

## ABSTRAK

**Yuliana (2022).** *Proses Koneksi Matematik dalam Pemecahan Masalah Berdasarkan Kemampuan Peserta Didik.* Program Studi Pendidikan Matematika. Pascasarjana Universitas Siliwangi Tasikmalaya, dibimbing oleh Dr. H. Supratman, M.Pd. dan Dr. Hj. Nani Ratnaningsih, M.Pd.

Penelitian ini bertujuan untuk mendeskripsikan proses koneksi matematis peserta didik dalam pemecahan masalah berdasarkan kemampuan peserta didik tinggi, sedang dan rendah. Jenis Penelitian yang digunakan kualitatif deskriptif. Instrument penelitian yaitu soal koneksi matematik dan wawancara. Subjek penelitian ini adalah peserta didik kelas X SMA Plus Muallimin Rajapolah sebanyak tiga orang. Subjek penelitian diambil dengan pertimbangan dari guru matematika dan walikelas yang memiliki tingkatan kemampuan matematika berbeda yakni kemampuan matematika tinggi, kemampuan matematika sedang dan kemampuan matematika rendah dan pernah mempelajari materi sistem persamaa linear tiga variabel. Hasil penelitian ini menunjukkan bahwa peserta didik yang berkemampuan tinggi memiliki proses koneksi matematis yang lebih lengkap pada pemecahan masalah berdasarkan penyelesaian masalah Polya yaitu memahami masalah, membuat rencana penyelesaian, melaksanakan rencana penyelesaian dan memeriksa kembali jawaban sedangkan Peserta didik yang berkemampuan sedang memiliki proses koneksi matematika kurang lengkap pada pemecahan masalah hanya mampu melaksanakan 3 tahapan Polya yaitu memahami masalah, membuat rencana penyelesaian, melaksanakan rencana penyelesaian dan peserta didik yang berkemampuan rendah hanya mampu menyelesaikan 1 tahapan Polya yaitu mampu memahami masalah

**Kata kunci:** Koneksi Matematika, Pemecahan Masalah

## ABSTRACT

**Yuliana (2022).** Mathematical Connection Process in Problem Solving Based on Learner's Ability. Mathematics Education Study Program. Postgraduate degree at Siliwangi University, Tasikmalaya, supervised by Dr. H. Supratman, M.Pd. and Dr. Hj. Nani Ratnaningsih, M.Pd.

This study aims to describe the process of students' mathematical connections in solving problems based on students' abilities. This type of research is descriptive research with a qualitative approach. The research instrument is a matter of mathematical connections and interviews. The subjects of this study were three students in class X SMA Plus Muallimin Rajapolah. The research subjects were taken with consideration from mathematics teachers and homeroom teachers who had different levels of mathematical ability, namely high mathematical ability, moderate mathematical ability and low mathematical ability and had studied material on a three-variable linear equation system. The results of this study indicate that high-ability students have a more complete mathematical connection process in problem solving based on Polya problem solving, namely understanding the problem, making a solution plan, carrying out the settlement plan and re-checking the answers while students who are moderately capable have a less mathematical connection process. Complete problem solving is only able to carry out the three Polya stages, namely understanding the problem, making a settlement plan, carrying out the settlement plan and students with low abilities are only able to complete one Polya stage, namely being able to understand the problem.

Keywords: mathematical connection, problem solving