



UNIUNEA EUROPEANĂ



GUVERNUL ROMÂNIEI
MINISTERUL MUNCII, FAMILIEI ȘI
PROTECȚIEI SOCIALE
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Fondul Social European
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Instrumente Structurale
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AGENCIA ROMÂNIA
DE ASIGURARE A
CALITĂȚII ÎN
ÎNVĂȚĂMÂNTUL ÎNALȚ

ALL-CHANGING UNIVERSITY: LEARN, UNLEARN, RELEARN

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I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S WORKS (1)

***Human constructions that try to answer questions:
currency, theatre, chaos theory, public parks,
Roman law, writing, rap music, vector calculus,
football, city ... all these are 'works'.***

(Yves Chevallard, *Questions vives, savoirs moribonds: le problème curriculaire*, Colloque Défendre et transformer l'école pour tous, Marseille, 3,4 et 5 octobre 1997)

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S WORKS (2)

Care for *continuity*, *consistency* and *quality* on training human resources.

Give clues for *tacit knowledge* of the future graduates.



Student's *portfolio* should record not only their various evaluation grades, but also their *profile* (e.g. demonstrated skills) that could come in support of further vocational guidance.

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S *WORKS* (3)

“The School has the right to remove unsatisfying students, at the same time it is its duty to place them in schools or institutions they are skilled for, in order not to lose any energy.”

(“Foreign and Domestic Educational Concerns of the year 1928” in: *Education. Journal for School and Family*, no. 1-2/January-February 1929)

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S *WORKS* (4)

Multiple-speed-rates-university:

- three-stage Bologna process,
as common academic education with an
emphasis on *vocational training*, and
- Merit Master/PhD with an emphasis on
research and innovation.

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S *WORKS* (5)

SCHOOL – Gr. skolê – “spare time”, fair study of society *works*;



SCHOOL – introductory operator to society;



SCHOOL – introductory operator to certain *works* of society;



SCHOOL – main introductory operator to society;
– warrant of agent's competences (degrees,
certificates) within *works*.

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S *WORKS* ⁽⁶⁾

CURRICULAR CRISIS
Updating is inescapable,
both in terms of

forms of studies and study *content*.

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S WORKS (7)

TRANSFER OF KNOWLEDGE

INNER MOTIVATION: SCIENTIFIC CURIOSITY AND ACTUAL LINK
BETWEEN *COMPETENCE* AND *PERFORMANCE*

MUST —————→ WANT

(*I must* learn)

WHAT I WANT FROM THE WORLD

(*I want to* learn)

WHAT THE WORLD WANTS FROM ME

IDENTIFICATION OF EXISTING LINK BETWEEN COURSE TOPICS AND SOCIAL STAKES

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S WORKS (8)

Increasing demand for H.E. → the choice between :

- a *rethought meritocratic orientation* and
- some formula of **availability to knowledge for all** by means of a differentiated **supporting pedagogy**.

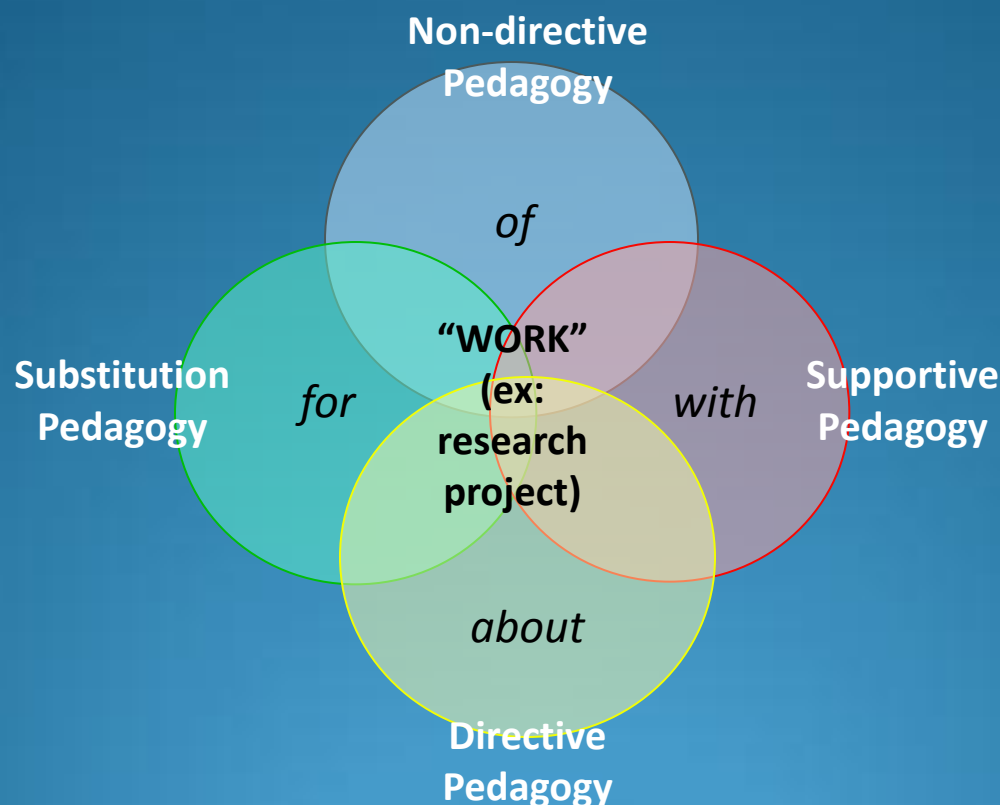
Simple transfer process grew intricate as **information entropy increased**. What would seem, from knowledge receivers' point of view, a need for "supportive pedagogy" is actually a matter of **training the trainers**.

