

**DESAIN DIDAKTIS MATA KULIAH *MICRO TEACHING* UNTUK  
MENGUNGKAP KEMAMPUAN CALON GURU DALAM  
MERANCANG PEMBELAJARAN MATEMATIKA**

**DISERTASI**

Diajukan untuk Memenuhi Sebagian dari Syarat untuk Memperoleh Gelar Doktor  
pada Program Studi Pendidikan Matematika



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UNIVERSITAS PENDIDIKAN INDONESIA**

**2023**

# **DESAIN DIDAKTIS MATA KULIAH MICRO TEACHING UNTUK MENGUNGKAP KEMAMPUAN CALON GURU DALAM MERANCANG PEMBELAJARAN MATEMATIKA**

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April 2023

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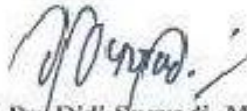
Ardhi Prabowo, 2023

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DALAM MERANCANG PEMBELAJARAN MATEMATIKA*

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## Abstrak

Prabowo, A. (2023). Desain Didaktis Mata Kuliah *Micro Teaching* untuk Mengungkap Kemampuan Calon Guru Dalam Merancang Pembelajaran Matematika. Promotor: Prof. Dr. Didi Suryadi, M.Ed., Ko-Promotor: Dr. Dadan Dasari, M.Si., Ko-Promotor: Dr. H. Dadang Juandi, M.Si.

Mahasiswa Lulusan Prodi Pendidikan Matematika diharapkan menjadi calon Guru yang profesional dan mandiri. Realitas bahwa mahasiswa masih melakukan aktivitas prosedural dalam merancang pembelajaran matematika, yaitu aktivitas memperoleh rancangan dari internet, teman sejawat, dan atau contoh dari dosen, menunjukkan aktivitas mahasiswa yang tidak mandiri dalam memulai merancang pembelajaran. Mata kuliah yang esensial memfasilitasi mahasiswa dalam merancang pembelajaran matematika secara mandiri dan bertahap adalah *Micro Teaching*. Penelitian ini bertujuan untuk menghasilkan desain didaktis mata kuliah *Micro Teaching* yang memfasilitasi mahasiswa dalam merancang pembelajaran matematika. Pendekatan penelitian ini adalah kualitatif dengan metode penelitian *didactical design research*. Data dikumpulkan melalui wawancara, diskusi terfokus, angket, analisis dokumen, dan pengamatan. Hasil penelitian menunjukkan desain didaktis *Micro Teaching* hipotesis memfasilitasi mahasiswa untuk merancang pembelajaran matematika secara bertahap. Ditemukan empat kemampuan mahasiswa yang mendukung mahasiswa untuk merancang pembelajaran matematika di sekolah, yaitu: kemampuan mengungkap pengetahuan ilmiah, kemampuan menganalisis kurikulum sekolah, kemampuan mengembangkan aktivitas pembelajaran, dan kemampuan menduga capaian pembelajaran siswa. Selain itu, penelitian juga menghasilkan segitiga didaktis bersarang sebagai bentuk pengembangan dari segitiga didaktis. Simpulan penelitian ini adalah desain didaktis hipotesis dapat meminimalisir hambatan belajar mahasiswa pada desain didaktis *micro teaching* terdahulu.

Kata kunci: Desain Didaktis; *Micro teaching*; Calon Guru Matematika; Merancang Pembelajaran; *Didactical Design Research*

## **Abstract**

Prabowo, A. (2023) Didactic Design of Micro Teaching Courses to Reveal the Ability of Prospective Teachers in Designing Mathematics Learning. Promotor: Prof. Dr. Didi Suryadi, M.Ed., Co-Promotor: Dr. Dadan Dasari, M.Si., Co-Promotor: Dr. H. Dadang Juandi, M.Si.

Graduate students of the Mathematics Education Study Program were expected to become professional and independent teacher candidates. The fact that students are still carrying out procedural activities in designing mathematics learning, namely the activity of obtaining plans from the internet, colleagues, or examples from lecturers, shows that student activities are not independent in starting to design learning. The essential course that facilitates students in designing mathematics learning independently and in stages was Micro Teaching. This study aimed to produce a didactic design for Micro Teaching courses that facilitate students in designing mathematics learning. This research approach was qualitative with the didactical design research method. Data was collected through interviews, focused discussions, questionnaires, document analysis, and observation. The results show that the didactic design of the Micro Teaching hypothesis facilitates students to design mathematics learning in stages. Students can design learning using their academic arguments. The impact of implementing lecture design includes that students can arrange the order of topics taught based on their scientific knowledge and can develop hypothetical learning tracks, worksheets, and scenarios, to predict student learning outcomes based on the learning designs made. From the application of micro teaching design, four student abilities are found that supported students in designing mathematics learning at school, namely: the ability to disclose scientific knowledge, the ability to analyze the school curriculum, the ability to develop learning activities, and the ability to predict student learning outcomes. In addition, the research also produces nested didactical triangles as a form of development of the didactical triangles. This study concludes that the hypothetical didactic design can minimize student learning barriers in the previous micro-teaching didactic design.

**Keywords:** Didactic Design; micro-teaching; Mathematics Teacher Candidates; Learning Design; Didactical Design Research

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