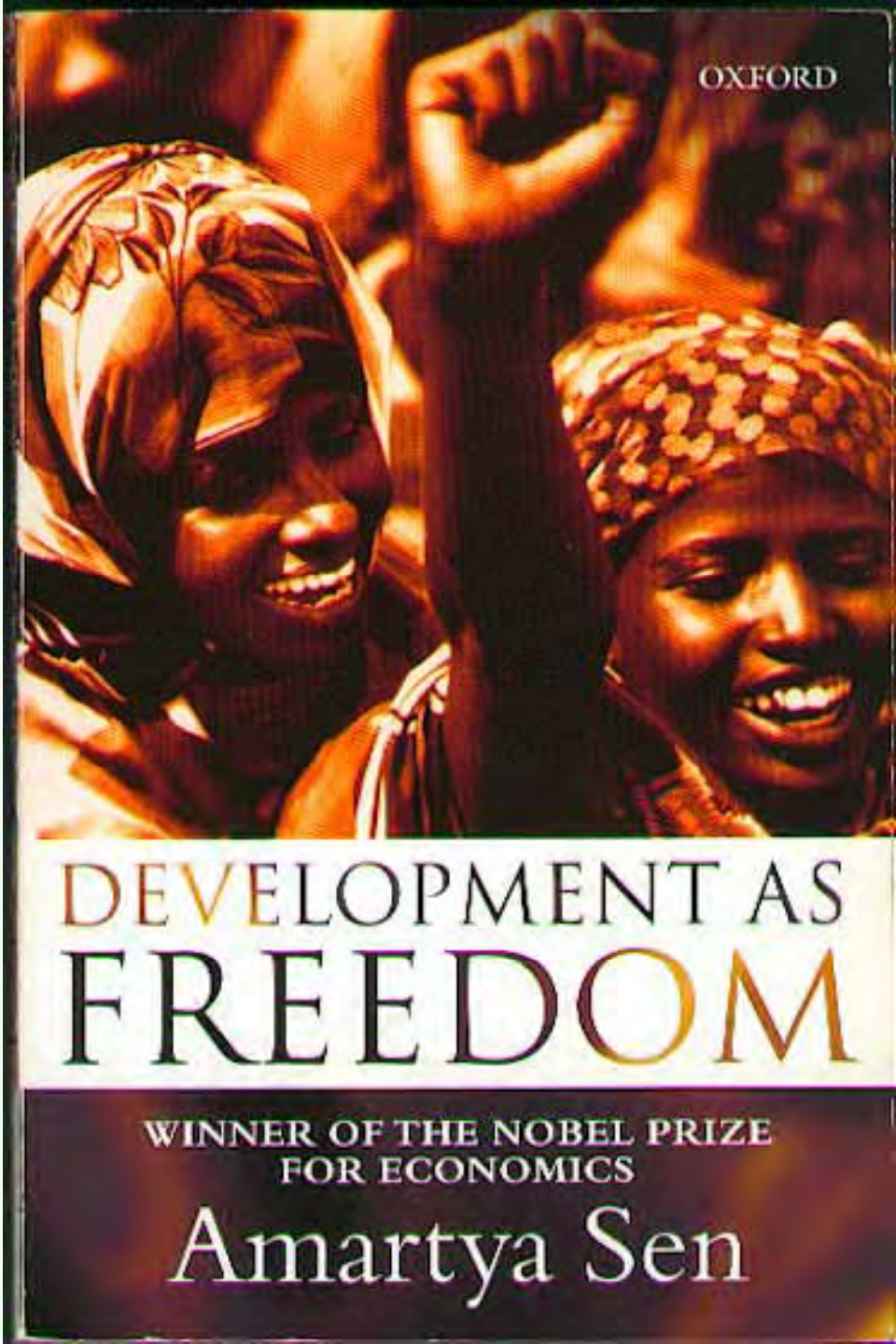
Education for Economic Growth

“human capital development”
(The World Bank)

“education is another magic
formula that has failed us in the
quest for growth”
(William Easterly)



Amartya Sen



Increasing freedom is
the measure of
development
and
free people
are the drivers of
development



1990
The World Conference on
Education for All
Jomtien, Thailand

Jomtien = a failure?