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S WORKS (9)

*All students in a modern democracy
have the right **not to be allowed to avoid**
the essential core of learning.*

(Paul Gagnon, *What Should Children Learn ?*, The Atlantic Monthly, December 1995, pp. 71-72).

Figure 1: KNOWLEDGE FOR ALL



Types of pedagogy that do not exclude each other, but overlap and are sometimes subconsciously applied by coordinating teachers. (Adapted from: Alain Beitone, *Pédagogie de l'accompagnement, enjeux de savoir(s) et dispositifs didactiques*, December, 2001.)

I. TO TRAIN SKILLED ACTORS FOR SOCIETY'S *WORKS* (10)

Knowledge receivers:

HOW and *WHERE* to search, and
HOW to assemble the selected *works* so that they
could endow themselves with *action tools* in society.

Employed graduates' *know-how* of initiating connections
according to specific requirements and **generating**
consistent solutions with quality and environmental
standards is at least as relevant as the cognitive paradigm
they possess.

II. BENCHMARKS OF INSTITUTIONAL WORTH (1)

- FROM COMPLIANCE TO EFFICIENCY -



II. BENCHMARKS OF INSTITUTIONAL WORTH (2)

- FROM COMPLIANCE TO EFFICIENCY -

Auditing standards change in step with technology and global market and **auditing practices** shift their focus from *compliance* to *efficiency*.

As a result, future audit practices will probably include assessment of *efficiency*, besides *compliance*.

In higher education institutions, ***compliance* remains a privilege of government control**, while ***efficiency* should be generated by autonomy**.

II. BENCHMARKS OF INSTITUTIONAL WORTH (3)

- THE CULTURE OF KNOWLEDGE TRANSFER -

Could growing numbers of candidates entail a quality decrease?

Universities are expected to be able to **detect changes** in signals coming from the environment – both internally and externally – and **adjusts themselves** accordingly as **adaptive bodies with learning capacity**.

II. BENCHMARKS OF INSTITUTIONAL WORTH (4)

-ASSESSMENT OF KNOWLEDGE –

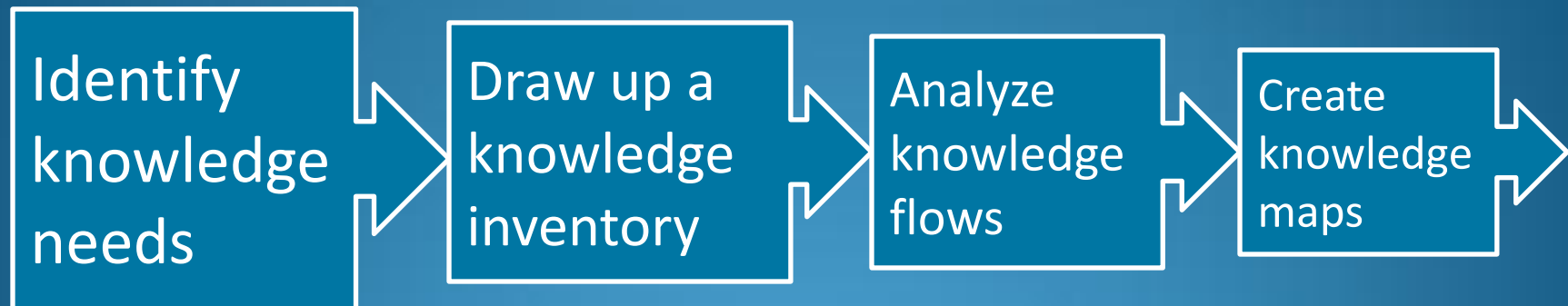


Figure 2. Knowledge Audit Constituents (Source: Asian Development Bank, *Auditing Knowledge*)

