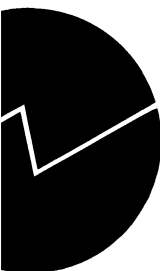


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**Photocopying in Higher
Education**

Documents



Foreword

The survey on copying at universities and colleges was carried out on assignment from Kopinor and the Ministry of Education, Research and Church Affairs. A steering committee consisting of representatives for the university and college sector, Kopinor and the Ministry of Education, Research and Church Affairs was appointed in connection with the survey. The steering committee held meetings after the completion of each of the seven collection rounds and representatives of Statistics Norway took part in these meetings. Helge Jagland, Senior Statistician, Kopinor has been our liaison vis-à-vis the commissioners of the report.

Two divisions at Statistics Norway have collaborated on the survey. The Division for Sample Surveys collected the data, with Anne Sundvoll and Dag Roll-Hansen serving as the project managers for this work. Kari Grøholt has been the interviewer contact, and the computer work was done by Solveig Myklestad, Glenn-Erik Wangen, Johnny Johansen and Rune Steffensen. Mailings and sundry tasks were done by Lillian Flekke, Anne Ellingsvold, Silje Fekjær, Ibrahim Shaikh and Bjørn Sjølie. Stein Opdahl has been the advisor for the project. In addition, around 25 interviewers worked at any given time on recording material. The Division for Statistical Methods and Standards has been responsible for estimating results. This work was done by Leiv Solheim and Li-Chun Zhang. Most of this publication has been translated from Norwegian by Dana Fossum, at Apropos Translatørbyrå AS.

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1 Introduction

1.1 Background for the survey

The survey was conducted as part of the copying agreement between the Ministry of Education, Research and Church Affairs and Kopinor (Norwegian Reproduction Rights Organisation). The objective has been to survey copying at universities and colleges. It estimates a total annual copy volume and how much that is copyright-protected material. The results are presented for students, academic staff and non-academic staff, broken down by the different groups of educational institutions. The survey also shows how copyright-protected material is broken down into various types of sources and types of material.

The results from the survey are meant to serve as a basis for the work of drafting a new copying agreement between the Ministry of Education, Research and Church Affairs and Kopinor. The results will also serve as a basis for Kopinor's distribution of remuneration to rightsholders in and outside Norway.

1.2 Structure of the report

The report consists of three parts. The first part describes the most important results from the survey. The tables describe the estimated copy volume and the quantity of copyright-protected material and copyright-protected material broken down by source, type of material and origin.

The second part describes the estimation method. A description is given of the data and uncertainty, in addition to an account of how the results were arrived at.

The third part gives an account of the data basis of the survey. Samples, response rates and data collection are described.

2 Results of the survey

The most important results of the survey are presented here. Supplementary results are presented in Appendix A.

2.1 Total annual copy volume

The average annual copy volume per person is estimated at 2,030 A4 copy-pages¹. Furthermore, we have estimated that each person on average has copied 903 pages of copyright-protected material. The number of pages of copyright-protected material copied per copy-page is called the protected percentage. We have estimated the protected percentage to be 44.5%. The university and college sector consists according to our overview of 174,295 students, 11,909 academic staff positions and 9,790 non-academic staff positions. This makes up the population in the survey. Based on these counts of the size of the population the survey concludes that the entire sector annually consumes a copy volume of 397.9 million A4 pages. Copies were made of 176.9 million pages of copyright-protected material. Copies students made outside the educational institution are not included. The scope of this copying is shown in Table A.0 in Appendix A.

The objective of the survey is to survey absolutely all copying at educational institutions, including the production of course packs. Course packs which are written at the educational institution and not published in publication form, are regarded as uncopyrighted material. Course packs or parts of course packs consisting of copies or transcripts of original works are coded in the usual manner. We have otherwise not taken a closer look at the legal basis for the copying and refer to Appendices E and F for further details on how the material is classified.

The tables in this chapter show the distribution of the annual copy volume for all persons (table 1.0) and copy volume broken down by different groups. The estimated copy volume is given for students (Table 1.1), academic staff (Table 1.2) and non-academic staff (Table 1.3). The figures describing the copy volume for these groups are broken down into four different categories or strata of educational institutions. The four strata are universities, universities of science and technology, state colleges and scientific colleges.

Students make on average fewer copies than staff. Because there are far more students than staff, most of the copies are nonetheless made by students. Furthermore, copyright-protected material accounts for a far higher percentage of the copies students make than the copies made by staff. This percentage is lowest among non-academic staff. The difference between all three groups of persons is statistically significant with respect to average copy volume, average copyright-protected volume and percentage of volume that is copyright-protected. There is no clear answer to whether there are significant differences between the various strata of educational institutions.

¹ The estimate comprises copies made at the educational institutions' regular copying machines and at in-house printing plants and repro centres, and course packs, collections of copies etc. produced by external copying and printing businesses.

2.2 Distribution of copyright-protected material

Copyright-protected material is classified according to the source the copies are made from, the type of material they consist of and the origin of the material. These breakdowns are presented in Table 2. The breakdowns are presented as the number of original pages. On the other hand, total annual copy volume and non-copyright protected material are calculated in number of A4 copy-pages.

By far the largest category of material copied has textbooks and non-fiction books as its source, consists of educational, non-fiction and scientific texts, and is published in Norway in Norwegian. Materials with these characteristics make up about half of all copyright-protected material. When the material is broken down solely according to origin, Norwegian works published in Norway account for 61.1%, while the percentage of materials of purely foreign origin is 32.6%.