1990 – 100m (6 to 11) out of school

2000 – 125m (6 to 11) out of school

Education for All by 2015

An international commitment



The Dakar World Forum on EFA 2000



The Fast-Track Initiative

World Bank

“to provide concentrated support to complete the task of achieving the quantifiable EFA goals in countries where conditions were judged to be propitious”

Jomtien = a failure?

1990 – 100m (6 to 11) out of school

2000 – 125m (6 to 11) out of school

Dakar = more progress

2010 – 70m (6 to 11) out of school

2015 – 50m (6 to 11) out of school



Universal Primary Education

SUCCESSSES

&

FAILURES

SUCCESS



IN SCHOOL

SUCCESS

Numbers in primary school have increased much faster since 2000 than in the decade between Jomtien and Dakar. The average net enrolment rate rose from 54% to 70% between 1999 and 2006 in Sub-Saharan Africa and from 75% to 86% in South and West Asia.

SUCCESS

In sum, there were 40 million more children in school in developing countries in 2006 than in 1999

FAILURE



NOT IN SCHOOL

FAILURE

In 2006 75 million children, 55% of them girls, were still not in primary school.

Furthermore, on present trends there will still be some 29 million of children out of school by 2015

CHALLENGES

Of success:

'The success of the campaign for Universal Primary Education is creating a surge of children towards secondary schooling and there is nowhere for most of them to go'

CHALLENGES

Of failure:

Getting the remaining 75 million children into school will require various strategies but, above all, the employment of more teachers.

Surging to Secondary



200 to 400 million youth

Surging to Secondary



200 to 400 million youth

Since the Industrial Revolution...

7 x more people

7 x the impact each

$7 \times 7 = 50$ x total impact

So... curb population growth



The education of girls may also be the most powerful tool against climate change

Key points:

- Expand secondary

Key points:

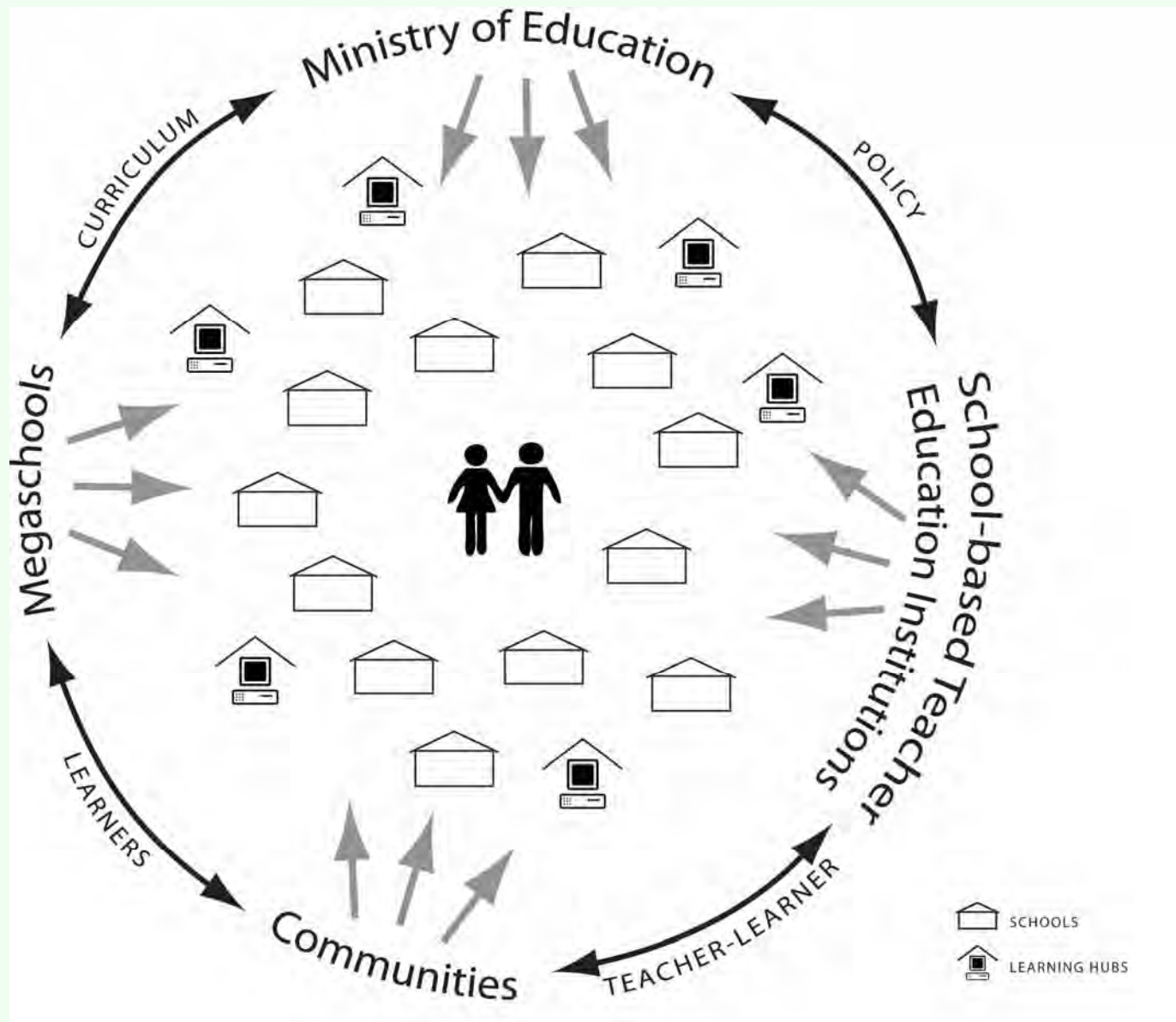
- Expand secondary
- Secondary is inefficient

