

デバッグ支援システム DESUS の利用からみた 初心者プログラマのトレース学習に関する特性

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Characteristics of a Beginner's Tracing Based on an Analysis of Programming Learning by DESUS.

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We developed the debugging support system named DESUS. The system supports debugging by guiding tracing for programming learners in their initial stage. We used DESUS in our programming classes. Based on the analysis results of the data obtained in the classes, we discussed the features for the tracing study of the beginners.

Most learners who studied tracing made comparatively good grades in the programming. On the other hand, among the learners who had not yet executed tracing, the grade point range for programming was significantly different. A lot of guidance was requested by the subjects given in the first half. The learners who executed the tracing by themselves, executed it by the subjects given after the basic structure of the programming was learned.

Key Words – tracing, debugging supports, beginner, programming education.