

Results and Experience with a Model of Adjustment of Student Enrollment at the Berlin School of Economics with Medium-term Consequences for Room Planning

by

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A b s t r a c t

The paper presents results of a model which has been used to avoid the consequences of a spatial expert opinion concerning the further development of the Berlin School of Economics in West Berlin in the year 1982. Starting point is the so called "HIS-Gutachten" of February 1982.¹ This expert opinion was commissioned by the Senator for Science and Culture of the West Berlin government to show the possibilities of finding free capacity for a different institution in the building used by the Berlin School of Economics during the current period of limited financial resources.

Analyzing this expert opinion in April 1982, there seemed to be a chance to contradict basic conclusions of this opinion. Time was short and the Berlin School of Economics was to lose 1/3 of its capacity in rooms as of October 1982. A weak part in this opinion was the forecast of student development in the 80's. The model which will be presented in this paper is a dynamic model to forecast growth and declining student enrollment in the 80's.²

Furthermore, this model contains the demand of lectures in various branches and, from there, the demand for rooms and area in the eighties, separated for each year and in terms of the usual normative planning items.

With this model it could be shown in July 1982 that a decision of the Senator for Science and Culture to take 1/3 of the room capacity away from the Berlin School of Economics would be a wrong decision because the present growth of student enrollment is so strong that, within a few years, the full capacity of the rooms of the Berlin School of Economics will be used for our own purposes. These results were accepted as hard data. In the meantime, the development of student enrollment at the end of 1982 has shown that the basic assumptions of this dynamic model may be correct. In the short-term planning, the growth of student enrollment was even greater than assumed in this model.

The result of the decision of the Senator for Science and Culture in this case in August 1982 was the following: The Berlin School of Economics will supply special rooms for a different institution. The planning horizon is half a year, and the number of rooms will depend on the growth of student enrollment at the Berlin School of Economics. Separating the building for the two separate institutions could be avoided.

Viewing aspects of dynamic modeling conclusions of this paper are:

- (1) Usually time is very short for applying a dynamic model in a practical decision situation.
- (2) Usually this time will be used to model only few central aspects in quantitative terms.
- (3) Feedback loops may not be modeled in quantitative terms. Their existence will be used as qualitative arguments within the planning and decision process.
- (4) Success of a special model depends on the facilities to integrate results of a model into the actual planning process on a very high

level of decision rather than on detailed scientific analysis. This analysis can be made later when a decision has already been made.

- 1) Re-utilization planning at Berlin colleges, an examination commissioned by the Senator for Science and Cultural Affairs, HIS, Hochschulinformationssystem GmbH, Hannover, February 1982.
- 2) Medium-term adjustment of student enrollment in the Day Studies program and the consequences for room planning at the Berlin School of Economics, Helmut Maier, FHW-Berlin, July 1982.