Key points:

- Expand secondary
- Secondary is inefficient
- Expand Open Schooling

Key points:

- Expand secondary
- Secondary is inefficient
- Expand Open Schooling
- Educational ecosystem



21st Century Educational Ecosystem

Conventional schools cannot cope!

ADD:

- Private schooling for the poor
- Applications of ICTs
- OPEN SCHOOLING

Develop and expand

OPEN SCHOOLING

and

INTEGRATE IT

with other approaches

Blur the unhelpful distinction



Between formal and non-formal education

Build a bridge between knowledge acquisition



and skills development

Reduce inequalities



OPEN SCHOOLING

Is less expensive than

CONVENTIONAL SCHOOLING
in most countries

and the difference in cost

IS INCREASING!



Professor
Keith Lewin

If the unit cost of
SECONDARY
is more than double
PRIMARY

A country will **NEVER** achieve

**UNIVERSAL SECONDARY
EDUCATION**

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MEGA-SCHOOLS, TECHNOLOGY AND TEACHERS

ACHIEVING EDUCATION FOR ALL

ROUTLEDGE



Can ICTs help?

- One Laptop Per Child (USA)
- Hole In The Wall (India)
- NEPAD eSchools (Africa)

but they need to be

EMBEDDED IN A FRAMEWORK

To develop learning systems that:

- operate at scale
- low cost
- consistent quality
- meet diverse needs

ODL at scale

3 sub-systems:

- Administration/logistics
- Course Development
- Student Support

'essential reading for all involved in higher education'
TIMES HIGHER EDUCATION SUPPLEMENT

Mega-Universities & Knowledge Media

Technology Strategies
for Higher Education

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'essential reading for all involved in higher education'
TIMES HIGHER EDUCATION SUPPLEMENT

Mega-Universities & Knowledge Media

100,000 students

Technology Strategies
for Higher Education

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10,000 pupils

MEGA-SCHOOLS, TECHNOLOGY AND TEACHERS

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Learning
made easy



Under MHRD, New Delhi

AVI-840005

**National Institute for Open Schooling –
India**

400,000 new pupils annually



Namibian College of Open Learning

28,000 pupils
=
40% of secondary



OPEN SCHOOLS

Similar ODL methods:

- Administration/logistics
- Course Development
- Student Support

Different educational purposes



OPEN SCHOOLING



3 types of Open Schools

- Complementary
- Alternative
- Integrative

Complementary

Same curriculum and exams as
conventional schools

Examples:

France, Botswana, Indonesia, Mexico, Namibia



Complementary

Needs:

- Better integration with rest of system
- More autonomy in governance
- Higher performance

Alternative

Different (usually more vocational) curriculum and sets its own exams, older pupils

Examples:



India, Papua New Guinea



Alternative

Programmes that focus on life skills and work-related subjects are attractive to students and parents

