

## ABSTRAK

**Geovani Debby Setyani. 2019. Studi Kasus Pembelajaran Distribusi Sampling dengan Penalaran Inferensial Informal untuk Peserta Didik Jenjang SMA Kelas 11 MIPA. Skripsi. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma, Yogyakarta.**

Penelitian ini bertujuan untuk (1) mendeskripsikan cara untuk mendukung peserta didik jenjang SMA kelas 11 MIPA dalam memahami distribusi sampling dengan penalaran inferensial informal dan (2) mengetahui persepsi peserta didik jenjang SMA kelas 11 MIPA terhadap pembelajaran distribusi sampling dengan penalaran inferensial informal.

Jenis penelitian yang digunakan dalam penelitian ini adalah penelitian studi kasus, yang termasuk dalam deskriptif kualitatif. Subjek dalam penelitian ini adalah 3 peserta didik kelas 11 MIPA SMA Stella Duce 1 Yogyakarta, yang terdiri dari 3 tingkat hasil belajar Matematika yang berbeda. Metode pengumpulan data menggunakan observasi langsung terhadap pembelajaran distribusi sampling oleh peneliti sekaligus guru, wawancara, dan dokumentasi. Instrumen penelitian yang digunakan adalah instrumen pembelajaran, pedoman wawancara, dan alat dokumentasi. Observasi pembelajaran dilakukan untuk mengetahui bagaimana subjek dapat memahami materi serta memahami distribusi sampling dengan penuntunan secara langsung. Untuk itu, peneliti menggunakan model pembelajaran berbasis masalah. Wawancara dilaksanakan untuk mengetahui persepsi subjek terhadap pembelajaran distribusi sampling dengan penalaran inferensial informal. Peneliti mendokumentasikan observasi dan wawancara selama penelitian berlangsung.

Berdasarkan data tersebut peneliti melakukan analisis sehingga peneliti menyimpulkan bahwa (1) penalaran inferensial informal dan model pembelajaran berbasis masalah dengan masalah kontekstual dan data riil dapat mendukung peserta didik jenjang SMA kelas 11 memahami distribusi sampling, dan (2) peserta didik jenjang SMA kelas 11 memberikan pernyataan positif mengenai pembelajaran distribusi sampling yang telah dilakukan dan menurut mereka, peserta didik SMA jurusan MIPA lainnya dapat memahami distribusi sampling ini dengan pendekatan yang digunakan sama yaitu dengan penalaran inferensial informal dan model pembelajaran berbasis masalah dengan masalah-masalah kontekstual dan data riil.

**Kata kunci:** distribusi sampling, penalaran inferensial informal, masalah kontekstual, data riil.



**ABSTRACT**

***Geovani Debby Setyani. 2019. A Case Study of Sampling Distribution Learning with Informal Inferential Reasoning for 11th-Grade Mathematics and Natural Science Major High School Students. Undergraduate thesis, Mathematics Education Study Program, Mathematics and Science Education Department, Science and Education Faculty, Sanata Dharma University, Yogyakarta.***

*This research is aimed to (1) describe how to support 11th-grade high school students majoring in mathematics and natural science in understanding the sampling distribution with informal inferential reasoning, and (2) describe the perceptions of 11th-grade high school students majoring in mathematics and natural science on the sampling distribution learning with informal inferential reasoning.*

*Researcher used a descriptive qualitative approach called case study as the methodology. The subjects were 3 students of 11th-grade Stella Duce 1 High School Yogyakarta, which were from 3 different levels of Mathematics learning outcomes. The method of data collection were direct observation of sampling distribution learning by researcher also as teacher, interviews, and documentations. The research instruments were learning instruments, interview guidelines, and documentation tools. Observation of sampling distribution learnings were conducted to find out how the subject can understand the sampling distribution. Therefore, researcher used problem based learning. Interviews were conducted to determine the subject's perception of distribution sampling learning with informal inferential reasoning. Documentation were done during observations and interviews.*

*Based on the result of research and analysis, the researcher concluded that (1) informal inferential reasoning with problem-based learning with contextual problems and real data could support 11th-grade high school students to understand the sampling distribution, and (2) 11th-grade high school students gave positive statements about learning the sampling distribution and according to them, other high school students majoring in mathematics and natural science could understand this sampling distribution using the same approach namely informal inferential reasoning and problem-based learning models with contextual problems and real data.*

***Keywords:*** *sampling distribution, informal inferential reasoning, contextual problems, real data.*