II. BENCHMARKS OF INSTITUTIONAL WORTH (5)

- THEORY AND PRACTICE -

Excessive enrichment of educational offers reveals **education entropy**.

Achieving unity of knowledge: transfer of those values which are consistent with nature laws.

If cropping knowledge into study disciplines is not followed by the way back to **inter-** and **trans-disciplinarity**, H.E. will probably be *stuck into a static model of reality*, rather than *building capacity of perpetual updating of this model at the pace of challenges given by reality itself*.

II. BENCHMARKS OF INSTITUTIONAL WORTH (6.1)

- TRANSDISCIPLINARITY –

Life might be seriously endangered by a triumphant techno-science that only subjects to the frightening logics of “efficiency that serves efficiency”.

The contemporary gap between an increasing knowhow and a decreasing inner-being's wellness results in an emergent new obscurantism, with incalculable consequences at individual and social levels.

II. BENCHMARKS OF INSTITUTIONAL WORTH (6.2)

Any attempt of reducing Reality to one single level, governed by one single logic, is incompatible with Transdisciplinarity; acknowledging the existence of different levels of Reality, governed by different logics, is in the nature of Transdisciplinarity.

Genuine education should not favour abstracting to the detriment of other forms of knowledge. Education should emphasize contextualization, concretization and globalization.

II. BENCHMARKS OF INSTITUTIONAL WORTH (6.3)

Rigour, openness and tolerance are fundamental characteristics of transdisciplinary attitude and vision:

- ***rigour*** in reasoning through taking into account of all existing data is the best barrier to possible deviations;
- ***openness*** involves accepting what it is unknown, unexpected and unpredictable;
- ***tolerance*** is to acknowledge one's right to assert ideas and truths that we do not share.

(Source: The Institute for Transdisciplinary Studies in Science, Spirituality, Society, http://www.adstr.ro/IT4S_CeEsteTSR.htm).

II. BENCHMARKS OF INSTITUTIONAL WORTH (7)

- BACK TO CONCRETE DESIGNS OF REALITY –

Teachers = *managers of knowledge*

- accurate vision of the Concrete that they unfold in didactically-oriented analyses.

Theoretical-knowledge based education develops understanding of connections and principles; *students may possess the syntax, but without mastering morphological elements.*

Use of **simulation programmes** that enable students to learn the *way from competence to performance.*

II. BENCHMARKS OF INSTITUTIONAL WORTH (8)

- LINEAR THINKING DEVELOPED BY CLASSICAL PHYSICS –

Cartesian split and mechanistic view of the world have led to the **great development of classical physics and technology**, but with **many adverse consequences for human civilization**.

Twentieth-century science began to leave fragmentation, taking the **way back to the original idea of unity**, to be found in Greek and Oriental thought.

There is an essential harmony between the spirit of Eastern wisdom and the Western science when ***modern physics goes beyond technology and configures a new vision of the world.***

CONCLUSION : old cognitive syntax under reform (1)

Particles' physics completes a temporal loop of the spiral of knowledge. Modern physics brought an **inventory all-different from the Newtonian one**, requiring a necessary reconsideration of the syntax that assembles our model of reality.

A new perception of the universe is being born now and old boundaries between sciences are vanishing, bringing into existence unexpected merges. Faced with such transformations, a still greater rigour is necessary to education, to avoid confusion and uncertainty.

CONCLUSION : old cognitive syntax under reform (2)

The science of physics structured our worldview along time, but exploration of atomic and subatomic world in the twentieth century put science basics in a difficult position (*'matter'* is a dramatically different concept in subatomic physics as compared to the traditional *'material substance'* in classical physics).

The influence of modern physics passed beyond the area of technology, extending to the way of thinking, to the culture, through the force of **a new representation of the relationship between Man and Universe.**

CONCLUSION : old cognitive syntax under reform (4)

The major challenge that the new century brings to higher education institutions is the detachment from linear thinking.

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”



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