Integrative

Placed at the heart of the
educational system to
strengthen it

Model for the future

How to improve quality? (UNESCO)

- good learning materials
- focus on the curriculum
- regular, reliable assessment of learning
- pedagogical materials for teachers
- relevant content
- teach reading and writing
- structured teaching
- independent learning
- appropriate language of instruction
- larger classes with better inputs

How to improve quality? (UNESCO)

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Collaborative Development of Learning Materials

- Digital formats:
move, adapt, convert
- Open Educational Resources
OERs

Collaborative Development of Learning Materials

COL & Hewlett Foundation



20 sets of self-instructional materials in the secondary curriculum (each is a complete syllabus for one grade 10 or 12 subject)

Collaborative Development of Learning Materials

COL & Hewlett Foundation



100 trained and experienced master teachers
(instructional design, eLearning)

OPEN SCHOOLS

and the integration of ICTs

into the whole school system

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EMBEDDED IN A FRAMEWORK

OPEN SCHOOLS

and the integration of ICTs
into the whole school system through:

- production of Open Educational Resources
- general IT expertise
- assessment materials (question banks)

CONCLUSION

We are seeing the beginnings of a process that will lead to much closer integration between open schooling and conventional schooling

EXPANDING TEACHER EDUCATION

“...recruiting and educating large numbers of teachers is a necessity for rich and poor countries alike...”

(30,000 untrained teachers in California)

EXPANDING TEACHER EDUCATION

Causes of the teacher shortage:

- Complete Universal Primary
- Expand Secondary
- Wave of retirements
- Deaths from AIDS

EXPANDING TEACHER EDUCATION

- 10 million additional teachers required by 2015 (UNESCO)
- Current global teaching force = 75 million

TEACHER EDUCATION

Two issues:

- How to expand supply?
- What kind of training?

TEACHER RECRUITMENT

A three-way correlation:

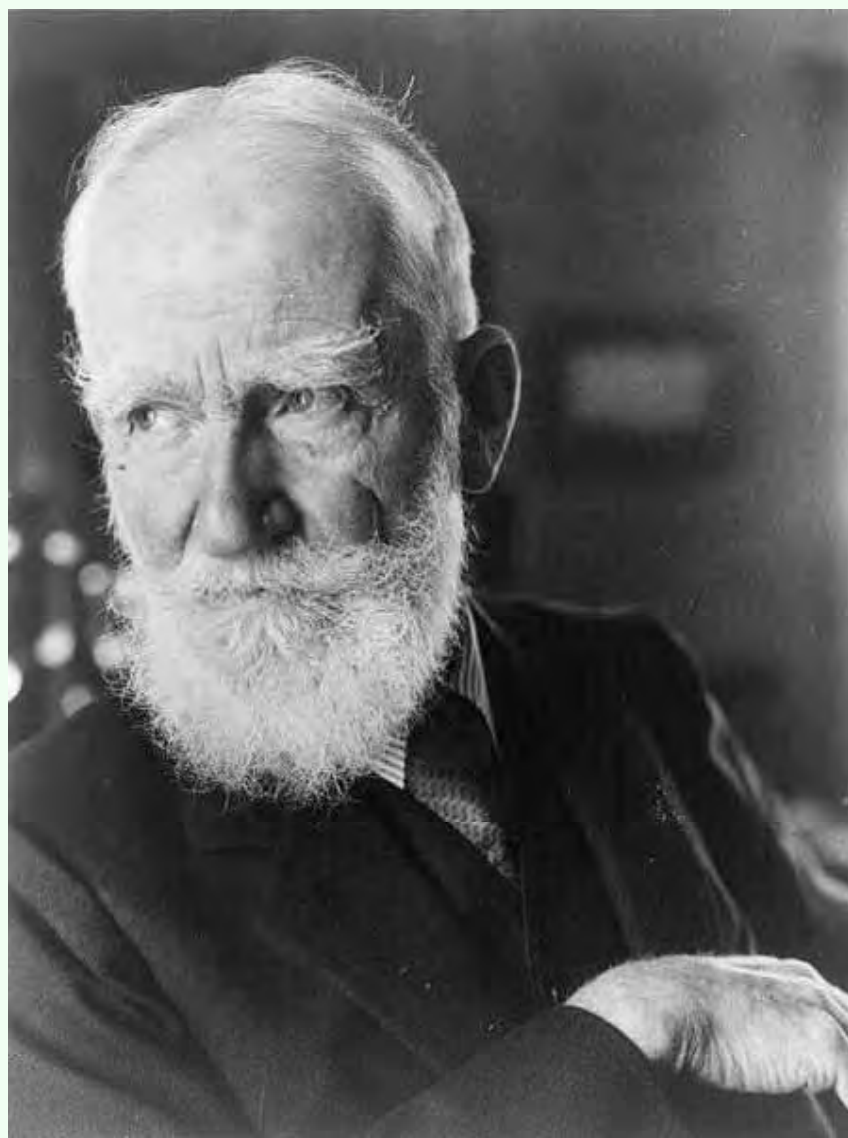
- Status of profession
- Ease of recruitment
- Pupil performance