TABLE 1.0: ANNUAL COPY VOLUME FOR ALL PERSONS

		TOTAL		RELATIVE			
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	397856300	14100093	3.5	17894267			
COPYRIGHT-PROTECTED VOLUME	176921557	9542882	5.4	18730984			
PERCENTAGE COPYRIGHT-PROTECTED (%)	44.5	2.9	6.5	104.7			
COPY VOLUME/PERSON	2030	72	3.5	103			
COPYRIGHT-PROTECTED/PERSON	903	49	5.4	107			
GENERAL UNIVERSITIES							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	132577483	9000567	6.8	11611458			
COPYRIGHT-PROTECTED VOLUME	75783166	7346107	9.7	13002087			
PERCENTAGE COPYRIGHT-PROTECTED (%)	57.2	6.8	11.8	112.0			
COPY VOLUME/PERSON	2024	137	6.8	204			
COPYRIGHT-PROTECTED/PERSON	1157	112	9.7	228			
UNIVERSITIES OF SCIENCE AND TECHNOLOGY							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	62842842	5834079	9.3	1179344			
COPYRIGHT-PROTECTED VOLUME	18133690	2727662	15.0	1365873			
PERCENTAGE COPYRIGHT-PROTECTED (%)	28.9	5.1	17.7	115.8			
COPY VOLUME/PERSON	3004	279	9.3	66			
COPYRIGHT-PROTECTED/PERSON	867	130	15.0	77			
STATE COLLEGES							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	152093629	8683810	5.7	1844602			
COPYRIGHT-PROTECTED VOLUME	58921851	4903502	8.3	1880350			
PERCENTAGE COPYRIGHT-PROTECTED (%)	38.7	3.9	10.1	101.9			
COPY VOLUME/PERSON	1833	105	5.7	24			
COPYRIGHT-PROTECTED/PERSON	710	59	8.3	25			
SCIENTIFIC COLLEGES							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	50342345	2890916	5.7	3258862			
COPYRIGHT-PROTECTED VOLUME	24082849	2369985	9.8	2482674			
PERCENTAGE COPYRIGHT-PROTECTED (%)	47.8	5.5	11.4	76.2			
COPY VOLUME/PERSON	1893	109	5.7	135			
COPYRIGHT-PROTECTED/PERSON	906	89	9.8	103			

TABLE 1.1: ANNUAL COPY VOLUME FOR STUDENTS

		TOTAL			RELATIVE		
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	267269005	8754256	3.3	17894267			
COPYRIGHT-PROTECTED VOLUME	154026396	8945006	5.8	18730984			
PERCENTAGE COPYRIGHT-PROTECTED (%)	57.6	3.8	6.7	104.7			
COPY VOLUME/PERSON	1533	50	3.3	103			
COPYRIGHT-PROTECTED/PERSON	884	51	5.8	107			
GENERAL UNIVERSITIES							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	76204131	5538087	7.3	11611458			
COPYRIGHT-PROTECTED VOLUME	62944520	6818876	10.8	13002087			
PERCENTAGE COPYRIGHT-PROTECTED (%)	82.6	10.8	13.0	112.0			
COPY VOLUME/PERSON	1336	97	7.3	204			
COPYRIGHT-PROTECTED/PERSON	1103	120	10.8	228			
UNIVERSITIES OF SCIENCE AND TECHNOLOGY							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	45001606	3936315	8.7	1179344			
COPYRIGHT-PROTECTED VOLUME	16904935	2695452	15.9	1365873			
PERCENTAGE COPYRIGHT-PROTECTED (%)	37.6	6.8	18.2	115.8			
COPY VOLUME/PERSON	2527	221	8.7	66			
COPYRIGHT-PROTECTED/PERSON	949	151	15.9	77			
STATE COLLEGES							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	104502441	4916505	4.7	1844602			
COPYRIGHT-PROTECTED VOLUME	51521843	4558772	8.8	1880350			
PERCENTAGE COPYRIGHT-PROTECTED (%)	49.3	4.9	10.0	101.9			
COPY VOLUME/PERSON	1387	65	4.7	24			
COPYRIGHT-PROTECTED/PERSON	684	60	8.8	25			
SCIENTIFIC COLLEGES							
		RELATIVE					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME	41560827	2509979	6.0	3258862			
COPYRIGHT-PROTECTED VOLUME	22655097	2338419	10.3	2482674			
PERCENTAGE COPYRIGHT-PROTECTED (%)	54.5	6.5	12.0	76.2			
COPY VOLUME/PERSON	1726	104	6.0	135			
COPYRIGHT-PROTECTED/PERSON	941	97	10.3	103			

TABLE 1.2: ANNUAL COPY VOLUME FOR ACADEMIC STAFF

		TOTAL		RELATIVE	
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	RELATIVE
ANNUAL COPY VOLUME	81883819	8250940	10.1	-	-
COPYRIGHT-PROTECTED VOLUME	19466675	3055235	15.7	-	-
PERCENTAGE COPYRIGHT-PROTECTED (%)	23.8	4.4	18.7	-	-
COPY VOLUME/PERSON	6876	693	10.1	-	-
COPYRIGHT-PROTECTED/PERSON	1635	257	15.7	-	-
GENERAL UNIVERSITIES					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	RELATIVE
ANNUAL COPY VOLUME	34295441	5986346	17.5	-	-
COPYRIGHT-PROTECTED VOLUME	10496969	2421207	23.1	-	-
PERCENTAGE COPYRIGHT-PROTECTED (%)	30.6	8.9	28.9	-	-
COPY VOLUME/PERSON	8065	1408	17.5	-	-
COPYRIGHT-PROTECTED/PERSON	2469	569	23.1	-	-
UNIVERSITIES OF SCIENCE AND TECHNOLOGY					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	RELATIVE
ANNUAL COPY VOLUME	12380515	3914796	31.6	-	-
COPYRIGHT-PROTECTED VOLUME	1193588	417334	35.0	-	-
PERCENTAGE COPYRIGHT-PROTECTED (%)	9.6	4.5	47.1	-	-
COPY VOLUME/PERSON	8187	2589	31.6	-	-
COPYRIGHT-PROTECTED/PERSON	789	276	35.0	-	-
STATE COLLEGES					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	RELATIVE
ANNUAL COPY VOLUME	31037296	4044854	13.0	-	-
COPYRIGHT-PROTECTED VOLUME	6934257	1800962	26.0	-	-
PERCENTAGE COPYRIGHT-PROTECTED (%)	22.3	6.5	29.1	-	-
COPY VOLUME/PERSON	6225	811	13.0	-	-
COPYRIGHT-PROTECTED/PERSON	1391	361	26.0	-	-
SCIENTIFIC COLLEGES					
	ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE	RELATIVE
ANNUAL COPY VOLUME	4170568	745117	17.9	-	-
COPYRIGHT-PROTECTED VOLUME	841862	233629	27.8	-	-
PERCENTAGE COPYRIGHT-PROTECTED (%)	20.2	6.7	33.0	-	-
COPY VOLUME/PERSON	3598	643	17.9	-	-
COPYRIGHT-PROTECTED/PERSON	726	202	27.8	-	-

