
Interpretation of the Questionnaire Results

Chapter D Teaching methods

by: *Rainer Hampel*

1. Traditional lessons with the teacher in front of the class

The table on P. 8 of the **Basis data** in Chapter D shows that students see the essential advantage of having the teacher in front of the class in the fact that the teacher can check learning progress continually and so be in a position to provide the necessary help (an average 1.7 out of a maximum 3 points). Nevertheless far fewer believe that this method can produce the same level of knowledge for all students (an average of only 0.7 out of a maximum 3 points).

The other advantages of having the teacher standing in front of the class lie in the strategic selection of the lesson content and its structural presentation by teaching staff. These advantages are given an average of 1.5 or 1.6 out of a possible total of 3 points.

If all the averages in the student evaluation of six advantages of having the teacher standing in front of the class are added together, there is an average in the pre-test of 7.8 and in the post-test of 8.4 out of a possible total of 18 points. Although the appreciation of this kind of teaching slightly increased in all the classes between pre-test and post-test - except for IT and PL - it only reached 46% of the highest possible value (18 = 100%). Why the values in CY, IT, NL, and PL are above 50% can probably only be explained by the teachers in these schools.

2. Group teaching

In order to evaluate group teaching the young people were likewise given six advantages to which they could express their degree of approval with a maximum of three ticks (points).

The table on P. 9 of the Basis data in Chapter D reports the result. One is immediately struck by the fact that in the penultimate column the sums of the averages - with the exception of DE* - all lie between 10 and 12 points, which corresponds to an approval rate of 55% to 66% if the highest possible total of points is put at 18 = 100%. Except for CY (a reduction of 0.4 points) and PL (unaltered) approval rating of group teaching increased between pre-test and post-test in all the classes even though it had already been higher than that for having the teacher in front of the class in the pre-test.

Young people particularly appreciate encouragement of organizational and teamwork ability, the interaction and communication in group teaching.

All in all it can be said that group teaching - at least in the context of the COMCULT network topics - was unequivocally given approval by students.

3. Using internet for teaching purposes

3.1 Information range and access

D 31 Almost unanimously, over 80% of the students in all the network schools think that the internet provides all the information one needs. Only in CY is this opinion much less to be found and why scepticism has the upper hand here can only be explained on the spot. This deviation from the average of all other opinions expressed is in striking contrast to the statements of young people in CY on their own use of computers (cf. P.7 of the Basis data):

- Easy access to computers in schools	100%
- Frequent use of computers at home	100%
- Highest rate of computer use at school in comparison with others	33%
- Most internet experience in comparison with others	67%

Is the Cypriot young people's scepticism towards the material relevant to teaching offered by the internet based on particularly intensive experience with this medium?

D 33 The speed of access to information via internet is on average likewise highly rated by about 80% of the students, whereby this rating grows - with few exceptions - between pre-test and post-test, in BG indeed from 67% => 89%. Less convinced of the speed of obtaining information via internet are students particularly in CZ* with only 59% => 53% agreement. Computer use at home here also only reaches an average value of 66%, and 72% say that they only rarely use computers at school (cf. P.7 of the Basis data in Chapter D).

D 55 Even so, on average 75% of those questioned believe that outside school, internet makes intensive learning possible. In the NL they are much less sure, 29% „Don't know“, in CY even 47%.

3.2 Obstacles to using the internet

D 32 On average the English language is hardly an obstacle for young people to using the internet. Deviations from this rule were only seen in CZ*, where 28% of young people felt disadvantaged because of English, in BG there were 39% and in HU even more with 50%.

D 44 Likewise students in CZ* (66%) and HU (77%) felt at a disadvantage because there was no comparable offer in their own languages in internet use. This opinion was shared by 57% in CY and another 36% answered "Don't know".

D 47 If the undecided ("Don't know") are counted among the ones who complain of a lack of technical help in using internet in schools, we arrive at an average of 61% of those questioned. This value is far exceeded in GR with 78%, in ES with 86% and in BG with as much as 95%. Using internet in teaching unfortunately still holds a series of technical risks, so that many teachers fight shy of using this method more often.

D 53 Maintaining that a well-ordered library is better than internet aims at the quality of classification according to topic or subject. This has the lowest evaluation in CZ*, since 94% of the youth here have greater confidence in library classification, followed by BG 33% => 44%. In the NL, however, scepticism towards internet arrangement diminished considerably between pre-test and post-test, 47% => 12%.

