

# Preface

“Give the pupils something to do, not something to learn; and the doing is of such a nature as to demand thinking; learning naturally results.”

John Dewey

During the time of this project I understood one important thing: Learning by actually doing something yourself can enhance deeper thought processes. I think this is especially effective if you experience a conflict, as you never would have guessed what you just have learned. Personally, I think this is a very good approach to discover your own knowledge.

I would like to acknowledge a number of very important people that contributed to and enabled the completion of this master thesis.

Firstly, I must acknowledge my primary supervisor, Silvia Heinz. I will never forget her support, patience and guidance throughout this project. Her ability to ask the right questions and connect me to the right people at the right time led me to the leading ideas of this thesis. I must also thank my secondary supervisor, Professor Klaus Opwis, for being positive and supportive during uncertain times. I would like to thank Dr. Markus Stöcklin for providing very important insights into their ways of teaching and explaining statistics and his patience in developing content text and tasks for the learning environment and the statistical knowledge test. In addition, I want to thank Associate Professor Roland Hübscher for his good ideas, patience and time to develop the learning environment with us. I am very fortunate to have Silvia Heinz, Klaus Opwis, Markus Stöcklin and Roland Hübscher as my supervisors and teachers during my time as a graduate student. Being their student I was able to learn important skills for doing research.

To my boyfriend Cordian Röthlisberger and my friend Satu Binggeli who have reviewed my thesis and supported me when times were not easy. To my family and friends, thank you for all your unconditional support.

Last, but not least, I thank all the motivated students who took the time to participate in my study. I hope they all have learned something new about statistics and their own knowledge. Without them, this study and the further development of the learning tool would not have been possible.

Glena Iten,  
October 2014

<http://www.springer.com/978-3-658-08334-2>

Impact of Visual Simulations in Statistics  
The Role of Interactive Visualizations in Improving  
Statistical Knowledge

Iten, G.

2015, IX, 48 p. 6 illus., Softcover

ISBN: 978-3-658-08334-2