TABLE 1.3: ANNUAL COPY VOLUME FOR NON-ACADEMIC STAFF

		TOTAL		RELATIVE	
		ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME		48703476	7355108	15.1	-
COPYRIGHT-PROTECTED VOLUME		3428486	1311101	38.2	-
PERCENTAGE COPYRIGHT-PROTECTED (%)		7.0	2.9	41.1	-
COPY VOLUME/PERSON		4975	751	15.1	-
COPYRIGHT-PROTECTED/PERSON		350	134	38.2	-
GENERAL UNIVERSITIES					
				RELATIVE	
		ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME		22077912	3808339	17.2	-
COPYRIGHT-PROTECTED VOLUME		2341677	1267268	54.1	-
PERCENTAGE COPYRIGHT-PROTECTED (%)		10.6	6.0	56.8	-
COPY VOLUME/PERSON		5257	907	17.2	-
COPYRIGHT-PROTECTED/PERSON		558	302	54.1	-
UNIVERSITIES OF SCIENCE AND TECHNOLOGY					
				RELATIVE	
		ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME		5460722	1793396	32.8	-
COPYRIGHT-PROTECTED VOLUME		35167	22621	64.3	-
PERCENTAGE COPYRIGHT-PROTECTED (%)		0.6	0.5	72.2	-
COPY VOLUME/PERSON		3414	1121	32.8	-
COPYRIGHT-PROTECTED/PERSON		22	14	64.3	-
STATE COLLEGES					
				RELATIVE	
		ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME		16553892	5905564	35.7	-
COPYRIGHT-PROTECTED VOLUME		465751	135879	29.2	-
PERCENTAGE COPYRIGHT-PROTECTED (%)		2.8	1.3	46.1	-
COPY VOLUME/PERSON		6285	2242	35.7	-
COPYRIGHT-PROTECTED/PERSON		177	52	29.2	-
SCIENTIFIC COLLEGES					
				RELATIVE	
		ON CAMPUS ESTIMATE	STANDARD ERROR	STANDARD ERROR (%)	OFF CAMPUS ESTIMATE
ANNUAL COPY VOLUME		4610950	1225544	26.6	-
COPYRIGHT-PROTECTED VOLUME		585890	306666	52.3	-
PERCENTAGE COPYRIGHT-PROTECTED (%)		12.7	7.5	58.7	-
COPY VOLUME/PERSON		3398	903	26.6	-
COPYRIGHT-PROTECTED/PERSON		432	226	52.3	-

TABLE 2: COPYRIGHT-PROTECTED MATERIAL

CATEGORY: SOURCE	PERCENTAGE (%)
TEXTBOOK/NON-FICTION BOOK	75.1
ENCYCLOPEDIA/REFERENCE WORK	0.7
FICTION, ORIGINAL	3.3
FICTION, ANTHOLOGY	0.0
SHEET OF MUSIC/COLLECTION OF SHEET MUSIC	2.9
SONGBOOK	0.4
NEWSPAPER	0.6
LEARNED JOURNAL	7.1
CULTURAL PERIODICAL	0.5
SPECIALIZED PRESS	4.8
WEEKLY MAGAZINE/COMICS	0.2
OTHER PERIODICALS	0.9
GOVERNMENT PUBLICATION/REPORT	0.2
OTHER PUBLISHING COMPANY-PRODUCED MATERIALS	3.2
CATEGORY: TYPE OF MATERIAL	PERCENTAGE (%)
DRAMA, PLAY	0.4
POEM/LYRICS	0.6
FICTION, PROSE	2.6
EDUCATIONAL, NON-FICTION, SCIENTIFIC TEXT	78.4
EDITORIALS/NEWS/COMMENTARY	0.9
FEATURE ARTICLE, ARTICLE ETC.	1.9
REVIEWS	0.2
BROCHURE/ADVERTISING COPY, ETC.	1.2
PHOTO OF HANDICRAFT	0.3
PHOTO OF VISUAL ART	0.1
TECHNICAL DRAWING	5.0
OTHER ILLUSTRATION	1.5
PHOTOGRAPH	1.0
MUSICAL NOTES	3.5
TABLES ETC.	2.4
CATEGORY: ORIGIN	PERCENTAGE (%)
NORWEGIAN WORK PUBLISHED IN NORWAY	61.1
FOREIGN WORK EDITED/ARRANGED INTO NORWEGIAN AND PUBLISHED IN NORWAY	0.7
FOREIGN WORK TRANSLATED INTO NORWEGIAN AND PUBLISHED IN NORWAY	1.5
NORWEGIAN PUBLICATION OF FOREIGN WORK NOT EDITED/TRANSLATED	3.5
FOREIGN PUBLICATION OF WORK BY NORWEGIAN AUTHOR	0.6
FOREIGN WORK PUBLISHED ABROAD	32.6

3 Method of estimation

3.1 Data

The sample consists of 11 educational institutions divided into four strata of educational institutions. The table below shows the distribution of the net sample, or response group, at the educational institutions selected to participate in the survey. Altogether 1,904 persons participated in the survey, and we have recorded 201,704 copy-pages. The data collection is described in Chapter 4, Section 2 and in Appendix G.

Table 3.1: Net sample by educational institution. Number of persons and number of recorded copy-pages

educational institution	students		academic staff		non-academic staff	
	persons	copy-pages	persons	copy-pages	persons	copy-pages
total	1,304	84,292	329	65,567	271	51,845
University of Oslo	301	15,345	64	14,124	58	8,344
NTNU	209	15,350	41	7,852	35	2,795
Agder College	179	9,013	61	8,183	25	2,905
Østfold College	164	9,534	57	15,229	29	2,793
Bergen College	106	7,983	29	8,639	27	22,797
Tromsø College	59	3,219	14	2,232	15	1,441
NHH	54	5,000	13	1,201	16	618
Norwegian College of Agriculture	73	7,268	21	5,693	24	4,459
BI	41	5,830	5	1	15	2,368
State Academy of Music	59	2,046	11	1,431	14	2,127
ONCA	59	3,704	13	982	13	1,198

A prerequisite for estimating the copy volume for the entire university and college sector is that the size of the population of students, academic staff and administrative staff is known. It is not enough to know the total number of each of these groups; the number in each of the different strata of educational institutions must also be known. We have obtained the number of students, academic staff and non-academic staff at all educational institutions from the Norwegian Social Science Data Services (NSD).

Table 3.2: Number of students, academic staff and non-academic staff

Stratum	Students		Academic staff		Non-academic staff	
	Population	Net sample	Population	Net sample	Population	Net sample
Total	174,295	1,304	11,909	329	9790	271
Universities	57,058	301	4,252	64	4,199	58
Universities of science and technology	17,805	209	1,512	41	1,600	35
State colleges	75,360	508	4,986	161	2,634	96
Scientific colleges	24,072	286	1,159	63	1,357	82

In the event of changes in these figures the copy volume estimate can be adjusted by using the average volume per person previously given in Tables 1.1, 1.2 and 1.3.

3.2 Method of estimation

Total annual copy volume is estimated in each of the four strata for educational institutions. The sum of these give us an estimate for the entire population. The same procedure is used for all estimation of copy volume.

Separate figures are compiled in each stratum for three groups based on personal status. The three groups are students, academic staff and non-academic staff. The sum of these gives us an estimate for the stratum of educational institutions in question.