3.3 Advantages and disadvantages of using internet (average values)

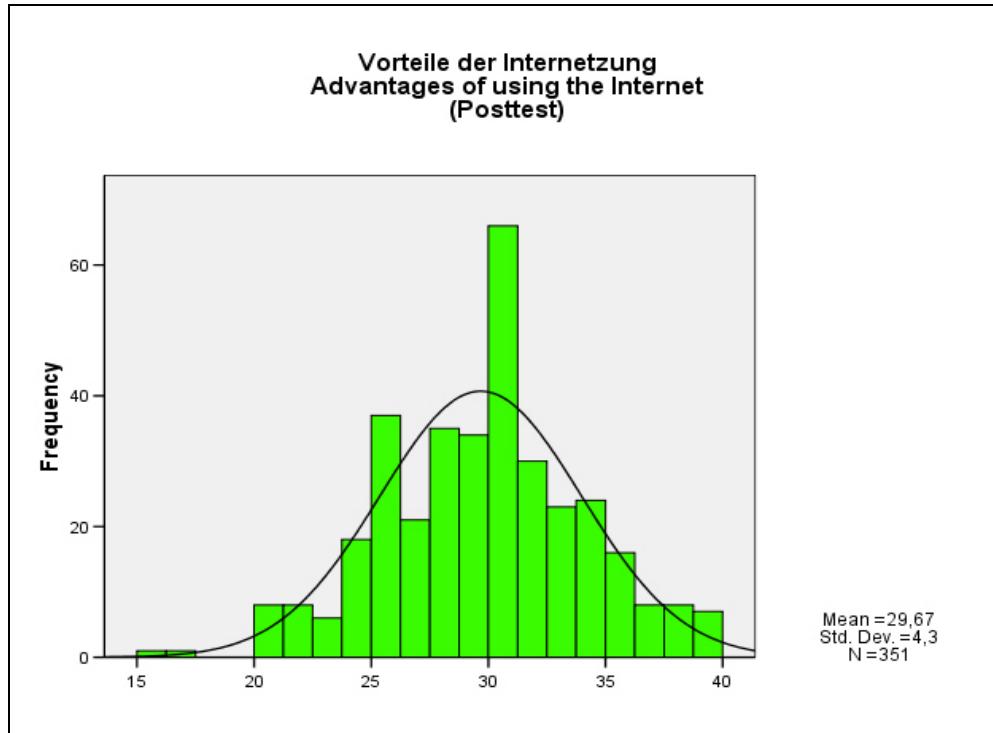
In order to clarify whether students see the use of internet in teaching more as an advantage or as a disadvantage, each aspect was allotted 8 statements (see Original version of the questionnaire). The rate of agreement was expressed on a scale of 1 – 5. In this way the following rates were obtained:

Don't agree at all	1
Don't agree	2
Don't know	3
Agree	4
Completely agree	5

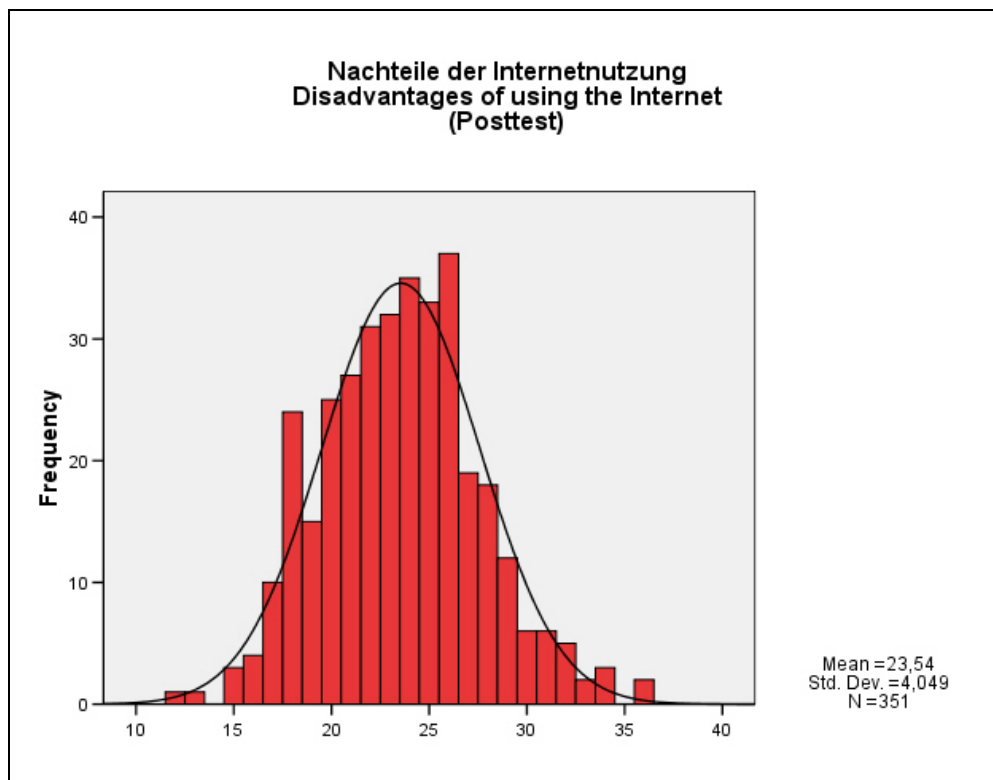
If one student completely disagreed with all 8 statements, a multiplication (8 x 1) would still have produced a minimum value of 8. If, however, he had completely agreed with all 8 statements, the multiplication (8 x 5) would have produced 40 as maximum value.

