

*Open Education Network*

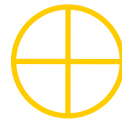
<http://www.open-ed.net>

# Rural Development in Asia through ICT-Supported Lifelong Learning



icODEL 2012 Manila 22-24 FEB

<http://icodel.upou.edu.ph>



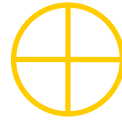
*Open Education Network*

<http://www.open-ed.net>

# Rural Development in Asia through ICT-Supported Lifelong Learning

Paul Kawachi FRSA  
Open University of China  
[kawachi@open-ed.net](mailto:kawachi@open-ed.net)

<http://www.open-ed.net/library/rural-ed.ppt>

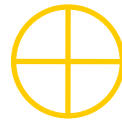


## a model for Modern Open Learning

- i. for rural economic development
- ii. using currently available technologies, and
- iii. which is scalable at low cost

together with historic case studies

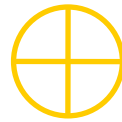
overview



*Open Education Network*  
<http://www.open-ed.net>

I want to show how and why  
distance education does not work, and

how and why  
open learning  
does



some definitions of terms :

- i. distance education vs open learning
- ii. cooperative learning vs collaborative learning
- iii. transactional distance, and
- iv. RLO, OER, OEP, ORE ...



distance education :

policy-driven by institutions, delivery of content,  
conforming to pre-set standards for accreditation  
the student is the object of short-term teaching

open learning :

fosters harmony and diversity through individualisation  
the student is the subject of lifelong learning

## definitions



*Open Education Network*  
<http://www.open-ed.net>

the role of distance education is  
somewhat distinct from and complementary to  
the role of open learning

in many ways distinct from and complementary to  
the role of conventional education



cooperative learning :

involves a teacher or other participant who knows the content and delivers this to the others

collaborative learning :

co-creates new non-foundational knowledge which initially no participant knows



definitions



*Open Education Network*  
<http://www.open-ed.net>

transactional distance :

the psychological distance in the mind  
or gap between not-knowing and knowing

the aim of education is to bridge this gap



## RLO, OER, OEP, ORE ...

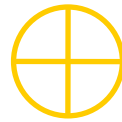
re-usable learning object – smallest bricks

open educational resource – free modules

open educational practice – use and create

open resources exchange – co-create, tag and share

aims

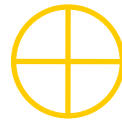


*Open Education Network*  
<http://www.open-ed.net>

an efficient model of open learning

- i. to co-create useful OER in context
- ii. to develop local rural economy
- iii. to create job-providers not job-seekers

methods



*Open Education Network*  
<http://www.open-ed.net>

case studies show historical evolution :

- case 1 lone-ranger
- case 2 lone-rangers with free money
- case 3 open university as listener
- case 4 current research-in-action

these are described next in turn ...

## case 1



*Open Education Network*

<http://www.open-ed.net>

### *i. the lone-ranger approach :*

In China in the 1990s, university experts went out into the villages alone, bicycling from village to village – wearing out bicycle tyres and later motorbikes to instruct farmers what to do.

Later whole city university faculty departments went into the rural areas to give week-long lectures and workshops, sometimes taking new seeds and technologies with them, and at other times tractors.

Of course these efforts are unsustainable.

Funding came from short-term international donors.



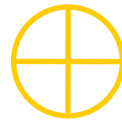
case 1



*Open Education Network*  
<http://www.open-ed.net>







*ii. lone-rangers with free money approach :*

In South Asia and Africa since 1995, micro-financing for rural entrepreneurs to start-up businesses has expanded now reaching 8 million borrowers almost all of whom are women. The bank largely behind this has 22,000 employees and has been subjected to government investigation (cleared in April 2011) of charging overly high interest rates to the very poor. Unregulated aggressive lending and high interest rates to the rural poor is also now (as of July 2011) subject to government investigation in India

case 2



*Open Education Network*

<http://www.open-ed.net>



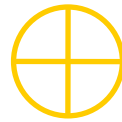


case 2



*Open Education Network*

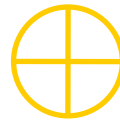
<http://www.open-ed.net>



- iii.* open university as listener approach :
  - i. has vast resources
  - ii. offers free OER and co-creates on demand
  - iii. uses local ethnic languages
  - iv. accommodates drop-in / drop-out
  - v. if wanted, offers certification at low cost

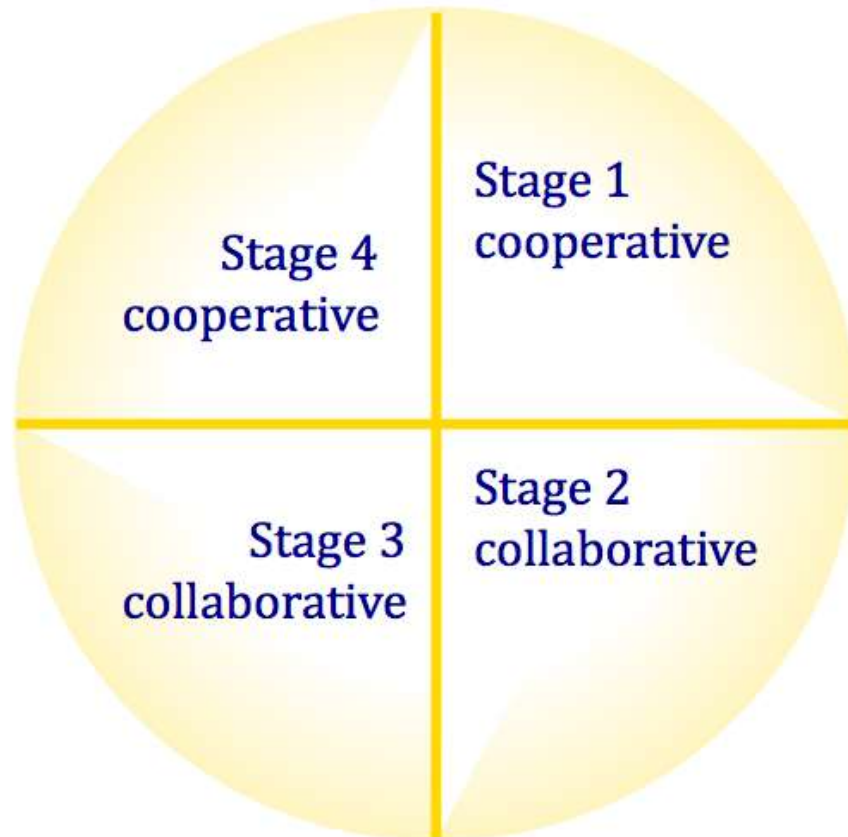
an open university is well-positioned  
philosophically, geographically, technologically

