



The testing effect reloaded

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Preface

Second and third study of my PhD-trajectory

- Experiment 2: Repeated and new questions
- Experiment 3: Judgements of learning

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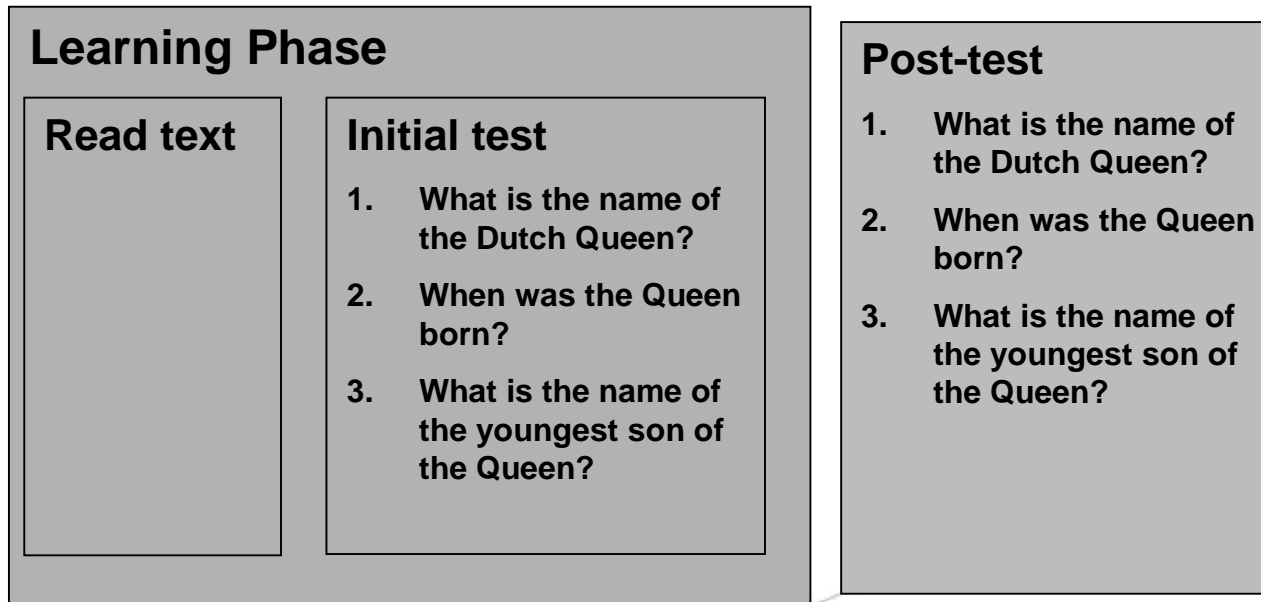
Testing

- University students see test as a means to....
 - Diagnose: “A test provides insight in what I not yet master”.
 - Learn: “By making a test I remember much more”.
 - Instruct: “A test provides insights in the exam (difficulty, type of questions)”.