Graph D 1 shows the result of the sum of all the student opinions on the **advantages** of internet use on the basis of a scale of 8 to 40 as X axis. The Y axis shows the frequency, i.e. how many students agreed to what degree to the 8 advantages. The average in the post-test is 29.6. This corresponds to an **agreement of 74 %** (maximum of 40 = 100%). The differences between pre-test and post-test are minimal (cf. Table D 3 and Table D 4).

Graph. D 1



Graph. D 2



Graph D 2 was drawn up in the same way. Here again the disadvantage evaluations were shown on a scale of 8 – 40 (X axis) and on the Y axis the frequency of ticks in the relevant column. The average in the post-test is only 23.5 in this graph, which corresponds to **59%** if the maximum is set at 40 = 100%. If both averages or graphs are compared with one another, then it is quite clear that altogether young people rate the **advantages** of using internet much **more highly** than the disadvantages.

The single values in Table D 3 were likewise shown on the basis of the scale of 8 – 40 described above, but here they did not refer to the sum of all the post-test answers but to pre-test and post-test results in the different schools (countries) in descending order.

Tab. D 3

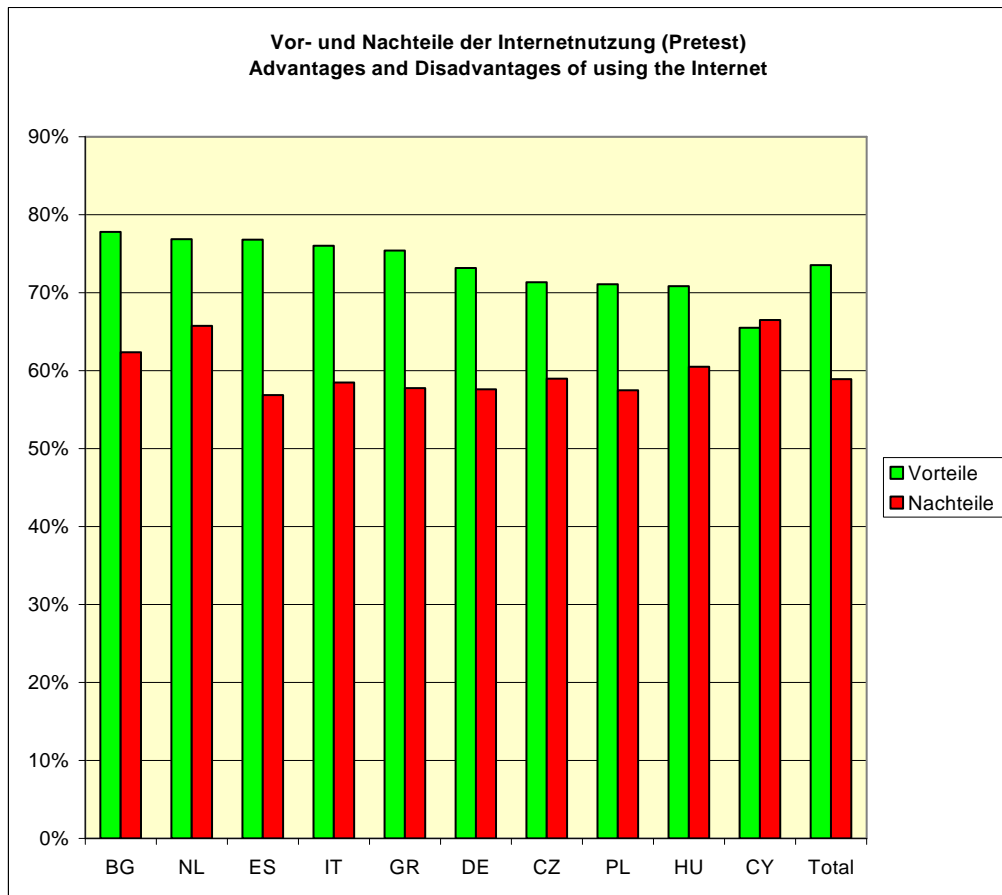
Pre-test	Advantages of using the Internet Maximum of mean = 40	Disadvantages of using the Internet Maximum of mean = 40	Difference of mean values	Agreement with the advantages of using the Internet	Agreement with disadvantages of using the Internet	Difference in percentages