process



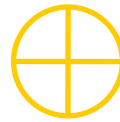
*Open Education Network*

<http://www.open-ed.net>



the Transactional Distance Model

process



*Open Education Network*

<http://www.open-ed.net>

Stage 4  
try out ...



Stage 1  
get input



Stage 3  
choose  
from all  
world

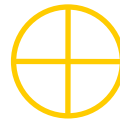


Stage 2  
create



the Transactional Distance Model

process



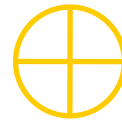
Open Education Network

<http://www.open-ed.net>

Transactional Distance	Stage				
far	1	S -			D -
med	2	S +	added		D -
low	3	S +	Structure	D +	added
zero	4	S -		D +	Dialogue

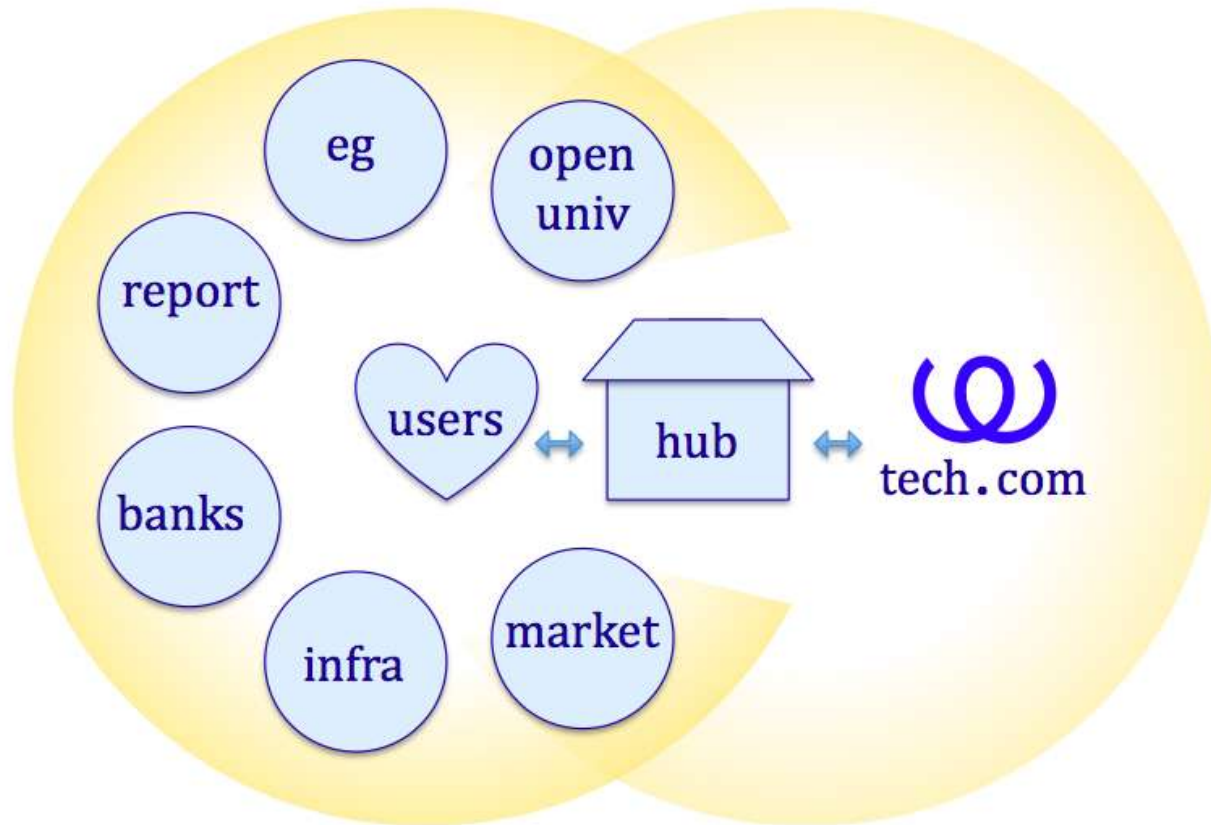
the Transactional Distance Model

cross-section



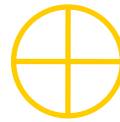
*Open Education Network*

<http://www.open-ed.net>



the Modern Open Learning Model

## cross-section



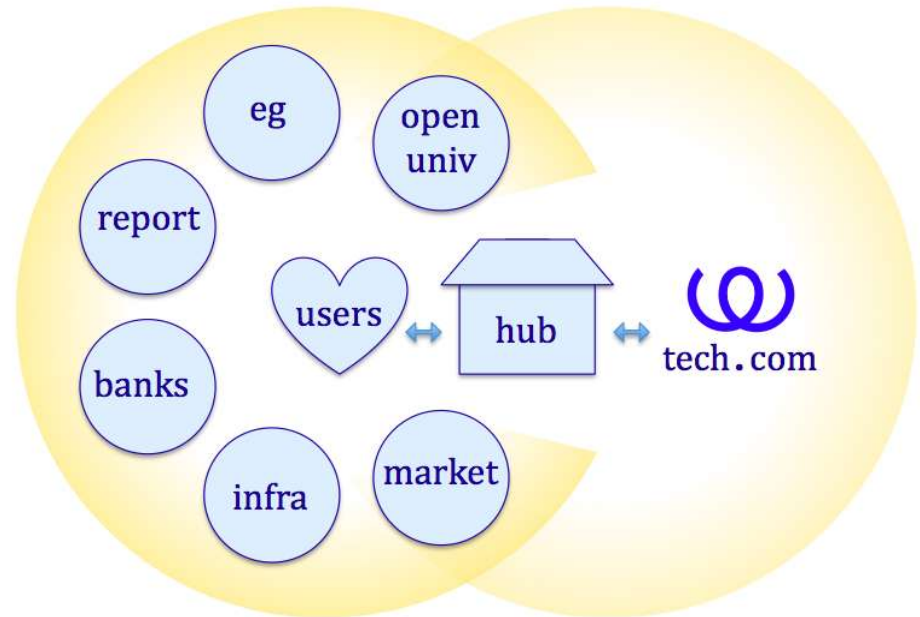
*Open Education Network*  
<http://www.open-ed.net>

- i. open university
- ii. demo to users
- iii. report to outsiders
- iv. coordinate finance
- v. build infrastructure
- vi. find markets

users = target learners

hub = villager with tech skills

tech.com = tech provider



the Modern Open Learning Model

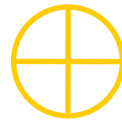


the Modern Open Learning model  