The total volume of a specific type of copy is estimated for each group of persons in a stratum by multiplying the estimated average annual copy volume per person in the net sample with the total number of persons in a corresponding group and stratum.

To do this one must first adjust the observed copy volume for a two-week period to an annual level for each person in the net sample. This is done in the following way: All persons from the same educational institution are broken down according to personal status. Then the total copy volume from the same educational institution is broken down for all three groups, so that the ratio between the different groups' average copy volume corresponds to what is observed in the net sample, up to a factor determined from lengths of a copying year for different persons. (Students were given 38 weeks, staff 46 weeks). Such an estimated annual level takes into consideration the relationship of copying habits of the various groups in the population at the educational institution based on observations done during the seven different collection rounds, each of which ran over two weeks. The details and several other aspects of the methods and the results are explained in Appendix B.

3.3 Uncertainty

Uncertainty in this survey mainly stems from the following sources:

(i) **Sample variation.** A sample must be drawn when there is no opportunity to observe all units in a population. There is always a certain risk that the sample drawn does not accurately reflect the population in relation to the variables of interest.

(ii) **Non-response in the gross sample.** We do not know if those who did not take part in the survey have copying habits that are different from those who took part.

(iii) **Time variation.** Those who took part in the survey have only collected copies for two weeks. We do not know what their copying habits are during the time they did not collect copies.

(iv) **Measurement errors.** Errors may have occurred during the recording of copies. Furthermore, there can be mistakes in the number of students and staff, and in the numbers the educational institutions have given for copy volume.

3.3.1 Sample variation

As long as there is no possibility for a full census of the entire population, the sampling variation will be present. Standard error and relative standard error, i.e. the ratio between standard error and estimate, are normal measures for uncertainty in this context. These measures are based on the assumption that the selected persons are drawn at random from the population, and will therefore probably be relatively representative of it. Because this is a two-step sample, in which the educational institution is the drawing unit for the first step, the evaluation of this source of uncertainty will be the same in practice as evaluating to which extent the selected institutions are representative for all educational institutions found in the population. By grouping the educational institutions into four strata we will reduce the probability that the institutions we have selected are not representative.

3.3.2 Non-response

The net sample which forms the basis for the analysis stems from a gross sample of 4,250 persons, including 3,242 students and 1,008 staff. Non-response in general is greater among the students than among staff, and greater in the spring than in the autumn. Non-response is described in Chapter 4, Section 1.

Theoretical studies and experience from other surveys indicate that poststratification evens out the imbalances caused by non-response if the poststratification characteristics are reasonably correlated with the variable one wishes to estimate. This will apply even when copying habits strictly speaking are not identical among the response group and the non-response group in each poststratum. In this survey we have stratified according to personal status and branch of study (programme). If the copying habits are identical in the response and non-response group in all poststrata all imbalances will disappear with poststratification.

To establish if there are imbalances that have not been corrected, other supplementary information is needed that is relatively well correlated with copying habits. It might be

possible to form a more correct picture of any remaining imbalance by comparing adjustments with various poststratification methods. We have tried to obtain supplementary information such as, e.g., study progression and full/part-time status of the students, without having succeeded to any sufficient degree. Consequently, it has not been possible to study the problem more closely.

3.3.3 Time variation

The main question about time variation in this survey is linked to the fact that for practical reasons the survey was carried out in the course of the regular semester periods, so observations from certain times of the calendar year are lacking.

If the copy volume we have recorded during the survey periods are typical for the whole year, the grossing up factor for the average copy volume from a two-week period to an annual level will be around 26. For the most part, however, this turned out not to be the case. Table 3.3 has listed the actual factors we have found for students at the selected educational institutions.

Table 3.3: Grossing up factor for students from a two-week survey period to an annual level

University of Oslo	30	NHH	34
NTNU	35	Norwegian College of Agriculture	10
Agder College	29	BI	17
Østfold College	27	State Music Academy	41
Bergen College	13	ONCA	33
Tromsø College	28		

The grossing up factor for staff is the figures in Table 3.3 multiplied by 46/38. In other words, the length of the copying year has been extended to 38 weeks for students and 46 weeks for staff. Variation from 26 in the grossing up factor for students or staff shows the effects of the annual copy volume we have gathered from the educational institutions.

As can be seen, most grossing up factors are still greater than 26, which could indicate a certain amount of underreporting by the persons participating in the survey. Since there is no empirical basis for anything else, it was decided that underreporting occurs among students and staff in equal measure.

3.3.4 Measuring errors

Measuring errors in this survey can have three sources.

- i misrecording during the recording of copies and in the electronic processing of data
- ii incorrect data on the number of persons at the selected educational institutions and at other educational institutions in the population
- iii insufficient reporting of copy volume from the selected educational institutions

There is little possibility to discover type *i* measuring errors while analyzing data, except in cases of inconsistency in the data file. Some cases have been discovered and corrected.

As previously mentioned, any changes in the number of persons in the strata of educational institutions (type *ii* errors) are handled in a simple way. The mistake in the reported figures at the selected educational institutions means that the estimation must be redone for the affected strata. The extent of such a correction is, however, difficult to determine in advance.

The same also applies to the reported copy volume at the selected educational institutions (type *iii* errors).

4 The data basis for the survey

Eleven institutions of higher learning were selected to participate in the survey. The educational institutions were chosen with a view to their providing the most representative picture possible of the copying habits of students and staff in the various fields of study. The following educational institutions took part in the survey:

University of Oslo

NTNU (Norwegian University of Science and Technology)

Agder College

Østfold College

Bergen College

Tromsø College

NHH (Norwegian School of Economics and Business Administration)

Norwegian College of Agriculture

BI (Norwegian School of Management) in Oslo

State Academy of Music

ONCA (Oslo National College of the Arts)

4.1 Sample and response rate

The survey is based on a sample of students and staff. We have drawn the most respondents from the largest educational institutions, based on the assumption that the copying habits vary more at large than small institutions. The method for drawing the sample was determined on the basis of experiences from a pilot survey².

