Designing New Paths for Learning

the interplay between improvisation and structure
professions and teaching

The way in which we conceptualize professional activities affects the way in which we design curricula
technical rationalism

separation of:

MEANS from ENDS

RESEARCH from PRACTICE

knowing from doing

Schon, A. Donald (1983)
technical rationalism

separation of:

MEANS from ENDS
RESEARCH from PRACTICE
KNOWING from DOING

the epistemology of technical rationalism affected teaching in:
a direct way and an indirect way
direct influence

“what teaching teaches”

According to the epistemology of technical rationalism:

- professions apply abstract principles to concrete situations
- are legitimimized by bounded scientific domains.

Teaching general principles is the more productive way to introduce young generations to professional practices.
indirect influence

“how teaching teaches”

Teaching is itself a profession: it has always sought scientific legitimization.

In the technical rationalism view, teaching endorsed **universal principles** according to which humans learn and applied such principles in practice

teaching assumed a world of **independent individuals** who "acquire" knowledge according to **universal principles**
Three decades of theoretical discussion and research centered on constructivism, constructionism, culturalism and the situated-ness of learning transformed this assumption. (Bruner, Papert, Lave, Resnick, Eckert, Wenger...)

“Situated approaches to learning revalue the idiosyncratic: the concrete, the local, and the personal” (Ackermann, 2001)
The re-conceptualization of the scientific principles underpinning teaching changes “what teaching teaches”
The re-conceptualization of the scientific principles underpinning teaching changes “what teaching teaches”

The object of teaching is not knowledge (a set of general principles): it is the activity of meaning making
The re-conceptualization of **professions** converges on the local, on the idiosyncratic.... on the personal!
And it is changing “**how teaching teaches**”
The re-conceptualization of professions converges on the local, on the idiosyncratic.... on the personal!
And it is changing “how teaching teaches”

The model defining of professions is shifting form a “push” model to a “pull” model. (John Hagel, John S. Brown, 2005).
Professional activities are based on the **anticipation** of needs and on the **planning** of objectives. Professions take advantage from a model designed to "push" resources in advance to areas of highest anticipated need.

it seeks to dictate the actions people must take in situations according to centralized and pre-scheduled activities
The “pull” model is based on a **productive relation with uncertainty**. Uncertainty is necessary for the creation of meaning and for the definition of aims.

It relies on the availability of resources and on the individuals’ ability to “read” the situation, define the aim and creatively configure the resources available.
What happens to “how teaching teaches”?

Does it mean that fixed points do not exist and that everything is about carving meaning from uncertainty?

The “red thread” is the evolution and transformation of practices and the tools used by practitioners.
teaching as a profession is experimenting a variety of tools and practices. In our research we have considered the one more anchored to institutional teaching: the LESSON PLAN
LESSON PLAN

1. Preparation  2. Presentation  3. Association
4. Generalization  5. Application

The Lesson plan does not allow for flexible configuration of resources (“pull”) but only the persistence of non flexible practices (“push”).

The persistence of practice is not negative; it is the on the contrary the result of the sedimentation of expertise. Nevertheless it ought to have an open disposition to support a dialogical interaction with the situation.

We argue that a designed interplay between constant practices and the configuration of resources is strategic in order to endow teaching with new professional tools.
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focus on the relationships among resources in the learning environment. balancing resources, activities and learners’ aspirations. articulation of the process in sequential phases. share the rationale of the planning with actors and stakeholders.
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- **The MORPHOLOGY of EDUCATIONAL FORMAT**

- **structure**

- **articulation of the process in sequential phases**

- **share the rationale of the planning with actors and stakeholders**

- **aspirations.**

- Focus on the relationships among resources in the learning environment

- Balancing resources, activities, and learners' aspirations.
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- **improvisation**
- **structure**

**similarities**

- share the rationale of the planning with actors and stakeholders
- articulation of the process in sequential phases

**aspirations**
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EDUCATIONAL FORMAT

a prototype
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Production Of Educational Formats

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http://www.unisi.it/dida/kaleidoscope/
Thanks!

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