TEACHER RECRUITMENT

Status of profession

Shared blame:

- Teachers: absenteeism, etc.
- Governments: conditions
(poor salaries, corruption)



George Bernard
Shaw

*“Those who
can do;
those who
can’t teach”*



The UK's Secret Intelligence Service, MI5, advertised for teachers this year, seeking their 'relationship-building skills'

The combination of the low status of the profession and the attractiveness of teachers' skills in the wider labour market no doubt explains why 50% of teachers in the US leave the profession within five years of completing their training (UNESCO, 2007).

UNTRAINED TEACHERS

cynical ploy or hard necessity??

“(Large expansion) para-teacher schemes where pre-service training is compressed or abandoned completely, wages are lowered, working conditions are poorer and career paths are limited. They are being used by many governments to cut the costs associated with expanding educational access to all children. The price such governments are forced to pay is the quality of training” (Nock, 2006).

“sending people into the classroom with minimal initial training can be a very good strategy for our times if they are then provided with appropriate on-the-job training”



Teach First
LEARNING TO LEAD



Teach First
LEARNING TO LEAD

Join in, stand out.

Teaching:

“tough and demanding”

Postgraduate Course:

“too slow”

“too theoretical”

“too boring”

Teacher education needs radical revision!

although

“more policy attention was given to teacher education in the 1990s than in all the hundreds of years of history that preceded it. And most of the activity has focused around quality”

Moon, 2008

1990s policy irrelevant because:

- it focused on long programmes of pre-service training

whereas

teachers need continuous professional learning

1990s policy irrelevant because:

- upgrading of teachers without reference to school needs

so

it encourages teachers to move jobs instead of becoming more effective

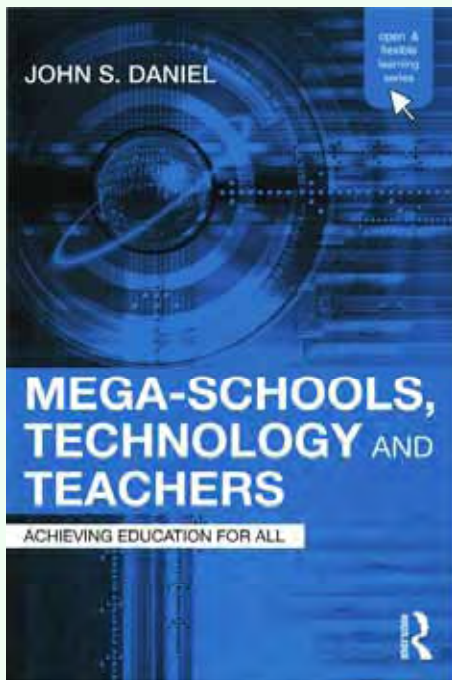
1990s policy irrelevant because:

- teacher education ignored the development of distance learning enhanced by ICTs and Open Educational Resources

although

distance learning is the only way to conduct classroom-focused continuous professional development

“The locus of continuous professional learning must be the school and its focus must be the classroom. This has always been the strength of distance learning systems for teacher education”



Profiles of Eight Distance Learning Teacher Education programmes

PERMAMA – Canada/Quebec 1970s





Top average scores for mathematics

Chinese Taipei	549
Finland	548
Hong Kong China	547
Korea	547
Quebec	540
Netherlands	531
Alberta	530
Canada (overall)	527
Ontario	526
Macau China	525
British Columbia	523
Japan	523
New Zealand	523

CalStateTEACH

A California State
University Multiple
Subject Preparation
Program for
Elementary School
Teachers



CalStateTEACH is a non-traditional program that offers both a student teaching and an intern program for qualified candidates interested in earning their credential without attending traditional college classes. Instead, the curriculum is delivered online.



