

## Learning accountability---and a few other things---from Bologna

Clifford Adelman  
Institute for Higher Education Policy  
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## Products of Part 1 of IHEP's Global Performance Initiative

- Essay (115 pp.): *The Bologna Club* May 2008  
[www.ihep.org/Research/GlobalPerformance.cfm](http://www.ihep.org/Research/GlobalPerformance.cfm)
- Policy Brief (36 pp.): *Learning Accountability from Bologna* July 2008  
same URL, but also in printed version
- Research Monograph (200+ pp): *The Bologna Process: a View from the U.S.* Feb., 2009

## The Bologna Club: a Summary

- Follows a story-line that sheds light on accountability and access challenges in the U.S.
- Is addressed to U.S. readers, and is not a full account of the Bologna Process.
- Is based on reading about 800 documents in 8 languages--with translation assistance in 5 ½
- And interviews with ministry, university, research center, etc. people in 9 Bologna-participating countries (Austria, France, Germany, Netherlands, Poland, Portugal, Scotland, Slovenia, Sweden).

## Basically, it says . . .

- Our European colleagues have been engaged for a decade in the most far reaching overhaul of higher education ever attempted, and will continue for another decade.
- Some of it has been successful, some less so, and it is still very much a work in progress.
- Different pieces of it have already been imitated in former colonies in Latin America, Africa, and Australasia.
- If we in the U.S. examine it carefully and listen, we will have an epiphany or two, and inevitably get some ideas of how to address core issues here.
- The Spellings Commission, of course, did none of this, and the response of the U.S. higher education community evidences a similar lack of learning and vision.

## We know what “accountability” means. It’s simple, right?

- Post your graduation rates, demographic mix, time-to-degree, job placement rates.
- Post some NSSE or CCSSE data on how much your students said they did X or liked Y
- Throw in a test or two to show how much a random sample of student volunteers improved in “critical thinking” between entrance and exit
- You’ve done it! Everybody goes home assured that this is what higher education is about.
- You resolved the issue---and did it in 18 months!

## Oh, yeah! ?

- When you look at what 46 countries in Europe have been working on for a decade, you have given us “accountability light.”
- We have no reference points for the meaning of our degrees---they do!
- And they have another decade to go---and know it!
- ... with students playing a significant role, something that has not happened here.
- They show us that if you want something to work, you have to work---hard!

## The accountability loop:

- Qualification frameworks: Pan-European and national
- Tuning, the disciplinary qualification frameworks
- A student-centered credit currency: its relationship to qualifications and curriculum reform.
- Diploma Supplements: documentation of student attainment.
- Creation of a “zone of mutual trust” by transparency and harmonization, hence enhancing recognition of degrees and mobility for students.

## In these matters, *The Bologna Club* provides suggestions for U.S. higher education, e.g.

- State level degree qualification frameworks
- “Tuning” analogues (Latin America has already done this---and 3 U.S. state systems are about to start systematic study of the territory)
- Overhauling our credit currency
- Developing our version of a Diploma Supplement (we can do it better—and so can they!)

## Very quick synopsis of their institutional landscape

- Universities
- Institutions of “applied science”
- Free-standing specialized institutions (from *Grande Écoles* to conservatories to medical schools)
- Short-cycle institutions allied to universities (e.g. the IUTs in France)
- Schools overlapping upper secondary and lower tertiary education, e.g. the Further Education colleges in the UK
- With the exception of Eastern Europe, private institutions are not very visible

## The content of Bologna accountability is highly specific, e.g.

- 5 models of national qualification frameworks (Ireland, Germany, Sweden, Netherlands, France)
  - Discipline-based benchmarking in Accounting and History
  - Credits and curriculum reform in the music conservatories
  - Medicine as an example of the relation between degree reform and the regulated professions
  - Combining credits and challenge levels in Scotland
- CONTENT COUNTS----EVERYWHERE YOU TURN!**

## Qualification Frameworks

- What does each level of degree we award mean? What does it represent in terms of student learning? How does it differ from the levels immediately below and immediately above it? **Common sense questions.**
- U.S. arguments on this field stagnate on **process** issues; under Bologna, everything is about **content**.
- And at all levels of the qualifications frameworks of Bologna, the criteria of content are ratcheted up from previous levels.