Pre-test	Vorteile der Internetnutzung Maximum des Mittelwerts = 40	Nachteile der Internetnutzung Maximum des Mittelwerts = 40	Differenz der Mittelwerte	Zustimmung zu Vorteilen der Internetnutzung in %	Zustimmung zu Nachteilen der Internetnutzung in %	Differenz der % Werte
	Mean/Mittel	Mean/Mittel	Mean/Mittel			
BG	31.1	24.9	6.2	78%	62%	15%
NL	30.8	26.3	4.5	77%	66%	11%
ES	30.7	22.7	8.0	77%	57%	20%
IT	30.4	23.4	7.0	76%	58%	18%
GR	30.2	23.1	7.1	75%	58%	18%
DE	29.3	23.0	6.2	73%	58%	16%
CZ	28.5	23.6	4.9	71%	59%	12%
PL	28.4	23.0	5.4	71%	58%	14%
HU	28.3	24.2	4.1	71%	61%	10%
CY	26.2	26.6	-0.4	66%	67%	-1%
Total	29.4	23.6	5.9	74%	59%	15%

Tab. D 4 shows the relevant values for the post-test, again in descending order

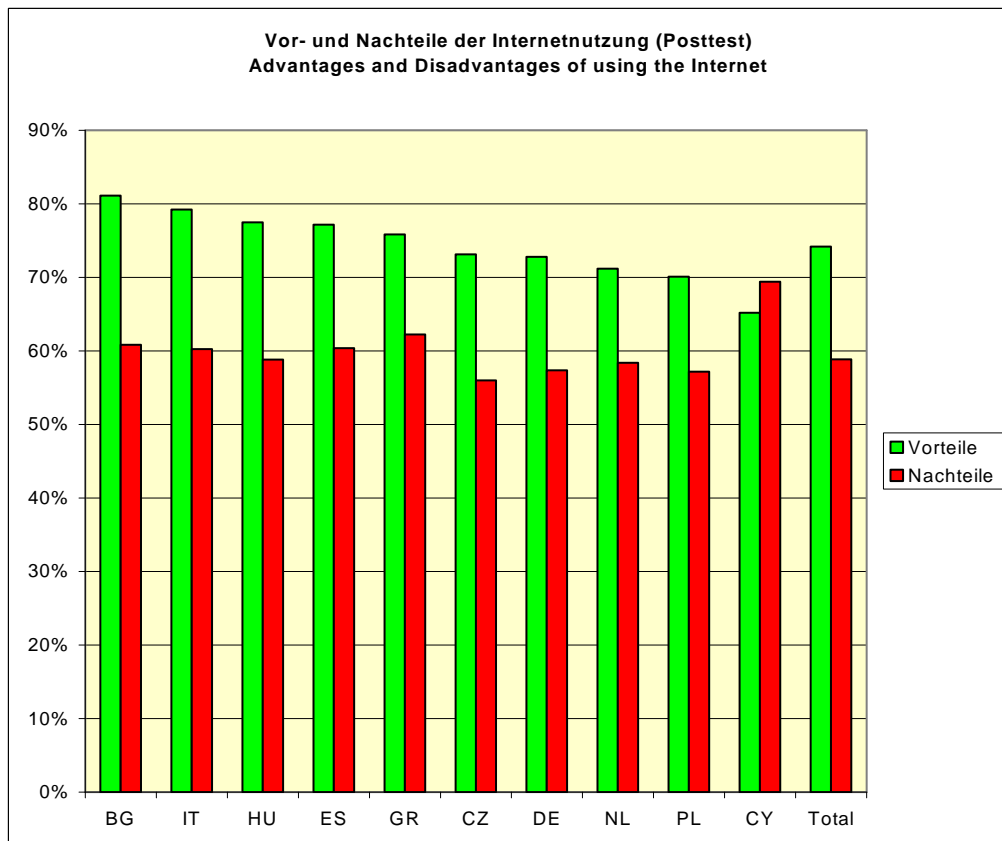
Post-test	Advantages of using the Internet Maximum of mean = 40	Disadvantages of using the Internet Maximum of mean = 40	Difference in mean values	Agreement with the advantages of using the Internet	Agreement with disadvantages of using the Internet	Difference in percentages
Post-test	Vorteile der Internetnutzung Maximum des Mittelwerts =40	Nachteile der Internetnutzug Maximum des Mittelwerts = 40	Differenz der Mittelwerte	Zustimmung zu Vorteilen der Internetnutzung in %	Zustimmung zu Nachteilen der Internetnutzung in %	Differenz der % Werte
	Mean	Mean				
BG	32.4	24.3	8.1	81%	61%	20%
IT	31.7	24.1	7.6	79%	60%	19%
HU	31.0	23.5	7.5	78%	59%	19%
ES	30.9	24.1	6.7	77%	60%	17%
GR	30.3	24.9	5.4	76%	62%	14%
CZ	29.3	22.4	6.9	73%	56%	17%
DE	29.1	22.9	6.2	73%	57%	15%
NL	28.5	23.4	5.1	71%	58%	13%
PL	28.0	22.9	5.2	70%	57%	13%
CY	26.1	27.8	-1.7	65%	69%	-4%
Total	29.7	23.5	6.1	74%	59%	15%