The Open University

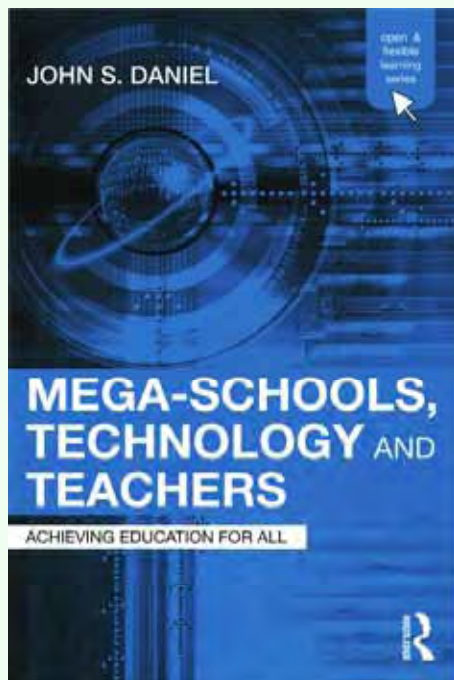
Contributions of ICTs

- Creation of communities of practice through computer conferencing:

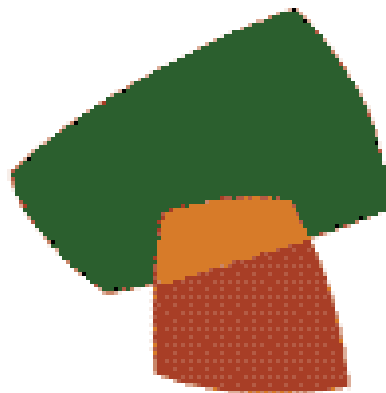
novices can gain experience through contact with veteran practitioners.

Contributions of ICTs

- **Open Educational Resources**
an Internet powered worldwide community effort to create an education commons.

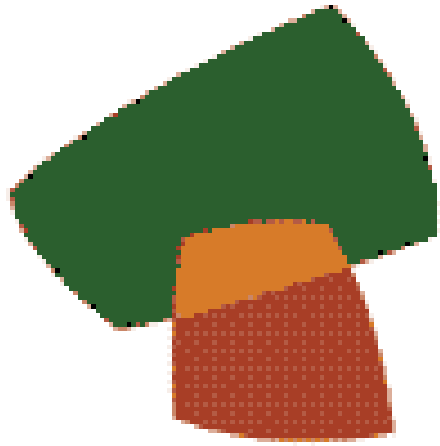


Profiles of Eight Distance Learning Teacher Education programmes



TESSA

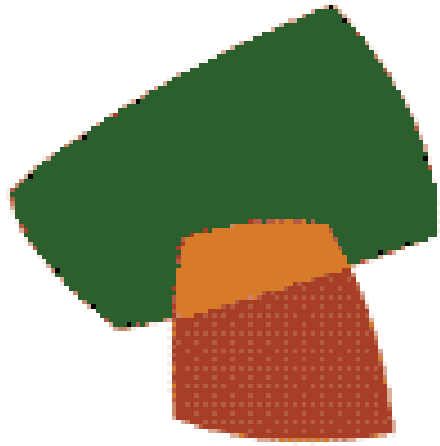
Teacher Education in Sub-Saharan Africa



TESSA

Teacher Education in Sub-Saharan Africa

a consortium of 13 African universities, the UK Open University and five international organisations. It works across nine African countries – with more participating informally – by creating teacher education materials in Arabic, English, French and Kiswahili.



TESSA

Teacher Education in Sub-Saharan Africa

Last year nearly half a million African teachers worked with materials and resources produced through the TESSA community. Since these are classroom-based in-service materials they have a direct impact on millions of children through their use in the classroom

OERs can be adapted to local needs:



University of Fort Hare

Devereux, Jane
&
Amos, Sandra
(2005)

The University of Fort Hare's learner-centred Distance Education Programme

Open Learning 20(3) 277-284.

