**MENINGKATKAN KEMAMPUAN KONEKSI DAN KOMUNIKASI MATEMATIS SERTA *SELF ESTEEM* SISWA MELALUI MODEL*PROBLEM BASED LEARNING* (PBL)**

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**ABSTRACT**

**Astrida Nurul Fitria (168060050). Improving Mathematical Connection and Communication Capabilities and Student Self Esteem Through Problem Based Learning (PBL) Models**.

Problem Based Learning Model (PBL) to improve mathematical connection and communication skills, as well as student self esteem. The purpose of this study was to find out: (1) Differences in the increase in mathematical connection skills of students using the Problem Based Learning (PBL) model with increased connection skills using conventional learning models seen from Early Matemais Ability (KAM) (Superior, medium, low) (2) Difference in improvement in students' mathematical communication skills using the Problem Based Learning (PBL) model with an increase in communication skills using conventional learning models seen from Early Matemais Ability (KAM) (Superior, medium, low), (3) student self esteem learning uses the Problem Based Learning (PBL) model and students who use conventional models, (4) differences in Self esteem of students who use the Problem based Learning (PBL) model with self esteem of students who use conventional learning models seen from the Early Ability Matemais (KAM) ( Superior, moderate, low), (5) the relationship between connection ability, kemamp communication and mathematical self-esteem of students. This research method is a mixed method (mixed methods) type of embedded design. This research was conducted in class VIII Mts Putri PUI Talaga in the 2018/2019 school year with sampling using a purposive sampling technique. The instruments used were tests and non tests, namely the mathematical connection test and mathematical communication, while the non tests were observation, interview, and Likert self-esteem scale. Data was processed with the help of SPSS 25 and Microsoft Excel 2016. Software analysis of data using two-way ANOVA test, non-parametric test and correlation test. The findings of this study are, (1) There are differences in the increase in mathematical connection ability between students with learning Problem Based Learning (PBL) models and students with conventional learning based on KAM (High, medium and low); (2) There are differences in the increase in mathematical communication skills between students with learning Problem Based Learning (PBL) models and students with conventional learning based on KAM (High, medium and low); (3) Self-esteem of students using the Problem Based Learning (PBL) model can be said to be positive; (4) There are differences in self esteem of students who use the Problem Based Learning (PBL) model with self esteem of students who use conventional models; (5) There is a correlation between connection ability and communication skills and student self-esteem.

**Keywords**: Problem Based Learning Model; Mathematical Connection Ability; Mathematical Communication Ability; and Student Self Esteem

**ABSTRAK**

Model *Problem Based Learning* (PBL) untuk meningkatkan kemampuan koneksi dan komunikasi matematis, serta *self esteem* siswa. Tujuan dari penelitian ini adalah untuk mengetahui: (1) Perbedaan peningkatan kemampuan koneksi matematis siswa yang menggunakan model *Problem Based Learning* (PBL) dengan peningkatan kemampuan koneksi yang menggunakan model pembelajaran konvensional dilihat dari Kemampuan Awal Matemais (KAM) (Unggul, sedang, rendah) (2) Perbedaan peningkatan kemampuan komunikasi matematis siswa yang menggunakan model *Problem Based Learning* (PBL) dengan peningkatan kemampuan komunikasi yang menggunakan model pembelajaran konvensional dilihat dari Kemampuan Awal Matemais (KAM) (Unggul, sedang, rendah), (3) *self esteem* siswa yang pembelajarannya menggunakan model *Problem Based Learning* (PBL) dan siswa yang menggunakan model konvensional, (4) perbedaan *Self esteem* siswa yang menggunakan model *Problem based Learning* (PBL) dengan *self esteem* siswa yang menggunakan model pembelajaran konvensional dilihat dari Kemampuan Awal Matemais (KAM) (Unggul, sedang, rendah), (5) hubungan antara kemampuan koneksi, kemampuan komunikasi dan *self esteem* matematis siswa. Metode penelitian ini merupakan metode campuran (*mixed methods)* tipe *embedded design.* Penelitian ini dilaksanakan di kelas VIIIMts Putri PUI Talaga pada tahun ajaran 2018/2019 dengan pengambilan sampel menggunakan teknik *purposive sampling*. Instrumen yang digunakan tes dan non tes, yaitu tes koneksi matematis dan komunikasi matematis, sedangkan non tes yaitu observasi, wawancara, dan skala Likert *self esteem*. Data diolah dengan bantuan *software SPSS 25* dan *Microsoft Excel 2016*. Analisis data menggunakan uji anova dua jalur, uji non-parametrik dan uji korelasi.Temuan penelitian ini adalah, (1) Terdapat perbedaan peningkatan kemampuan koneksi matematis antara siswa dengan pembelajaran model *Problem Based Learning* (PBL) dan siswa dengan pembelajaran konvensional berdasarkan KAM (Tinggi, sedang dan rendah); (2) Terdapat perbedaan peningkatan kemampuan komunikasi matematis antara siswa dengan pembelajaran model *Problem Based Learning* (PBL) dan siswa dengan pembelajaran konvensional berdasarkan KAM (Tinggi, sedang dan rendah); (3) *Self-esteem* siswa yang menggunakan model *Problem Based learning* (PBL) dapat dikatakan positif; (4) Terdapat perbedaan *self esteem* siswa yang menggunakan model *Problem Based learning* (PBL) dengan *self esteem* siswa yang menggunakan model konvensional; (5) Terdapat korelasi antara kemampuan koneksi dan kemampuan komunikasi serta *self-esteem* siswa.

**Kata Kunci :**Model*ProblemBased Learning*; Kemampuan KoneksiMatematis; Kemampuan Komunikasi Matematis; dan Self Esteem Siswa.

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