

The bachelor's thesis focuses on simple models of electric circuits that are used in physics classes. First I selected the overview of the models from accessible sources. Subsequently I categorised them to models that are suitable for classroom demonstration and to models that are more appropriate for discussion or error analysis. For a basic overview of models that are currently used in physics classes I created an online questionnaire and also interviewed several teachers of physics. I discovered that although there are various simple models of electric circuits available, not all of them would be suitable for classroom demonstration without subsequent discussion about possible errors. I also found out that there are teachers who like to use models of electric circuits in their classes whereas others avoid them because of the risk of students' misinterpretation.