## 5 learning outcome constructs in qualification frameworks

- Knowledge and understanding
- **Application of knowledge and understanding**
- **Fluency in use of increasingly complex data and information**
- Breadth and depth of topics communicated; range of audiences for communication
- Degree of autonomy gained for subsequent learning.

**In the pan-European Qualifications framework, these features get the ratcheting-up treatment for**

- Short-cycle degrees (our Associate's), where they exist
- 1<sup>st</sup> cycle degrees (our Bachelor's)
- 2<sup>nd</sup> cycle degrees (Master's)
- 3<sup>rd</sup> cycle (Doctoral)

With enough space and flexibility to account for intermediate credentials in those countries that offer them (e.g. Sweden, Germany, UK)

**Whether pan-European or national,**

- the statement for each level is not a goal--it's a warrantee. By inverse logic it says that the student who did not "demonstrate" these levels of knowledge, application, competence, etc. did not earn a degree.
- In terms of quality assurance, each institution must thus be able to "demonstrate" that it's students have "demonstrated."

**National Qualification Framework versions: Ireland's vertical**

- 10 levels from elementary school to doctoral
- More complex criterion-referenced constructs, e.g.

Knowledge: breadth

Knowledge: kind

Know-how and skill: range

Know-how and skill: selectivity

**Watch the ratchet! In this illustration, for "Know-how and skill: range"**

- **Level 6:** Demonstrate comprehensive range of specialized skills and tools.
- **Level 7:** Demonstrate specialized technical, creative or conceptual skills and tools across an area of study.
- **Level 8:** Demonstrate mastery of a complex and specialized area of skills and tools; use and modify advanced skills and tools to conduct closely guided research, professional, or advanced technical activity.

## Germany's more parsimonious statement: 2 configurations

- Knowledge and understanding
  - breadth
  - depth
- Ways of demonstrating knowledge
  - Instrumental competences
  - Systemic competences
  - Communicative competences

## Illustration: systemic competences

Bachelor's level:

has acquired the competence to derive scientifically-grounded judgments that take social, scientific, and ethical relationships into consideration

Master's level:

has acquired the competence to make scientifically justified decisions based on incomplete information while considering social, scientific and ethical relationships that result from the application of their knowledge and decisions

## Other national qualification frameworks

- Sweden: written by national legislature, with specifications for 19 "professional" disciplines, e.g. audiology
- Netherlands: references to labor market positions, and a binary framework to match a binary system
- France: a registry of 4800 degree programs, all of which had to undergo the equivalent of the first phase of accreditation, but with Bologna criteria

## Tuning: disciplinary frameworks from the ground up

- Created by faculty, not ministers;
- 1<sup>st</sup> round (2001) with 9 disciplines, 138 universities, 16 countries;
- 2<sup>nd</sup> round (2005) added 16 disciplines;
- With the 3<sup>rd</sup> round (2008) we are up to 45 disciplines
- The most noted case of adaptation outside Europe: Tuning Latin America (ALFA) with 12 disciplines, 182 universities, 18 countries.

## What does "Tuning" in a discipline mean and do?

- After a consultation survey with employers, former students, faculty, sets up a "common language" for expressing what a curriculum in the discipline aims to do,
- But does not prescribe the means of doing it.
- You get "reference points," not standardization of content, sequence, and delivery.
- There is no straightjacket, but there is "convergence."

## Example: the Business group definition of a firm as a "value chain" results in:

- A curriculum content map
- "Subject specific skills and competences" as learning outcomes to match the map, and set out as
  - core knowledge
  - supporting knowledge
  - communication skills
- The statements are not specified, but the distribution is: 50% core knowledge, 10 % economics, 5 % each for quantitative methods, law, and IT. Notice: that does not add to 100%---on purpose.

## Problems of language in Tuning

- Faculty are not accustomed to writing criterion-referenced learning outcome statements in their own field, so one finds
- statements that are not really operational competences,
  - extremely vague statements,
  - statements of the obvious, etc.
- They ran an evaluation in 4 disciplines, and were brutal about this!**

## Benchmarking statements as an analogue to Tuning

- Came out of the QAA in the UK, and are available on-line across a wide range of fields
- Faculty are reminded of what they committed themselves to doing. . .
- Students can see in advance---and while in progress---what their academic journey is about
- External observers have a set of guidelines for judging the quality of education and training provided in each discipline.

