

The reform of mathematics teacher education in Hungary

Csaba Csapodi

Eötvös Loránd University of Sciences, Faculty of Science, Budapest, Hungary

Afréd Rényi Institute of Mathematics, Budapest, Hungary

csapodi.csaba@ttk.elte.hu

Keywords: preparation and training of university mathematics teachers, curricular and institutional issues concerning the teaching of mathematics at university level.

RESEARCH TOPIC

From September 2022, teacher training in Hungary will be reformed in both form and content. As part of this, the training of mathematics teachers will also be transformed [1].

Since 2013, teacher training has been organised in 10 (for primary school teachers) and 12 (for secondary school teachers) semester-long courses. (Eurydice, 2022) Students follow a two-subject teacher training programme, leading to a master's degree. Teacher training consists essentially of subject-specific preparation and teacher preparation. The credits for teacher preparation include credits in pedagogical, psychological theory and practice, in subject methodology, credits for teaching practice in parallel with and following the training, and credits for the preparation of a portfolio, which is compulsory during the training. The highest credit value of the teacher preparation is the continuous individual teaching practice for 50 credits. (Novotná et al., 2021)

Every year for the past few years, I have conducted a survey of graduate students, asking for their views on teacher training. The three problems most frequently reported were: (1) the training is too long (6 years); (2) students meet too late school pupils in the teaching practice during their training (usually only in year 5); (3) the mathematics curriculum is too much and difficult to learn.

RESEARCH QUESTION

What are the structural changes in teacher training programs and what difficulties these changes can correspond to?

RESEARCH RESULTS

The new teacher training lasts 10 semesters (5 years) and the qualification allows the students to teach both in primary and secondary schools. The training leads to a master's degree, but the diploma does not allow teachers to prepare for the higher level final exam. To do so, one must also complete a one-year course of training to become a so-called "master teacher".

The biggest change from the previous training is the completely reformed system of teaching practices. Whereas before, students had 15 hours of teaching practice first in their 5th year of university, the new system will be as followed:

in semesters 2 to 4, there will be socialisation exercises in schools, which are not yet linked to the subject area, students will be introduced to different aspects of school life; in semesters 6 to 7, students will participate in a group teaching practice of their subject, a completely new part of the course, which will be accompanied by a methodology course at the university; in the 8th and 9th semesters, the individual teaching practice mentioned above will take place and the continuous teaching practice in the 10th semester is not a new element in the training neither (but half the length of the recent version).

	Primary school teacher training (5 years)		Secondary school teacher training (6 years)	
	Mathematics	Teaching	Mathematics	Teaching
Credits	100	100	130	100

Table 1: Distribution of credits in parallel teacher training programmes before 2022

	Teacher training (primary and secondary school teachers, 5 years)		Master teacher training (higher level education, 1 year)	
	Mathematics	Teaching	Mathematics	Teaching
Credits	105	90	50	10

Table 2: Distribution of credits in consecutive teacher training programmes after 2022

The answers to the three problems raised are thus: (1) the course will be one year shorter, but those who want to teach students at higher level will still have to spend a total of 6 years at university; (2) there will be a definite positive change, students will meet students and will have the opportunity to try teaching more often and much sooner than before; (3) the same situation as in (1): those who do not want to teach at higher level will have a significantly reduced set of mathematical skills to learn (105 credits instead of 130).

NOTES

1. On the poster the structure of the new mathematics teacher training programme will be presented.

REFERENCES

- Eurydice (2022). Hungary. Initial education for teachers working in early childhood and school education. https://eacea.ec.europa.eu/national-policies/eurydice/content/initial-education-teachers-working-early-childhood-and-school-education-34_en
- Novotná, J., Gosztonyi, K., Hošpesová, A. et al. Mathematics teacher education in the Czech Republic and Hungary: commonalities and differences. *ZDM Mathematics Education* 53, 1541–1553 (2021). <https://doi.org/10.1007/s11858-021-01278-7>