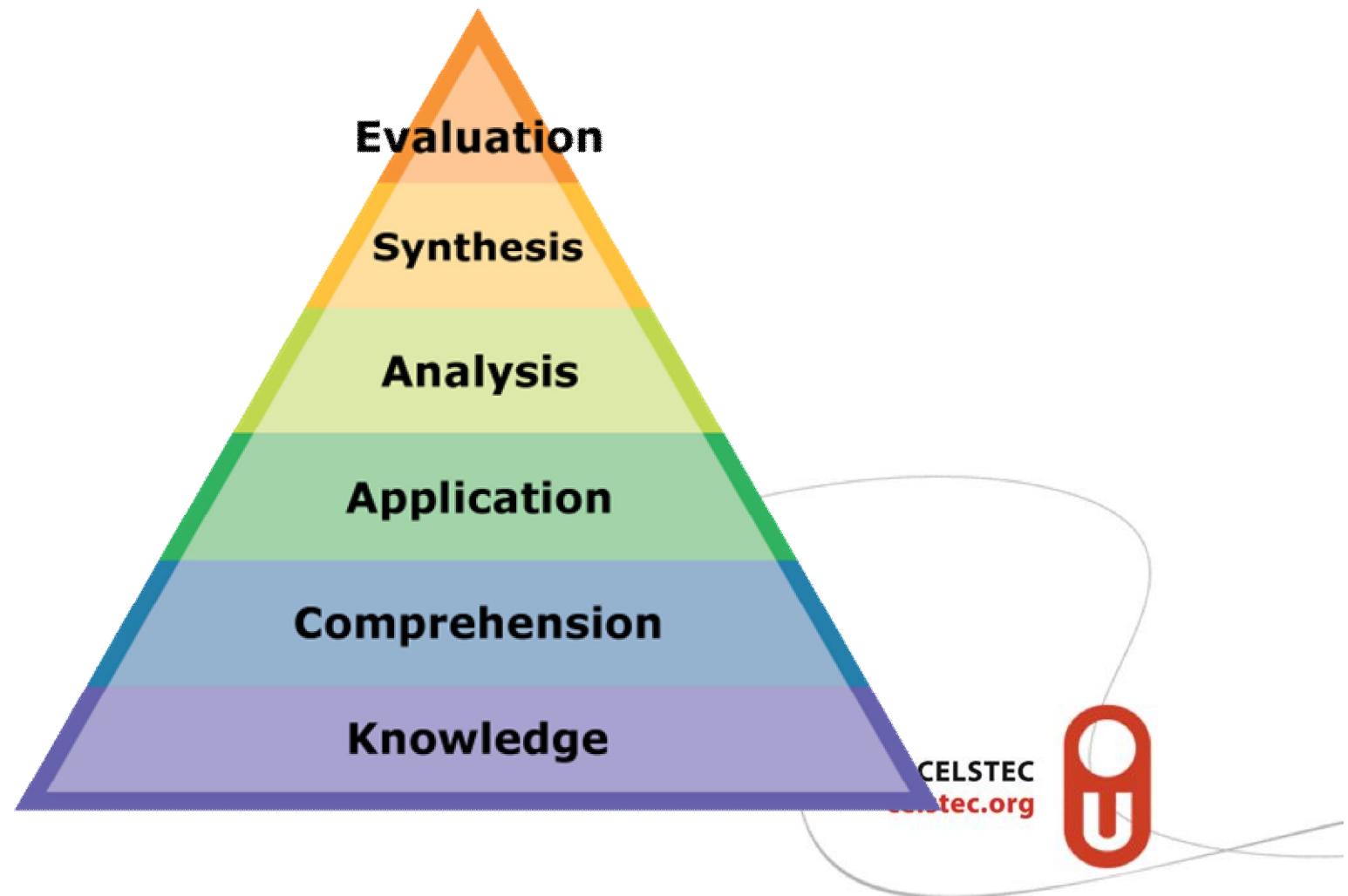


Testing effect

Testing effect research mainly focuses on repeated factual knowledge questions.



Blooms Taxonomy



Experiment 2

- 1) Can the testing effect be replicated for new questions?
- 2) Can the testing effect be replicated for application questions?



Method and procedure

- 38 participants (22 male, 16 female)
- Between 15 and 16 years old ($M = 15.91$; $SD = 0.67$)
- Two conditions: LLLL; LTLT
- Expository text (899 words) about probability calculations
- Post-test: four types of questions: repeated facts, new facts, repeated application, new application



Conclusion

- Retrieving information through testing fosters remembering of retrieved facts, but not non-retrieved facts
- Retrieving information through testing fosters application of the knowledge
- Answering application questions seems to foster repeated and new application questions.



Experiment 1

- 1) Helps retrieving information through testing to make more accurate judgements of learning?
- 2) Helps retrieving information performance?



Method and procedure

- 42 participants (20 males, 22 females)
- Between 15 and 16 years old ($M = 15.53$; $SD = 0.63$)
- Two conditions: LLLL+; LTLT+
- Expository text (899 words) about probability calculations
- Post-test with factual knowledge and application questions
- Judgements of learning

Hoe zeker ben je dat je over 1 week feitjesvragen kunt beantwoorden over het tekstdeel dat je zojuist gelezen hebt, zonder dat je dat tekstdeel daarvoor nog een keer gelezen hebt?

0 % zeker	20 % zeker	40 % zeker	60 % zeker	80 % zeker	100 % zeker
0	0	0	0	0	0



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Conclusion

- Retrieving information through testing leads to less overestimation of factual knowledge
- Retrieving information through testing leads to underestimation of application of the aquired knowledge
- Testing leads to increased performance on application questions



Future.....

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