changes the role of the open distance university

- i. from delivering content to listening to wants,
- ii. from controlling standards to serving diversity, and
- iii. from being concrete to becoming oxygen



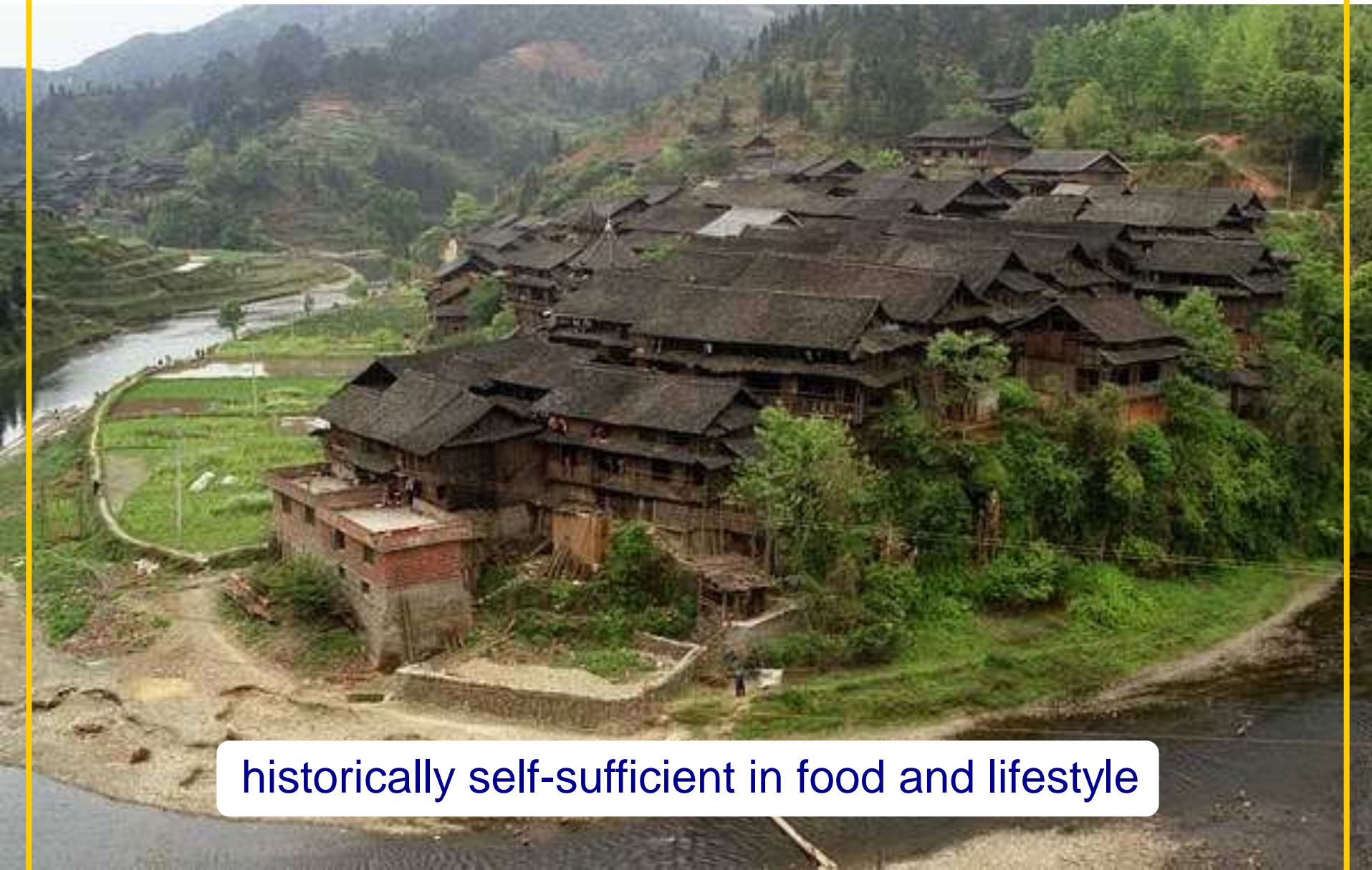
## Case 4



*Open Education Network*  
<http://www.open-ed.net>

- iv.* current rural development :
  - i. ICT-support through university resources
  - ii. university acts as intermediary
  - iii. listens to local ethnic culture
  - iv. provides continuous support
  - v. rejuvenates rural villages and preserves diversity

listening, flexibility, individualization, and  
co-creating the best way forward



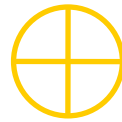
historically self-sufficient in food and lifestyle





local over-supply of ginger led to price crash

## Case 4



*Open Education Network*  
<http://www.open-ed.net>

- iv.* initial top-down project brought :
- i. televisions and high electricity costs
  - ii. education and high school fees
  - iii. hospitals and high medical fees
  - iv. modern agriculture and high fertiliser costs

after their very hard work, they over-produced, the local market price collapsed, the people got high debts and became poorer than before





“ I have been feeding my cattle with cabbages for lack of market.

