

Randomized evaluation (Worskhop)

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WORKSHOP :

**"Randomized evaluation in a non-routinized environment :
new perspectives on R&D in education and other social sectors"**

- Economists of innovation are coming to an agreement on the general conditions that support rapid and effective creation of know-how;
- These conditions have not been met in the education sector, and this has been considered a plausible explanation as to why educational technologies and know-how have been difficult to improve in a systematic way;
- A growing number of educational researchers and economists believe that the use of more rigorous research design tools - such as randomized assignment - will allow the educational sector to catch up to other sectors in terms of productivity;
- However, there are limitations to the full realization and implementation of new research designs. These limitations deal with the fundamental non-routinized character of the object of the experiment (the classroom);
- The main issue to be addressed in this project is whether these new research methods have the potential to change and transform the way know-how is produced and distributed in the education sector;
- Can this evolution create the kind of progressive, systematic improvement over time that has characterized successful parts of our economy and society throughout the 20th century in fields such as medicine, agriculture, transportation, and technology ?

Framing the problem:

Unequal ability to improve know-how could constitute an important condition underlying perceptible differences in the success with which different areas of endeavour are pursued within the same society and the pace at which productivity advances in different sectors of the economy. In the nineteenth century, for example, even in the more developed economies, the improvement of agricultural productivity lagged behind industry in good part because the relevant knowledge base in plant and animal biology, and soil chemistry was comparatively narrower and less dynamic than was the case in mechanics and inorganic chemistry. That situation was largely transformed by the second half of the twentieth century, as is testified to by the successes of 'the Green Revolution' brought by new plant varieties, and the acceleration of agricultural productivity growth rates in the advanced economies to parity with those in their manufacturing sectors.

Today it remains astonishing to observe the contrast between fields of economic activity where improvements in practice are closely reflecting rapid advances in human knowledge - such as information technologies, transportation, and medical care (surgery and drug therapy) - and other areas where the state of knowledge appears to be far more constraining. The fact is that knowledge is not being developed to the same degree in every sector. A major policy concern is 1) to understand the factors at the origin of such uneven development, and 2) to implement a proper strategy to fill the gap between sectors with fast knowledge accumulation processes and those in which these processes remain weak.

Consider the efforts to develop more effective educational practices in schools. Murnane and Nelson (1984) and Nelson (2003) have argued that education is a sector characterized by a slow process of knowledge creation about teaching: even if we do know more about educational practices that we did previously, knowledge creation in this domain has been slow and there have been severe difficulties in diffusing "new and superior" knowledge.