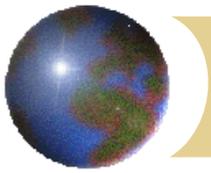


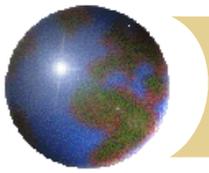
The Dubious State and Use of Comparative International Data on Higher Education

**Cliff Adelman, Institute for Higher
Education Policy, for Univ. of Texas at
Dallas, Feb. 19, 2010**



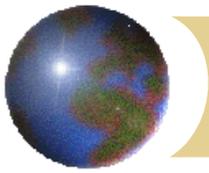
Welcome to a highly visible sub- chapter of the propaganda of numbers

- ✚ **We love self-flagellation.**
- ✚ **Virtually every report or pronouncement on U.S. higher education claims we are doing poorly compared with other countries, usually OECD countries.**
- ✚ **It's a mantra, part of our liturgy of bad news.**



And with the liturgy comes a bible, OECD's *Education at a Glance*

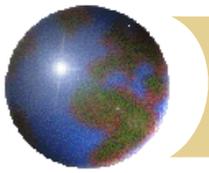
- ⊕ **Three other international organizations--- UNESCO, Eurostat, and the World Bank--- collect and promulgate similar data.**
- ⊕ **OECD, Eurostat, and UNESCO are even supposed to observe the same rules---but they don't.**
- ⊕ **But we use *EAG*, which comes with a glossy PR operation, and whose contents, we assume, were handed down from Mt. Sinai---therefore, of course, they are true.**
- ⊕ **And the contents are presented---and interpreted---as a beauty contest, one which the U.S. always loses, right?**



This presentation hardly claims that all is well with U.S. higher education

- ⊕ **Our participation rates, while high, are imbalanced.**
- ⊕ **Our bachelor's completion rates are okay, but we could do better.**
- ⊕ **Our associate's completion rates are miserable.**
- ⊕ **There are no substantive reference points that tell us what our degrees mean.**

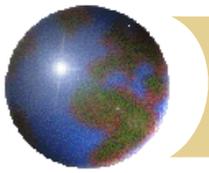
But much of this is beside the point when we get to considering comparative indicators.



A moment of sympathy for OECD, UNESCO, Eurostat, etc.

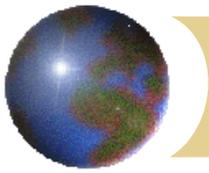
- ✦ **Out of a complexity of structures in national education systems, they struggle to find common elements or aggregations;**
- ✦ **Out of a complexity of social categories conditioned by language and culture, they work hard to find analogues that will cross borders;**
- ✦ **Out of a wilderness of credentials, they labor to create common bracket classifications.**

It ain't an easy job.



Principles I: Language Landscape

- ✦ **To do serious work in these fields requires languages other than English**
- ✦ **You will be on the Web sites of ministries and statistical agencies of other countries**
- ✦ **And when neither you nor the translator sitting next to you can figure out specialized terminology and abbreviations, you need friends in other countries---who may also not be able to figure it out.**

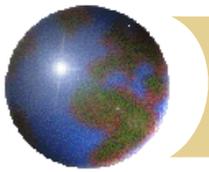


Principles II: Transnational accounts don't always agree---with each other.

- ⊕ **UNESCO (presumably, everybody)**
- ⊕ **Eurostat (27 countries)**
- ⊕ **World Bank (presumably, everybody)**
- ⊕ **OECD (30 countries)**

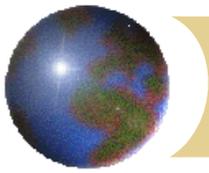
And, for background tapestry, include the Migration Policy Institute, Pew Demographics, etc.

Compare the overlaps!!!



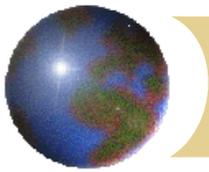
Principles III: Context

- ⊕ **Volatility in time-series data, e.g. Finland**
- ⊕ **Massification periods**
- ⊕ **Systemic credential restructuring, i.e. Bologna**
- ⊕ **Political order, e.g. Eastern Europe**
- ⊕ **Pre-collegiate structure/rules (and their coming changes), e.g. Germany**
- ⊕ **National "habits," e.g. age of entrance to higher ed in Scandinavian countries**
- ⊕ **Basic history, e.g. South Korea**



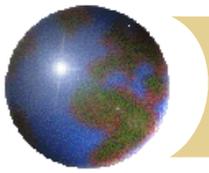
When we interpret time-series data on higher education, remember:

- ✦ **Of the 30 OECD countries, 15 experienced either war on their own soil, dictatorships, and/or climbing out of the rubble of World War II**
- ✦ **Belgium, Czech Republic, England, France, Germany, Hungary, Italy, Japan, Korea, the Netherlands, Poland, Portugal, Romania, Slovak Republic, Spain**
- ✦ **Your bible, *Education at a Glance*, does not acknowledge any of this.**



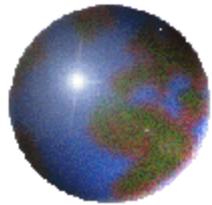
Principles IV: Macro population

- ⊕ **Where is the population increasing? By how much? In what age groups?**
- ⊕ **Where is the population decreasing? By how much? In what age groups?**
- ⊕ **Principal factors in population trends: growth rate, fertility rate, net migration rate.**
- ⊕ **What are the likely effects of these changes on indicators of access? participation? degree completion?**



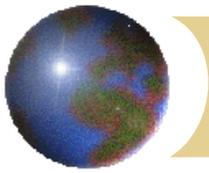
For example, projected population changes in 25-34 age group, 2010-2025

	Change	Growth	Fertil	NetMigr
Japan	-24.3%	-0.2	1.3	0.4
Russia	-37.4	-0.6	1.3	0.4
Poland	-32.1	-0.2	1.2	-0.7
Germany	- 7.8	-0.2	1.4	1.8
Finland	- 4.4	+0.2	1.8	1.1
Mexico	+13.9	+1.0	2.1	-3.4
Canada	+ 6.0	+0.8	1.5	5.8
U.S.	+ 9.8	+0.9	2.1	4.1



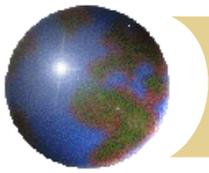
Now what do you think happens to national participation and graduation rates with those changes?

You don't need more than 4th grade Math to figure it out!!!



The U.S. position in the degree beauty contest is affected principally by:

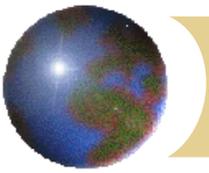
- ✪ **Demographic growth: we *do* live on a different planet!**
- ✪ **New degree cycles that are by-products of the Bologna Process (and you can see the impact of Bologna in data for Norway and Czech Republic, in particular)**
- ✪ **Short-cycle (Associate's) production in countries that offer such credentials through institutions dedicated to that task and no other.**



Examples of short-cycle productivity

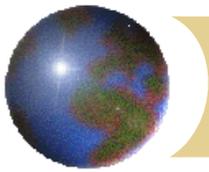
- ❖ **France: IUT graduation rate: 78% with 28% continuing to the *license* at the university across the street.**
- ❖ **England “Foundation” degree programs graduation rate: 56% with 54% continuing to Honours Bachelor programs at university partner.**

We don't see comparative indicators of vertical penetration in *EAG*---or anywhere else!



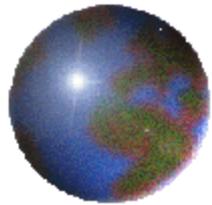
Principles V: Full-Census or Samples?

- ✚ **We are not always dealing with full-census accounts from other countries.**
- ✚ ***EAG's* "synthetic ratios" and "virtual cohorts" are artificial estimates. Neither NCES nor Census does that.**
- ✚ **Eurostat is working hard to get uniform sampling protocols, i.e. the EU 27 don't have them now.**
- ✚ **One lesson for our Data Quality Campaign: Eurostat recommends reconciliation tables. Think about it!**



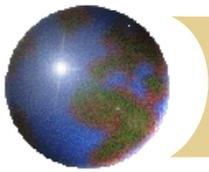
Principles VI: It's Absolute Fog Out There!

- ⊕ **Netherlands has 3 different definitions of beginning students.**
- ⊕ **The UK offers 3 different estimates of beginning students from 2 different agencies.**
- ⊕ **Canada can't tell you how many beginning students they have.**
- ⊕ **"Graduates" are whatever a country says they are, and that includes people who do not receive degrees as we recognize them.**
- ⊕ **Russia and Canada include postsecondary certificates with what we would call associate's degrees.**



And Education at a Glance
doesn't help us reconcile
any of this.

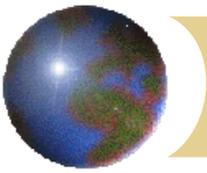
**In fact, it is downright sloppy and
prejudicial in its presentation of key
data, e.g.....**



In its core table presenting “cohort survival,” i.e. graduation rates, *EAG*

- ✦ Mixes cross-sectional and “true cohort” country reports
- ✦ Does not indicate the number of years for which cohorts were followed
- ✦ Does not tell the reader that the U.S. 6-year rate is the only *institutional* rate in the table
- ✦ Buries the U.S. *system* rate in an on-line appendix, and says the data are “old”--- even though Sweden and the Netherlands use the same beginning year.