4.1.1 Students

Altogether 3,242 students were selected to participate in the survey. They were drawn from Statistics Norway's education register and the State Educational Loan Fund register. It turned out that the registers on which the sample selection was based were not sufficiently up to date. This was particularly true of Statistics Norway's own register. It was used to draw the sample for the first two of the survey's seven rounds. Some of those drawn therefore turned out to be no longer in the target group of the survey. Most of them were no longer studying at the educational institution in question. We have identified students who have concluded their studies based on lists of those we had selected, which were sent to the educational institutions. We asked, inter alia, the educational institutions to say if the students were registered as students during the semester they were drawn to participate in the survey. The information we received from most of the educational institutions was of relatively good quality. The main exceptions were NTNU (Norwegian University of Science and Technology) and the Norwegian College of Agriculture. We received no information whatsoever from NTNU about the students in the sample, and we received no information from the Norwegian College of Agriculture for the spring semester. The students whom we were told were not students during the semester in question are not regarded as part of the population we wish to make generalizations about and are therefore excluded from the sample. The same applies to

² The pilot survey is described in *Undersøkelse om kopiering på universiteter og høyskoler. Pilotundersøkelse, nr 96/59* in Statistics Norway's notes series.

interview subjects whom we do not have information about from the educational institution, but whom our interviewers found out were no longer students during the period in question.

Table 4.1: Deletion from sample drawn. Students

	number of persons	percentage of drawn sample
total	3,242	100.0
no longer a student at the educational institution	644	19.9

There were 644 students who were not attending the educational institution in question during the semester in which the sample was drawn. The gross sample of students therefore totals 2,598 persons. An overview of reasons for non-response from the gross sample of students is given in Table 4.2.

Table 4.2: Non-response and interviews. Students

	number of persons	percentage of non-response	percentage of gross sample
total	2,598		100.0
total non-response	1,294	100.0	49.8
not found/failed to show up	1,031	79.7	39.7
refused	145	11.2	5.6
away	60	4.6	2.3
no phone/too far to travel	22	1.7	0.8
illness	4	0.3	0.2
other	32	2.5	1.2
interviews	1,304		50.2

We achieved a response rate of 50.2%. In calculating the response rate we have not included students whom we later found out were no longer attending the educational institution at the time they were drawn to participate in the survey. Non-response is 49.8%. Students whom our interviewers did not make contact with make up the largest non-response group, accounting for 79.7% of the non-response. Many in this group would probably have other reasons for not taking part than that our interviewer did not get in contact with them. Several would probably no longer be students at the educational institution, and should consequently have been classified as deletions. This will mostly apply to students at educational institutions from which we have received insufficient information about the sample, but it will also apply to those who quit after they were registered as students. Because we have no basis for classifying them under other non-response reasons or as deletions, they are still listed under the category "not found/did not show up".

Table 4.3: Participation of students at various educational institutions

Educational institution	number drawn for survey	identifiable deletions	number who are candidates for the survey	number who participated	response rate
total	3,242	644	2,598	1,305	50.2
University of Oslo *	860	173	687	301	43.8
NTNU	392	45	347	209	60.2
Agder College	350	108	242	179	74.0
Østfold College	490	70	420	164	39.0
Bergen College	280	104	176	106	60.2
Tromsø College	140	40	100	59	59.0
NHH	140	21	119	54	45.4
Norwegian College of Agriculture BI**	140	12	128	73	57.3
State Music Academy	170	28	142	41	28.9
ONCA	140	34	106	59	55.7
	140	9	131	59	45.0

* Due to low response rate, 90 more students than planned were drawn in this group.

** Due to low response rate, 30 more students than planned were drawn in this group.

4.1.2 Staff

For each of the collection rounds, we selected 144 staff to participate in the survey. They were selected at random from the educational institutions' catalogues and phone lists. We drew from both academic and non-academic staff. Instructors paid by the hour and technical staff were also included in the sample basis.

Table 4.4: Deletion from sample drawn. Staff

	number of persons	percentage of deletion	percentage of sample drawn
total	1,008		100.0
total deletions	94	100.0	9.3
no longer employed at educational institution	91	96.8	9.0
the interview subject is deceased	2	2.1	0.2
moved permanently abroad	1	1.1	0.1

We have identified 94 persons in the sample of staff who no longer were employed at the educational institution in question. The gross sample is therefore made up of 914 persons. An overview of reasons for non-response is given in Table 4.5.

Table 4.5: Non-response and interviews. Staff

	number of persons	percentage of non-response	percentage of gross sample
total	914		100.0
total non-response	314	100	34.4
refused	98	31.2	10.7
illness	19	6.1	2.1
did not make contact with	126	40.1	13.8
did not meet despite appointment	13	4.1	1.4
leave	20	6.4	2.1
away	33	10.5	3.6
other	5	1.6	0.5
interviews	600		65.6

We achieved a response rate of 65.6%. There were 314 persons out of 600 in the gross staff sample that did not take part in the survey. All of 98 refused to participate when they were contacted by our interviewers. Many of them said that they did not have the time to participate. We were unable to contact 126 of the respondents. Many were probably either temporarily absent or no longer employed by the educational institution. Those who were no longer employed should have been classified as deletions. Because we do not have the capacity to identify them they are nevertheless listed under the category "did not make contact with".

Table 4.6: Participation of staff at various educational institutions

educational institution	number drawn for survey	identifiable deletions	number who are candidates for the survey	number who participated	re-sponse rate
total	1,008	94	914	600	65.6
University of Oslo	238	14	224	122	54.5
NTNU	126	20	106	76	71.7
Agder College	112	6	106	86	81.1
Østfold College	147	11	136	86	63.2
Bergen College	91	5	86	56	65.1
Tromsø College	49	5	44	29	65.9
NHH	49	7	42	29	69.0
Norwegian College of Agriculture	49	1	48	45	93.8
BI	49	9	40	20	50.0
State Academy of Music	49	4	45	25	55.6
ONCA	49	12	37	26	70.3

Table 4.7: Copy sources broken down by educational institution. All materials

educational institution	number of copy sources students	percentage of copy sources students	number of copy sources staff	percentage of copy sources staff	number of copy sources total	percentage of copy sources total
total	4,972	100.0	2,268	100.0	7,241	100.0
University of Oslo	847	17.1	279	12.3	1,127	15.6
NTNU	800	16.1	457	20.1	1,257	17.4
Agder College	590	11.9	279	12.3	869	12.0
Østfold College	838	16.9	594	26.2	1,432	19.8
Bergen College	410	8.2	160	7.1	570	7.9
Tromsø College	297	6.0	184	8.1	481	6.6
NHH	223	4.5	77	3.4	300	4.1
Norwegian College of Agriculture	398	8.0	69	3.0	467	6.4
BI	201	4.0	58	2.6	259	3.6
State Academy of Music	200	4.0	45	2.0	245	3.4
ONCA	168	3.4	56	2.5	234	3.2