Graphs D 5 and D 6 show the percentage values in Tables D 3 and D 4 as columns and illustrate optically student preferences in the different countries.

Graph. D 5 green columns = advantages red columns = disadvantages



Graph. D 6 green columns = advantages red columns = disadvantages



3.4 Advantages and disadvantages of using the internet (Basis data)

Above and beyond the general facts shown by the graphs described above the Basis data in Chapter D reveal (cf. Pp.3 – 6) further interesting details.

The main advantage of using the internet is seen by young people in the fact that surfing is fun **D 36**. Apart from BG and PL (post-test) over 80% of those questioned are unanimous on this point.

If fun in surfing can be used for learning by discovery and not just for senseless running through the mass of pages in the internet, then using internet is certainly a form of enrichment for teaching **D 35**. This is also how all in all 85% of students see it. The decline in enthusiasm in CY from 67 % to 60% between pre-test and post-test is actually puzzling. Nor do all students think that using internet information makes lessons more interesting **D 39**, in CY only 53% and in DE*, too, only 52%. But lessons between pre-test and post-test had a livening-up effect in other classes thanks to using internet, as in BG 83 % => 89 %, HU 83 % => 100 % and in PL 78 % => 91 %.

D 50 Young people were sometimes sceptical towards the statement that teaching with the help of internet strengthened reasoning through combining ideas, in CY only 7% thought so while 33% answered “Don’t know”, in PL 57% => 35% and the “Don’t know” rate stood at 39%. **D 54** Regarding also the supposition that facts learned in lessons supported by internet were remembered longer, the “Don’t know” rate had an average of 33% and sometimes clearly above that. **D 43** The cross-border exchange of ideas with other students via internet was then partly seen as more positive, particularly in BG, ES, GR, HU and IT with about 90 % and more.

D 38 The opinion that using internet is detrimental to communication between people is not shared by young people – except in CY and GR - and the large amount of time needed in using internet is - except for CY - not felt to be so much a disadvantage. **D 48**. Many young people do agree that teaching with the help of internet requires additional qualities in the teachers, particularly so in BG, ES, GR, NL and DE* **D 57**. Assessment of students’ work is also not made easier for teachers with this method of teaching. The rate of agreement here has an average of 38% and the “Don’t knows” are 30%. **D 52**. Obviously new evaluation procedures for student assessment must be worked out or improved in this field. **D 56** With regard, too, to the number and type of work instructions for teaching with the help of internet, the divergent opinions expressed by students suggest that teachers need further experience in order to be able to make optimum use of internet in their lessons.