I had planted two acres of the produce and no one has bought a single piece,”

Muthoni, R. (2012) 9<sup>th</sup> January

[http://thewip.net/contributors/2012/01/with\\_no\\_money\\_kenyan\\_farmers\\_f.html](http://thewip.net/contributors/2012/01/with_no_money_kenyan_farmers_f.html)

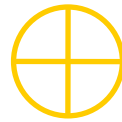
bumper harvest of potatoes and carrots ...

but lack of market demand

caused a lot of it to rot in the land,

costing hefty [ financial ] losses.

similar over-supply occurred in Africa ...



### *iv. current rural development :*

“After we collected the oral testimonies, we organized sharing sessions to go through the stories together with the local participants in order to discover the needs and aspirations of the villagers, identify their cultural heritage and strengths as a community, and make plans for improving their livelihood using a communal decision-making process.”

Ku, 2011 (p.353)

*Action Research, 9 (4), 344-369.*





ethnic weaving and embroidery

## Case 4



ethnic crafts now succeed for rural development



## Case 4



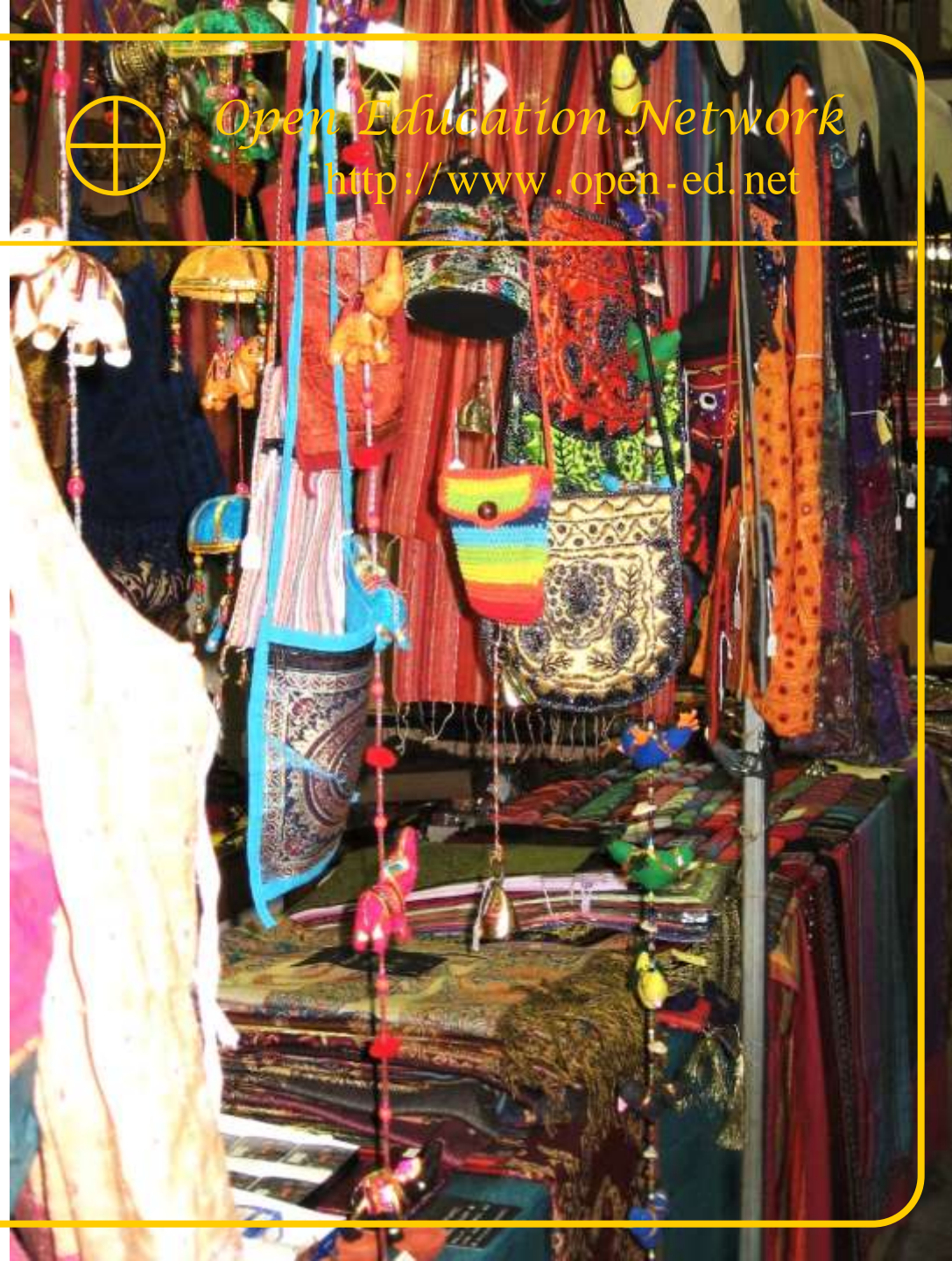
the modern 'Fair Trade' movement  
has given such villagers an unusual high-price  
for their weaving and embroidery

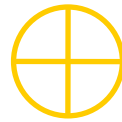
this does not reduce the village  
to a humiliating circus side-stall  
provided that they can deliver unusual high quality

## Case 4



*Open Education Network*  
<http://www.open-ed.net>





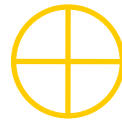
*iv.* the second time round :

- i. the university listened to local interpreters
- ii. they found inspiring examples
- iii. they co-created new ideas together
- iv. they use outside resources as they want
- v. they study the knowledge and skills they want
- vi. the university continues to publish the results
- vii. the university advises on expanding markets

the target users became self-motivated

to engage open lifelong learning for themselves

summary



*Open Education Network*  
<http://www.open-ed.net>

key points :

much rural development is unsustainable

current China growth is overly delivered by an investment boom and needs to be re-focused on domestic human development which the proposed Modern Open Learning model can help stimulate through lifelong learning to increase domestic consumption

the Modern Open Learning model shows how rural development can be sustainable



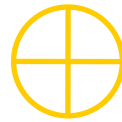
Open Learning Model :

where ...