Table 4.8: Copy sources broken down by educational institution. Copyright-protected material

educational institution	number of copy sources students	percentage of copy sources students	number of copy sources staff	percentage of copy sources staff	number of copy sources total	percentage of copy sources total
total	2,758	100.0	722	100.0	3,481	100.0
University of Oslo	643	23.3	151	20.9	795	22.8
NTNU	334	12.1	98	13.6	432	12.4
Agder College	329	11.9	126	17.5	455	13.1
Østfold College	351	12.7	120	16.6	471	13.5
Bergen College	197	7.1	80	11.1	277	8.0
Tromsø College	130	4.7	27	3.7	157	4.5
NHH	147	5.3	35	4.8	182	5.2
Norwegian College of Agriculture	313	11.3	27	3.7	340	9.8
BI	47	1.7	6	0.8	53	1.5
State Academy of Music	167	6.1	29	4.0	196	5.6
ONCA	100	3.6	23	3.2	123	3.5

4.2 Implementation of data collection

4.2.1 Implementation – a summary

The object of the survey is to estimate an annual copy volume and how much copyright-protected material is copied at universities and colleges. To do this we asked those drawn for the survey to gather all the material they had obtained in the course of a certain two-week period, and then show it to one of our interviewers. The interviewers have been specially trained in the coding of this type of material.

Those who were drawn to participate in the survey received a letter about it well before they were to start gathering material. The letter contained information about the purpose of the survey and the type of material we wished to record. The letter to the sample of students also

contained an overview of the recording offices' opening hours and location at the individual educational institution. The letter to the staff stated that they would be contacted by one of our interviewers. The information letters are enclosed as Appendices. They varied somewhat in the course of the survey and are discussed in more detail in Appendix G, which describes the implementation of the survey in detail.

The survey is based on the recording of copies which were obtained in the course of seven two-week periods, spread over the two semesters in the calendar year 1997. Four collection rounds were carried out in the spring semester and three during the autumn semester. The periods were spread out over the semesters to capture the seasonal variations in copying. The following collection rounds were selected:

collection round 1	copies were collected during weeks	5 and 6
collection round 2	copies were collected during weeks	10 and 11
collection round 3	copies were collected during weeks	19 and 20
collection round 4	copies were collected during weeks	22 and 23
collection round 5	copies were collected during weeks	34 and 35
collection round 6	copies were collected during weeks	40 and 41
collection round 7	copies were collected during weeks	47 and 48

To prevent imbalances in the sample from having an undesirable impact on the results, we have also gathered information to be able to make corrections for this. We have obtained information from the students in the survey, about the total number of students and staff, and about the copy volume at the educational institutions.

4.3.2 Subsequent control of the sample

The difficulties relating to the student registers led to a number of problems in connection with the collection of data. This must be taken into consideration in estimating the results because we do not know if those whose copies we did not record have other copying habits than those who took part in the survey.

To test the representativeness of the sample we asked the educational institutions that took part in the survey for supplementary information about students and staff. The information was obtained to examine whether there were imbalances in the non-response and to make corrections for them, if necessary.

We furthermore asked the educational institutions to give us information about the total number of students broken down by field of study (programme) and intensity level. We also asked them to give us figures for staff broken down by programme and whether they are administrative or academic staff. This information helped make it possible to examine how well the sample reflects the actual population and make corrections for imbalances, although the quality of the data describing study intensity was in many cases insufficient. The information we asked for from educational institutions is described in detail in Appendices H and I.

4.3.3 Recording of copy volume

We gathered information on how many copies are taken at the educational institutions included in the survey. We asked the educational institutions to give the copy volume broken down by programme and whether the copies are made by staff or students. In many cases, the breakdown by programme and form of association to the educational institution turned out to be difficult to track.

4.4 Follow-up of interviewers

The interviewer liaison and project manager at Statistics Norway provided guidance to interviewers on survey-related questions throughout the entire survey period. This pertains to both questions about coding the material and questions of a more practical nature.

The project manager visited recording offices during every survey period. The objective of the visits has been to see how the recording is carried out in practice, and to guide the interviewers, if necessary. The experience from these visits has been that the interviewers have done the coding in a satisfactory way. Representatives from Kopinor and the universities and colleges have also visited the recording offices.

4.5 Collection and processing errors

The interviewers had received instructions in how the material should be classified through courses and instructions. Problem cases nevertheless occurred along the way. It was often difficult to determine the source of a copy and it was also hard to distinguish between published and unpublished works. Judgement was used where there was doubt, in some cases in cooperation with the project manager.

Appendices

- A Tables - several results from the survey
- B Estimation of copy volume
- C Letter to interview subjects
- D Printout of interview and coding form
- E Instructions to interviewers
- F Coding instructions
- G Memo on the implementation of the various rounds of the survey
- H Letter on the collection of information from the educational institutions
- I Memo on the collection of sample data
- J Memo on the collection of copy volume
- K Three forms for recording copy volume

Appendix A

TABLE A.0: ANNUAL COPY VOLUME FOR STUDENTS BY ACQUISITION

TABLE A.1.1: COPYRIGHT-PROTECTED MATERIAL BY SOURCE AND TYPE OF MATERIAL (%)

TABLE A.1.2: COPYRIGHT-PROTECTED NORWEGIAN WORKS IN ORIGINAL NORWEGIAN PUBLICATION BY SOURCE AND TYPE OF MATERIAL (%)

TABLE A.1.3: FOREIGN COPYRIGHT-PROTECTED MATERIAL EDITED OR ARRANGED INTO NORWEGIAN AND PUBLISHED IN NORWAY BY SOURCE AND TYPE OF MATERIAL (%)

TABLE A.1.4: FOREIGN COPYRIGHT-PROTECTED MATERIAL TRANSLATED INTO NORWEGIAN AND PUBLISHED IN NORWAY BY SOURCE AND TYPE OF MATERIAL (%)

TABLE A.1.5: FOREIGN COPYRIGHT-PROTECTED MATERIAL NOT EDITED OR TRANSLATED INTO NORWEGIAN AND PUBLISHED IN NORWAY BY SOURCE AND TYPE OF MATERIAL (%)

TABLE A.1.6: COPYRIGHT-PROTECTED MATERIAL OF NORWEGIAN ORIGIN PUBLISHED ABROAD BY SOURCE AND TYPE OF MATERIAL (%)

TABLE A.1.7: COPYRIGHT-PROTECTED MATERIAL OF FOREIGN ORIGIN PUBLISHED ABROAD BY SOURCE AND TYPE OF MATERIAL (%)

TABLE A.2.1: COPYRIGHT-PROTECTED MATERIAL BY SOURCE AND ORIGIN (%)

TABLE A.2.2: COPYRIGHT-PROTECTED MATERIAL BY TYPE AND ORIGIN (%)

TABLE A.3.1: COPYRIGHT-PROTECTED MATERIAL BY COUNTRY OF PUBLICATION AND ORIGIN (%)