CONCLUSION

Teacher Education

in the context of

the campaign for

Education for All



CONCLUSION

10 million additional teachers
required by 2015



CONCLUSION

The locus of continuous professional learning must be the school and its focus must be the classroom

CONCLUSION

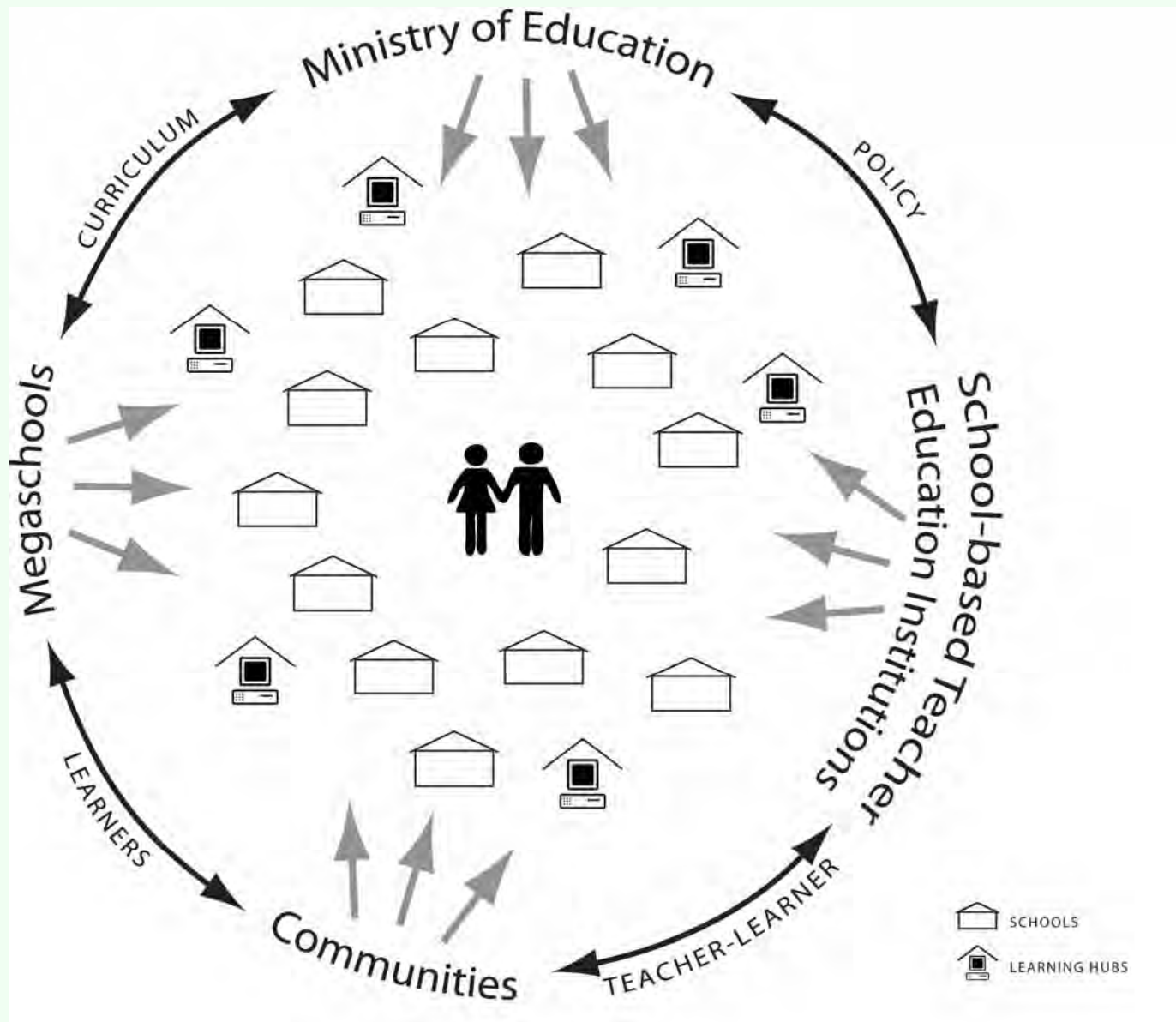
Teacher education institutions will have to give themselves the capability to offer distance learning programmes in order to reach teachers in their schools.

Today information and communications technology can make distance learning a richer experience than learning in a university classroom.



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