*eg* we listen to Jilin Province above North Korea  
and co-create local courses in Korean native language  
for local job creation and lifelong learning

*eg* we listen in Xinjiang Province in northwestern China  
in ethnic muslim areas  
and co-create local courses in Wei native language  
for local job creation and lifelong learning

cross-section



*Open Education Network*  
<http://www.open-ed.net>

Open Learning Model :

scalable

transmissible, self-extensible, self-financing

sustainable, profitable

potential advantages include lifelong learning  
throughout life ;- from pre-natal to post-death

cross-section



*Open Education Network*

<http://www.open-ed.net>

what other models might work equally well ?

cross-section



*Open Education Network*  
<http://www.open-ed.net>

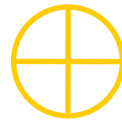
other researchers in China in conventional universities  
have developed a similar ubiquitous 3G concept :

Learning Cell model  
and the  
Learning Resource Aggregation model

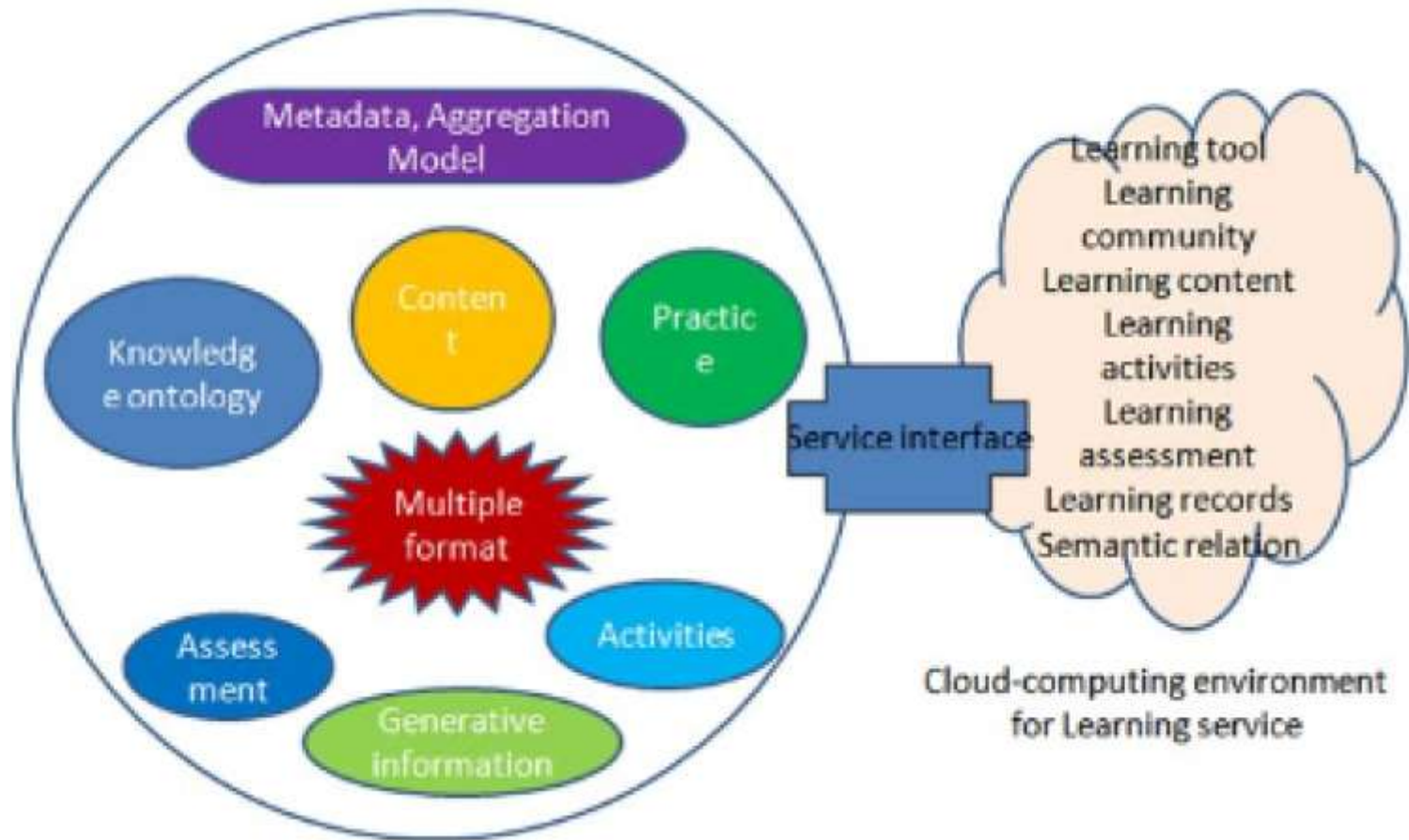
Yu, ShengQuan (2011).  
Research on the organization model of ubiquitous learning resources :  
The concept and architecture of the Learning cell. In R. Huang (Ed.),  
*Technology for education and learning*. IASTED. Calgary : Acta Press.



cross-section



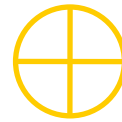
Open Education Network  
<http://www.open-ed.net>