## Put qualification frameworks, Tuning, and benchmarking together

and you begin to see what  
accountability might really mean in a  
U.S. setting.

## Turning the tables on what goes into learning: ECTS

- U.S. credits are based on faculty contact-hours, with an assumption of student work, with no difference between, e.g. Intro to Sports and Neuropsychology
- ECTS are based on student work load, and, in some countries, by weighting of challenge

Which of these do you think is more student-centered and more reflective of curriculum?

## Pieces of the formulas

- Annual student learning time: 1500–1800 hrs
- Ratios of hours / credits: X / 25-30.
- ECTS per semester: 30

You can see how the credit assignment water finds the easiest way to flow downhill.

However, student workload *can* be clocked; no instructor can assume the desired learning will take place if there is not enough time; no academic advisor should allow student work overload.

When time is tight, superficial learning is the outcome.

## Connecting ECTS to learning outcomes by “level descriptors”

- UK and Scotland use 9 and 12 “credit levels” (respectively) defined as indicators of “the relative demand, complexity and depth of learning and learner autonomy.” While generic, these are pretty detailed and clear statements, and they, too, ratchet up thresholds of content and performance.
- Degree qualifications are then set in terms of minimums at each level, e.g. 40% of credits at level 6, 65% of credits at levels 5 and 6, etc. In the U.S. that would preclude students stuffing their portfolios with low-level demand courses simply to reach the 120 or 128 credits required for a bachelor’s degree.

## ECTS also drives curriculum reform

- If faculty have to think about relationships between stated learning outcomes of course modules, internships, etc., student time, and full degree program curricula, reforms and adjustments are inevitable.
- As Project Polifonia demonstrated, you can't simply add subjects: you may have to reprioritize and drop some requirements, compress others, or change the mode of their delivery.

## The Diploma Supplement as Assurance, addresses the following:

- You earned your bachelor's in business from a university in Romania.
- You apply for a job with a bank in Germany, or for admission to a Master's program in international finance in England.
- Neither the bank nor the university has any guidance or reference points to judge the nature and quality of your degree, hence
- Both your labor market and educational mobility is severely restricted.

When multiplied by millions of degree recipients in dozens of countries, we get economic stagnation and cultural isolation

## So, we get a document that renders the degree transparent and recognizable across borders

- Ideally, issued to every graduate, in a standard format, in at least one widely-spoken European language, and free.
- This currently happens in 25 of 46 Bologna countries.
- In 2007, the ESU estimated that only 30 percent of students and 10 percent of employers are even aware of it.

Not very promising for a core feature of Bologna.

## What's on a Diploma Supplement?

- Information about the credential, its level (in the national system at issue), requirements for entry into the program, official duration.
- Information on requirements for the degree, modes of study, enrollment intensity, and compressed signals of student performance.
- Statement of the purpose of the credential.
- "Additional Information" (we'll come back to this).

Both a transcript and description of the national education system are appended.

**Nice idea, but it doesn't fly. Our sample consisted of 27 documents from 16 institutions in 11 countries.**

- They said nothing about the institution and very little about the student.
- The only entity served, really, was the national system.
- We can do this better--and so can they!
- **Start with the student, and certify the full color of the student's achievement while making sure the institution's standards for degree qualifications are explicit.**

**Our proposed version of the Diploma Supplement (besides standard boilerplate):**

- Statement of the purpose of the degree granted in the field in which it was granted.
- **List all other institutions attended by the student, and the % of credits earned at the institution awarding the degree.**
- **If the institution has a qualifications framework for the degree in question, reference it and put in Appendix. Ditto for Tuning-type disciplinary QFs.**
- Specification of program requirements in the major field, including internships, theses, comprehensive examinations.

**And in that "additional information" section, markers of student achievement**

- Compressed signals of academic performance (PBK, honors, dean's list)
- Short description of thesis or degree-qualifying project
- **External certifications or licenses**
- **Maximum of 2 noteworthy and documented services performed by the student to either the institution or its surrounding community**
- Student research, creative, or service participation.
- **Documented proficiency in languages other than English, along with method of documentation**

**All the accountability elements merge here. . .**

Nice work if you can get it,  
And you can get it, if you try!  
(thank you, George and Ira!)