Under recognized statistical standards, all of this is absolutely unacceptable.



Dealing with contradictions in data, e.g. ISCED 5A (bachelor's) cohort graduation rates: OECD versus the native national statistics agencies.

Netherlands (2006)

OECD says 65% (7 years, but that's not in the *EAG* table)

Netherlands CBS says

66% for full-time *hogescholen* students in 7 yrs

51% for part-time *hogescholen* students in 7 yrs

61% for full-time university students in 7 yrs

31% for part-time university students in 7 years

Sweden (2005)

OECD says 69% (6 years, but that's not in the *EAG* table)

Swedish national statistics agency says

54% for full-time students in 7 years

44% for everybody, 7 years

Finland (2005)

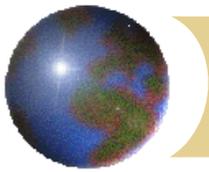
OECD says 72% (10 years, but that's not in the *EAG* table)

Statistics Finland says

58% for the university sector in 7.5 years

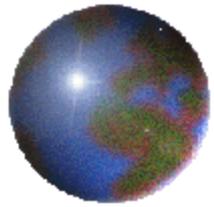
70% for the polytechnic sector in 7.5 years

Go figure!



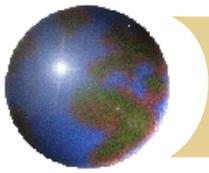
What can you conclude about Bachelor's degree *system* attainment rates (according to OECD only—except for Years of Tracking) from?:

Country	Completion Rate	Years of Tracking
United States	63	6
Finland	72	10
France	65	7
Iceland	66	9
Netherlands	65	7
Norway	67	10
Sweden	69	6



**If all tracking periods were
Winsorized at 7 years. . .**

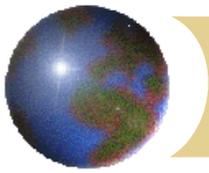
**Everybody is producing bachelor's
degrees at roughly the same rate,
and the beauty contest is nullified!**



If no beauty contest is justified, then what indicators *should* be reported?

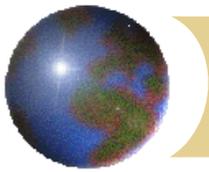
- ⊕ **Inclusion of sub-populations (isolated rural, with disabilities, non-native ethnicities, low income)**
- ⊕ **System flexibility indicators (alternative entry paths, recognition of prior learning, part-time status, e-Learning volume)**
- ⊕ **Degree quality proxies, e.g. Qualifications Frameworks**
- ⊕ **Vertical penetration (short-cycle to 1st; 1st cycle to 2nd)**
- ⊕ **The consequences of 2ndary school tracking: qualifying and non-qualifying populations.**

All of these are common policy concerns of OECD countries. Beauty contests are not!



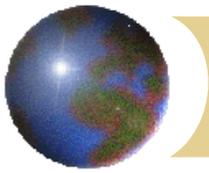
Each of these indicators presents challenges, e.g.

- ⊕ **Inclusion: geodemography, population definitions**
- ⊕ **System flexibility: credit or credentials for APEL; definition of part-time and treatment of PT students**
- ⊕ **Vertical penetration: when the Bologna master's degree is seen by students as the true end of formal education**
- ⊕ **Tracking: countries in which 40+% of the secondary school population is in ISCED 3C programs.**



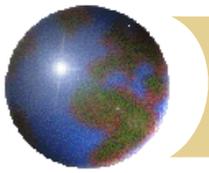
Example of vertical penetration data: German bachelor's recipients

	Continued to 2nd degree cycle	On entrance, intended to continue
University graduates	80%	55%
<i>Fachhochschule Graduates</i>	40%	35%



OECD data will continue to be used as propaganda by public authorities. . .

- ⊕ . . .under the assumption that they were handed down from Mt. Sinai.
- ⊕ OECD itself knows that there are severe problems with the data, and the Bologna changes, in particular, have highlighted those problems.
- ⊕ We have a long way to go to present comparative data in which we can feel confident.
- ⊕ We will work on this not to say that one country does better than another, rather to understand what we all have to do in a world without borders.



Some allied references (Google them!). . .

- ✦ **Adelman, C. 2009. *The Bologna Process for U.S. Eyes.***
- ✦ **Barro, R.J. and Lee J-W 2000. *International Data on Educational Attainment***
- ✦ **Schneider, S.L. (ed.) 2008, *The International Standard Classification of Education: An valuation of Content and Criterion Validity***
- ✦ **OECD 2008, *Higher Education to 2030. Volume 1: Demography***