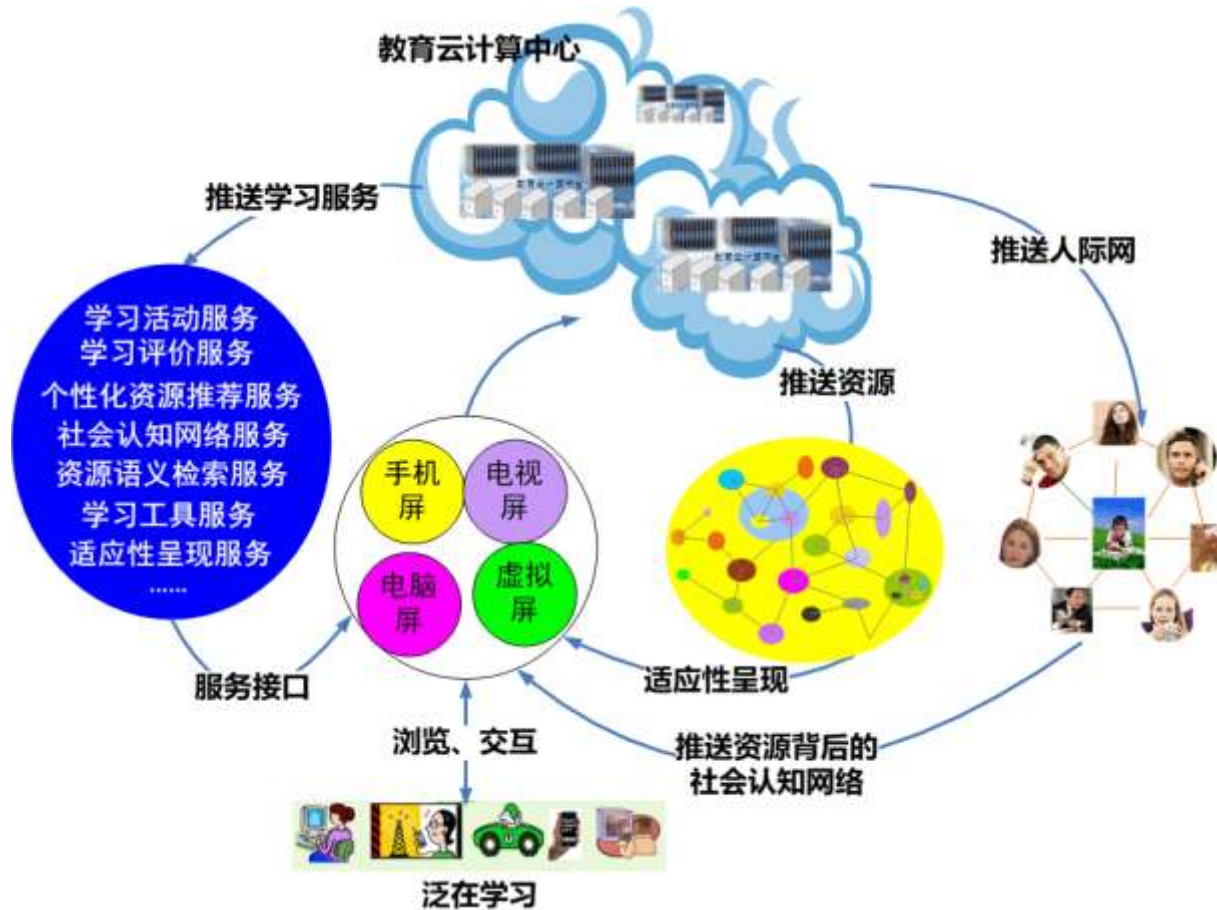
## the Learning Cell Model

first proposed by ShengQuan Yu in 2009

cross-section



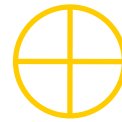
Open Education Network  
<http://www.open-ed.net>



