

Trying to Teach Testing Skills and Judgment

 **EuroSTAR** | #esconfs
Software Testing Conference



Rikard Edgren

Context

- Higher vocational studies, 1 – 2 years full time
- Based on market needs, including supervised internship
- We (Rikard and Henrik) have taught test-savvy parts at several schools

- Teaching Philosophy
 - Motivation is key
 - Not for the money
 - It's not about us
 - Encourage new ideas
 - Don't be afraid



Tacit Skills and Judgment

- Asking good questions
- Critical thinking
- Understanding what is important
- Rapid learning
- Seeing many perspective and test ideas
- Selecting effective test strategies
- Capturing serendipity
- Realizing when testing is good enough

[Courses are not centered around these, but they are embedded within “classic” testing areas.]



Think Like a Tester - excerpt

- You will now experience a fake lecture, using real examples from "Think Like a Tester".
- We usually start with a story...



Think Like a Tester - definition



- Testers think differently than other professions; we want to see problems.
- A good tester needs critical thinking, questioning assumptions that really aren't givens.
- You get many perspectives with creativity, often by combining old things in new ways.
- You also need logical thinking, to understand how things are connected.
- And we need to learn rapidly, since there are loads to know in order to test well.
- On top of this a healthy dose of pragmatic thinking, to adjust to reality so you can test your best within time limits.
- This needs to be balanced with a very good understanding about what is important in the unique situation.

Critical Thinking

- Question everything, especially this statement
- What If...
- You can't avoid bias, but you can manage it (Lessons Learned #39)



Critical Thinking - Examples

- Evaluating concepts
- Questioning the product
- Testers can make mistakes
- *The critical thinking is embedded in who we are as testers.*



Think Like a Tester - Exercise



- `Guess the Number v1.0` by Rikard Edgren and Henrik Emilsson.
- This is an exercise for software testers.
- It promotes logical thinking and pattern recognition.
- Understand the behavior so you can solve the puzzle within 7 guesses.
- I am thinking about an integer between 1 and 100 (decimals are ignored)
- What is your guess:

Think Like a Tester – Exercise Debrief

- Critical thinking
- Many experiments
- Logical thinking
- Observation



TEACHER WORK

THEORY

PURPOSE

EXAMPLES

TIPS & TRICKS

READING

STORIES

FEEDBACK

AUTHENTIC PROBLEMS!

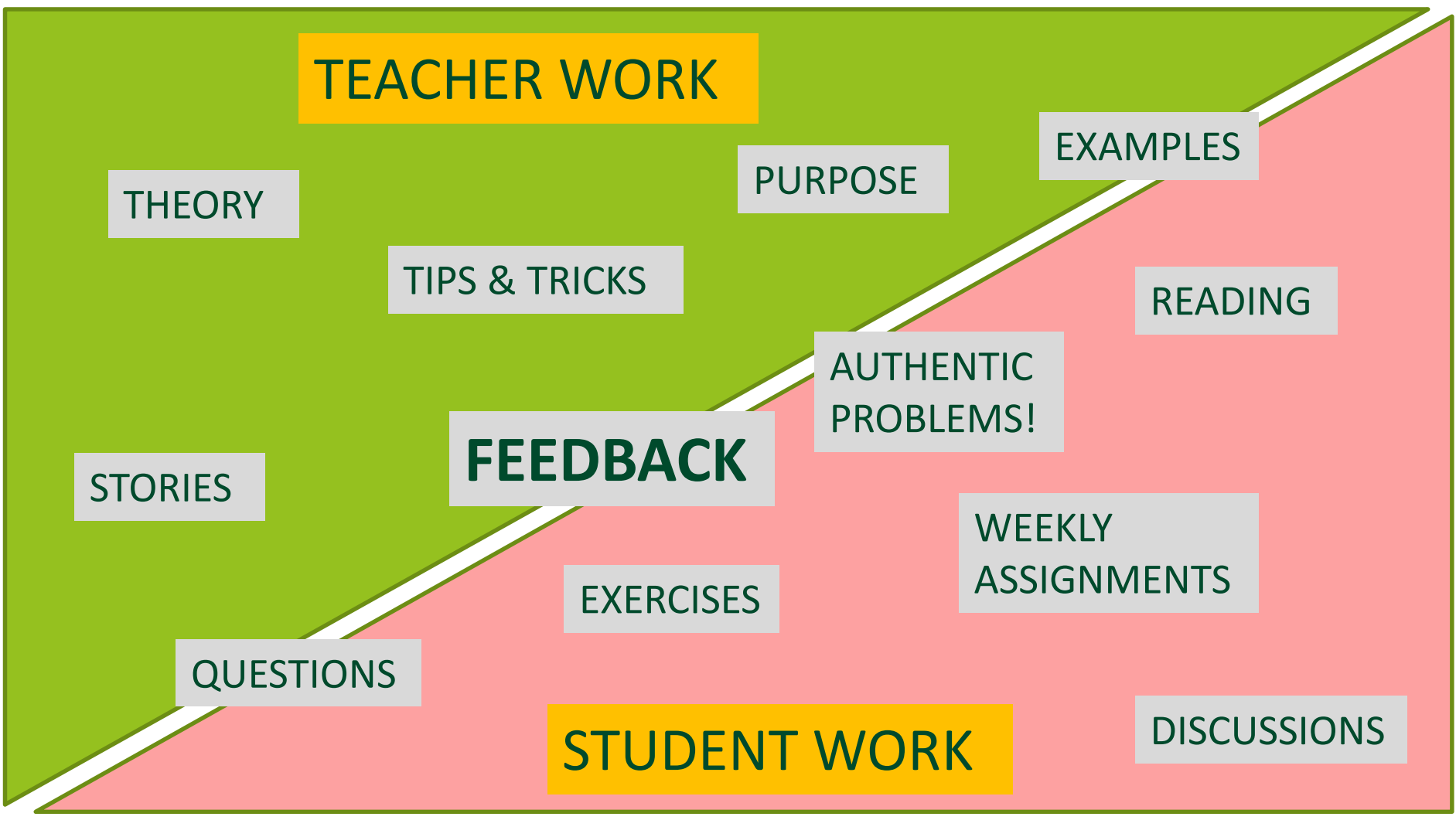
WEEKLY ASSIGNMENTS

QUESTIONS

EXERCISES

STUDENT WORK

DISCUSSIONS



Finale

- A challenging opportunity to learn (for students and teachers!)
- *“If a student wants a crystal clear education with easy assignments, you will probably not like it” (Magnus)*
- I can't really teach these tacit skills and judgment, but I know how to help students acquire it.
- You can do it too, a good start is reading the paper with details.

rikard.edgren@learningwell.se