TABLE A.3.2: COPYRIGHT-PROTECTED MATERIAL BY COUNTRY OF RESIDENCE AND ORIGIN (%)

TABLE A.0: ANNUAL COPY VOLUME FOR STUDENTS BY ACQUISITION

	PURC.			DIST.			COPIED SELF			COPIED SELF			
	IN	ON	FROM	BY	ON	FROM	BY	ON	FROM	ON	FROM	ON	OFF
	BOOKSTORE	CAMPUS	STUD.	TEACHER	CAMPUS	STUD.	MASTER	CAMPUS	STUD.	CAMPUS	STUD.	CAMPUS	CAMPUS
ALL STUDENTS													
TOTAL	8697956	64342532	2125620	72016725	43136742	12582698	5894910	35745985	22726936	41640895	17894267	69.9	30.1
IN PERCENTAGE (%)	3.3	24.1	0.8	26.9	16.1	13.4	2.2	13.4	8.5	32.908791	18730984	63.7	36.3
COPYRIGHT-PROTECTED	3738108	42541976	1785000	37233947	14604293	7615630	2986208	29973583	13597650	32908791	18730984	63.7	36.3
IN PERCENTAGE (%)	2.4	27.6	1.2	24.2	9.5	4.9	1.9	19.5	8.8	32.908791	18730984	63.7	36.3
GENERAL UNIVERSITIES													
TOTAL	2643910	22048763	143069	11760250	12012051	42866339	549384	15268295	7491079	15817679	11611458	57.7	42.3
IN PERCENTAGE (%)	3.5	28.9	0.2	15.4	15.8	5.6	0.7	20.0	9.8	16739042	13002087	56.3	43.7
COPYRIGHT-PROTECTED	1785498	20435938	74396	8653093	42866339	3347608	497879	16241163	7422406	16739042	13002087	56.3	43.7
IN PERCENTAGE (%)	2.8	32.5	0.1	14.1	6.8	5.3	0.8	25.8	11.8	16739042	13002087	56.3	43.7
UNIVERSITIES OF SCIENCE AND TECHNOLOGY													
TOTAL	4777547	12118363	0	9272292	8655544	394118	2226313	2409833	5147596	4636146	1179344	79.7	20.3
IN PERCENTAGE (%)	10.6	26.9	0.0	20.6	19.2	0.9	4.9	5.4	11.4	2400808	1365873	63.7	36.3
COPYRIGHT-PROTECTED	1182353	3387606	0	3447776	4151773	21060	487382	1913426	2313560	2400808	1365873	63.7	36.3
IN PERCENTAGE (%)	7.0	20.0	0.0	20.4	24.6	0.1	2.9	11.3	13.7	2400808	1365873	63.7	36.3
STATE COLLEGES													
TOTAL	218117	22468929	1774993	38078333	17471632	6933624	2775729	9638860	5142224	12414589	1844602	87.1	12.9
IN PERCENTAGE (%)	0.2	21.5	1.7	36.4	16.7	9.2	2.7	9.2	4.9	87.1	12.9	87.1	12.9
COPYRIGHT-PROTECTED	105569	12855730	1507306	17857742	4478179	3676741	1662710	8161280	1216587	9823990	1880350	89.9	16.1
IN PERCENTAGE (%)	0.2	25.0	2.9	34.7	8.7	7.1	3.2	15.8	2.4	9823990	1880350	89.9	16.1
SCIENTIFIC COLLEGES													
TOTAL	1058382	7705487	207459	12905850	4997516	968617	343484	8428996	4945036	8772480	3258862	72.9	27.1
IN PERCENTAGE (%)	2.5	18.5	0.5	31.1	12.0	2.3	0.8	20.3	11.9	8772480	3258862	72.9	27.1
COPYRIGHT-PROTECTED	664689	5862703	203298	7075335	1688002	570021	288237	3657715	2645098	3945952	2482674	61.4	38.6
IN PERCENTAGE (%)	2.9	25.9	0.9	31.2	7.5	2.5	1.3	16.1	11.7	3945952	2482674	61.4	38.6

TABLE A.1.1: COPYRIGHT-PROTECTED MATERIAL BY SOURCE AND TYPE OF MATERIAL (%)

ALL SOURCES	SOURCE														OTHER PUBLISHING COMPANY PRODUCED MATERIALS
	TEXT-BOOK/ NON-FICTION	EN-CYCLOPEDIA	FICTION ORIGINAL	FICTION ANTHOLOGY	SHEET MUSIC COLLECTION	SONG BOOK	NEWS-PAPER	LEARNED JOURNAL	CULTURAL PERIODICAL	SPECIALIZED PRESS	WEB-KLY MAGAZINE/ CO-MICS	OTHER PERIODICALS	GOVERNMENT PUBLICATION/ REPORT		
100	75.1	0.7	3.3	-	2.9	0.4	0.6	7.1	0.5	4.8	0.2	0.9	0.2	3.2	
ALL TYPES OF MATERIALS	100	75.1	0.7	3.3	-	2.9	0.4	0.6	7.1	0.5	4.8	0.2	0.9	0.2	3.2
DRAMA, PLAY	0.4	0.1	-	0.3	-	-	-	-	-	-	-	-	-	-	-
POEM/LYRICS	0.6	0.1	-	0.3	-	-	0.2	-	-	-	-	-	-	-	-
FICTION, PROSE	2.6	0.1	-	2.5	-	-	-	-	-	-	-	-	-	-	-
EDUCATIONAL, NON-FICTION, SCIENTIFIC TEXT	78.4	65.7	0.4	0.1	-	-	-	0.1	6.2	0.2	2.9	-	0.5	-	2.2
EDITORIAL, NEWS, AND COMMENTARY	0.9	0.2	-	-	-	-	-	0.3	-	-	0.3	-	-	-	-
FEATURE ARTICLE, ARTICLE ETC.	1.9	0.4	-	-	-	-	-	0.1	0.4	0.1	0.8	-	0.1	-	-
REVIEWS	0.2	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-
BROCHURE/ADVERTISING COPY, ETC.	1.2	0.2	0.1	-	-	-	-	-	-	-	0.1	-	0.1	-	0.6
PHOTO OF HANDICRAFT	0.3	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
PHOTO OF VISUAL ART	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
TECHNICAL DRAWING	5.0	3.9	0.2	-	-	-	-	-	0.3	-	-	-	-	-	-
OTHER ILLUSTRATION	1.5	1.3	-	-	-	-	-	-	0.1	-	-	-	0.1	0.2	0.2
PHOTOGRAPH	1.0	0.5	-	-	-	-	-	0.1	-	-	-	-	-	-	0.1
MUSICAL NOTES	3.5	0.5	-	-	2.8	0.2	-	-	-	-	-	-	-	-	-
TABLES ETC.	2.4	1.9	-	-	-	-	-	-	0.1	-	0.2	-	-	-	0.1