the Learning Cell Model

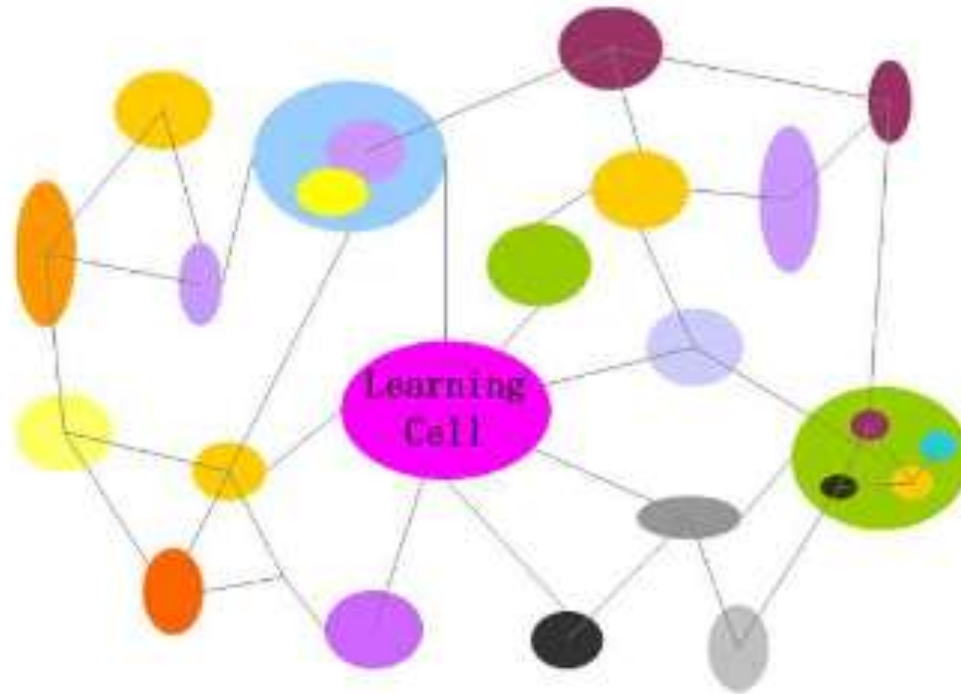
first proposed by ShengQuan Yu in 2009

cross-section



*Open Education Network*

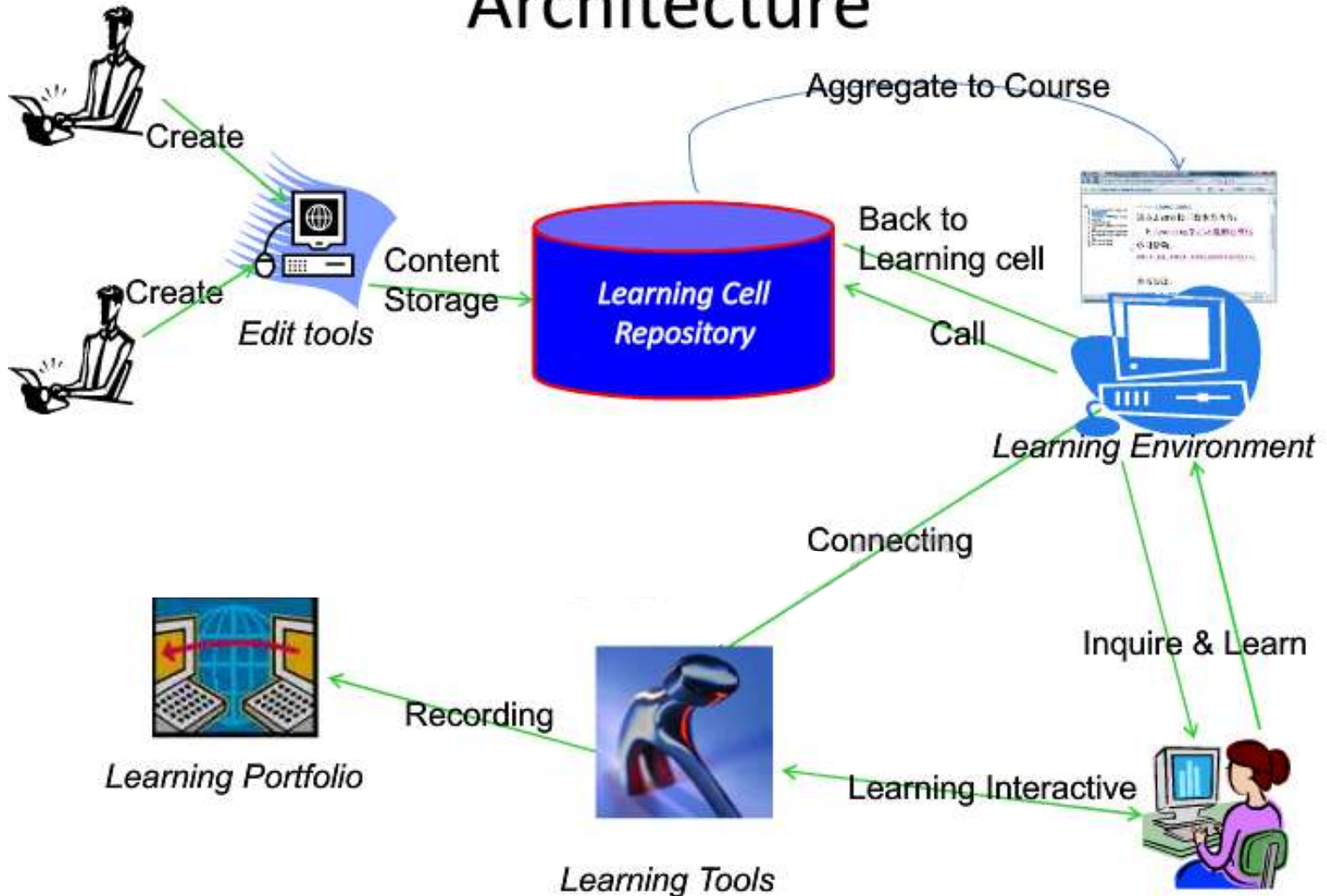
<http://www.open-ed.net>



## the Learning Cell Model

first proposed by ShengQuan Yu in 2009

# Architecture



## the Learning Cell Model

first proposed by ShengQuan Yu in 2009

cross-section



*Open Education Network*  
<http://www.open-ed.net>

in our view the  
Learning Cell model :  
is cooperative and sharing old knowledge

while the Open Learning Model  
is collaborative and co-creating new knowledge

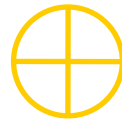
cross-section



*Open Education Network*  
<http://www.open-ed.net>

Learning Cell model :  
uses Author name as a tag  
and lit ref Authors as tags  
to connect old knowledge to other old knowledge  
  
to become a cloud of old knowledge  
  
the automaticity becomes epidemic

cross-section



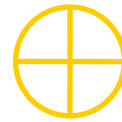
*Open Education Network*  
<http://www.open-ed.net>

