In general, students did very well (average exam mark is 34.09/55, i.e., 61.8%).

Item analysis shows that the exam had 7 easy questions, 16 medium, and 1 hard one – so we should add some more hard ones next time.

The hardest one relates to grammars versus languages being single-type, and was indeed a tricky question since the student had to spot that the given grammar can be rewritten into an equivalent, single-type one.

Question 23 was the easiest, with an average of 5.75/6. It asked for a skill (writing a DTD) that students clearly acquired during the course unit.

With the exception of Question 23, students did significantly less well on essay question 21-24 than they did on MCQs (in order of increasing student performance):

• Question 24: only few students were able to relate the differences in format to the formats properties such as being queriable, error-prone, extensible, etc.
• Questions 20: while most students were able to relate single-typeness to uniqueness of PSVI, few were able to explain when this was relevant and how. Also, students wrongly claimed that single-typeness makes validation less complex.
• Questions 22: While most students had some knowledge of some of the properties of Schematron and RelaxNG, this knowledge was rather patchy. Moreover, many students found it really hard to compare the two schema languages (in contrast to describing each of them).
• Questions 21: student performed mostly well, though few scored really high marks here – and surprisingly few considered the existence of a single schema language that combined advantages of possible.

Students did unsurprisingly rather well on short answers 16-19: they only required a good understanding of the taught material, without any analysis or discussion.

In general, I was surprised to see how many students wrongly believe that XSD or RelaxNG schemas are harder to validate against – and also at the number of students who seem to be unable to distinguish between a schema and a schema language.

Finally, the item analysis recommended to review 8 questions – (7 MCQs, plus Question 23), and I will follow this recommendation.