Learning Cell Model :  
global served up locally

Open Learning Model :  
localised served up globally

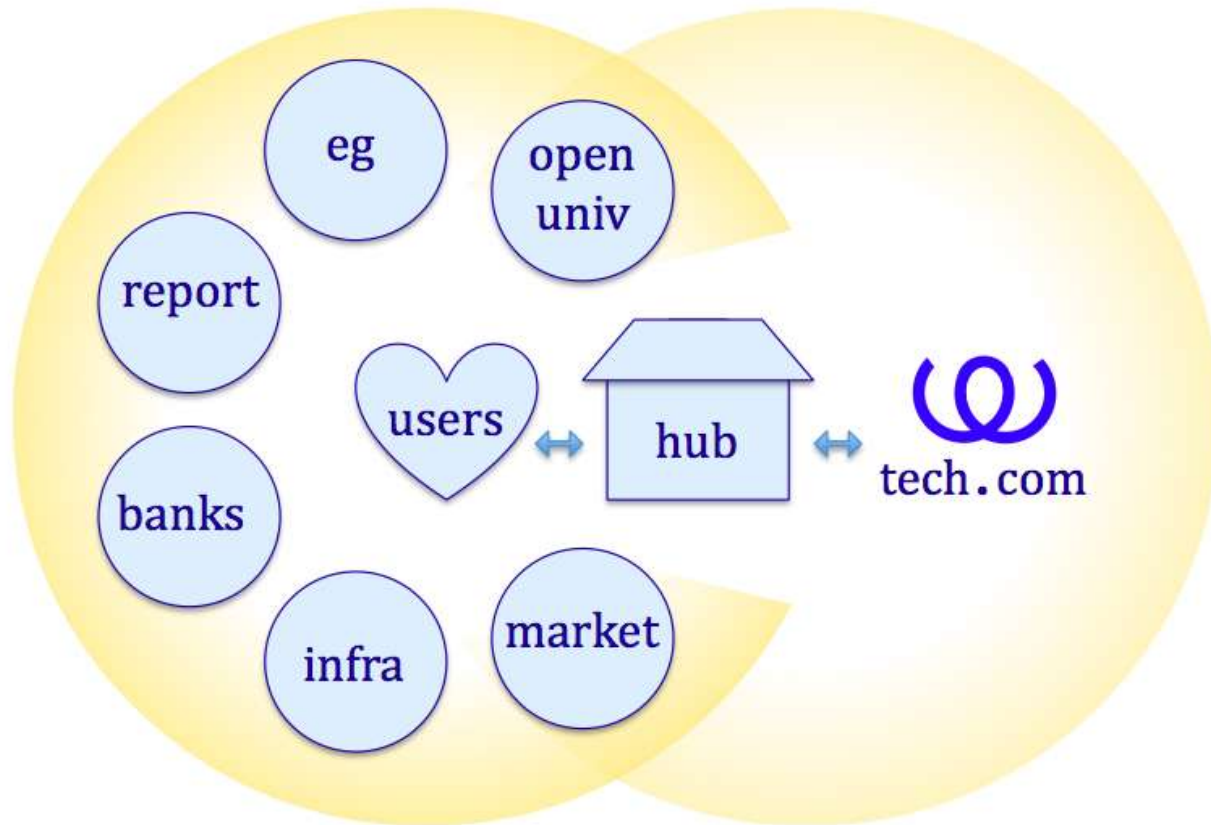
currently we are trying to rationalise these two similar models

cross-section



*Open Education Network*

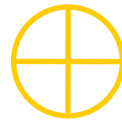
<http://www.open-ed.net>



the Modern Open Learning Model



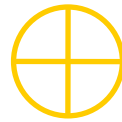
summary



*Open Education Network*  
<http://www.open-ed.net>

the modern Open Learning model  
has evolved from practice over 20 years  
is user-friendly, humanitarian, humanist, scalable

summary

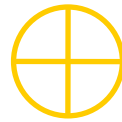


*Open Education Network*  
<http://www.open-ed.net>

the modern Open Learning model  
has evolved from practice over 20 years  
is user-friendly, humanitarian, humanist, scalable

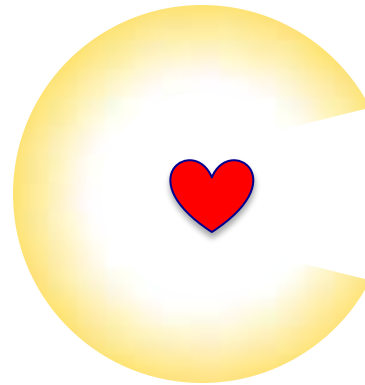
and caring

summary



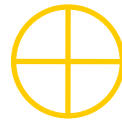
*Open Education Network*  
<http://www.open-ed.net>

the modern Open Learning model  
has evolved from practice over 20 years  
is user-friendly, humanitarian, humanist, scalable



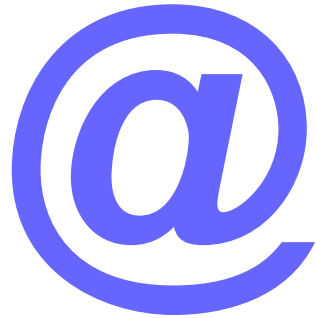
and caring

summary



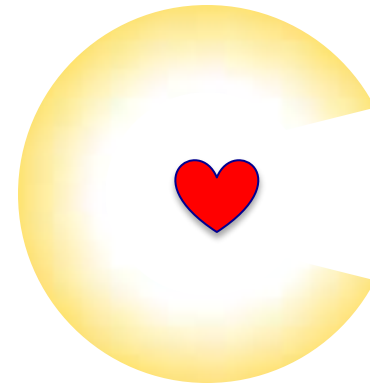
*Open Education Network*  
<http://www.open-ed.net>

far bridging = model of tech dream to be achieved  
near bridging = hugging = be here now

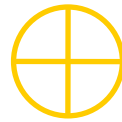


plain old ICT  
distance education

change  
to



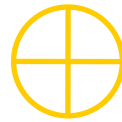
modern humanist  
open learning



the modern Open Learning model  
changes the role of the open distance university

- i. from delivering content to listening to wants,
- ii. from producing job-seekers to creating job-providers,
- iii. from controlling standards to (pre)serving diversity,  
and
- iv. from being concrete to becoming oxygen

summary



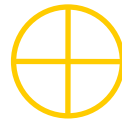
*Open Education Network*  
<http://www.open-ed.net>



*“ We must re-boot  
our economies  
with a more intelligent  
type of growth ”*

Jose Angel Gurria, OECD Secretary-General,  
Global Forum on the Knowledge Economy,  
Paris, 12-13 September 2011





*Open Education Network*

<http://www.open-ed.net>

You can download these slides freely from the website

<http://www.open-ed.net/library/rural-ed.ppt>

or by email to me at

[kawachi@open-ed.net](mailto:kawachi@open-ed.net)

4 MB download takes 1 minute at 64 kB / sec