TABLE A.1.2: COPYRIGHT-PROTECTED NORWEGIAN WORKS IN ORIGINAL NORWEGIAN PUBLICATION
BY SOURCE AND TYPE OF MATERIAL (%)

	SOURCE													OTHER PUB- LISH- ING COM- PANY PRO- DUCED MATE- RIALS	
	ALL SOUR- CES	TEXT- BOOK/ NON- FIC- TION	EN- CYC- LO- PAE- DIA	FIC- TION ORI- GI- NAL	FIC- TION AN- THO- LOGY	SHEET MUSIC	COL- LEC- TION OF SHEET MUSIC	SONG- BOOK	NEWS- PAPER	JOUR- NAL	CUL- TURAL PERIO- DICAL	SPE- CIA- LIZED PRESS	WEE- KLY MAGA- ZINE/ CO- MICS		OTHER PERIO- DICALS
ALL TYPES OF MATERIALS	61.1	50.5	0.4	0.6	-	0.4	0.3	0.4	2.0	0.2	2.8	0.1	0.5	0.2	2.8
DRAMA, PLAY	0.2	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-
POEM/LYRICS	0.2	-	-	0.1	-	-	0.1	-	-	-	-	-	-	-	-
FICTION, PROSE	0.4	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-
EDUCATIONAL, NON-FICTION, SCIENTIFIC TEXT	50.3	44.6	0.2	-	-	-	-	-	1.6	-	1.7	-	0.2	-	1.9
EDITORIAL, NEWS, AND COMMENTARY	0.3	-	-	-	-	-	-	0.1	-	-	0.1	-	-	-	-
FEATURE ARTICLE, ARTICLE ETC.	1.2	0.2	-	-	-	-	-	0.1	0.2	0.1	0.5	-	0.1	-	-
REVIEWS	0.2	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-
BROCHURE/ADVERTISING COPY, ETC.	1.0	0.2	-	-	-	-	-	-	-	-	0.1	-	0.1	-	0.5
PHOTO OF HANDICRAFT	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHOTO OF VISUAL ART	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TECHNICAL DRAWING	3.4	2.7	0.1	-	-	-	-	-	0.1	-	0.1	-	0.1	0.2	0.2
OTHER ILLUSTRATION	0.7	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-
PHOTOGRAPH	0.6	0.3	-	-	-	-	-	0.1	-	-	0.2	-	-	-	0.1
MUSICAL NOTES	0.9	0.4	-	-	-	0.4	0.1	-	-	-	-	-	-	-	-
TABLES ETC.	1.6	1.4	-	-	-	-	-	-	-	-	0.1	-	-	-	0.1

TABLE A.2.1: COPYRIGHT-PROTECTED MATERIAL BY SOURCE AND ORIGIN (%)

	ORIGIN		FOREIGN WORK		FOREIGN WORK		FOREIGN WORK		FOREIGN WORK	
	NORWEGIAN PUBLISHED IN NORWAY	NORWEGIAN PUBLISHED IN NORWAY	ARRANGED INTO NORWEGIAN PUBLISHED IN NORWAY	EDITED/ NORWEGIAN PUBLISHED IN NORWAY	TRANSLATED INTO NORWEGIAN PUBLISHED IN NORWAY	TRANSLATED INTO NORWEGIAN PUBLISHED IN NORWAY	EDITED/ NOT PUBLISHED IN NORWAY	NOT PUBLISHED IN NORWAY	FOREIGN PUBLICATION OF WORK BY NORWEGIAN AUTHOR	FOREIGN WORK PUBLISHED ABROAD
ALL SOURCES	100	61.1	0.7	1.5	1.5	3.5	0.6	32.6		
TEXTBOOK/NON-FICTION BOOK	75.1	50.5	0.6	1.4	1.4	2.8	0.4	19.5		
ENCYCLOPAEDIA/REFERENCE WORK	0.7	0.4	-	-	-	-	-	0.3		
FICTION, ORIGINAL	3.3	0.6	0.1	-	-	0.2	-	2.5		
FICTION, ANTHOLOGY	-	-	-	-	-	-	-	-		
SHEET OF MUSIC/COLLECTION OF SHEET MUSIC	2.9	0.4	-	-	-	0.1	-	2.4		
SONGBOOK	0.4	0.3	-	-	-	-	-	-		
NEWSPAPER	0.6	0.4	-	-	-	-	-	-		
LEARNED JOURNAL	7.1	2.0	-	-	-	0.2	0.2	4.8		
CULTURAL PERIODICAL	0.5	0.2	-	-	-	-	-	0.3		
SPECIALIZED PRESS	4.8	2.8	-	-	-	0.1	-	1.9		
WEEKLY MAGAZINE/COMICS	0.2	0.1	-	-	-	-	-	-		
OTHER PERIODICALS	0.9	0.5	-	-	-	-	-	-		
GOVERNMENT PUBLICATION/REPORT	0.2	0.2	-	-	-	-	-	-		
OTHER PUBLISHING COMPANY PRODUCED MATERIALS	3.2	2.8	-	-	-	0.1	-	0.4		

TABLE A.2.2: COPYRIGHT-PROTECTED MATERIAL BY TYPE AND ORIGIN (%)

	TOTAL	ORIGIN				FOREIGN WORK				FOREIGN PUBLISHED ABROAD
		NORWEGIAN PUBLISHED IN NORWAY	ARRANGED INTO NORWEGIAN PUBLISHED IN NORWAY	EDITED/ NORWEGIAN PUBLISHED IN NORWAY	TRANSLATED INTO NORWEGIAN PUBLISHED IN NORWAY	EDITED/ TRANSLATED INTO NORWEGIAN PUBLISHED IN NORWAY	NOT EDITED/ TRANSLATED INTO NORWEGIAN PUBLISHED IN NORWAY	FOREIGN PUBLICATION OF WORK BY NORWEGIAN AUTHOR	FOREIGN WORK PUBLISHED ABROAD	
ALL TYPES	100	61.1	0.7	1.5	3.5	32.6				
DRAMA, PLAY	0.4	0.2	0.1	-	-	0.1	-	-	0.1	
POEM/LYRICS	0.6	0.2	-	-	-	0.1	-	-	0.2	
FICTION, PROSE	2.6	0.4	-	-	-	-	-	-	2.1	
EDUCATIONAL, NON-FICTION, SCIENTIFIC TEXT	78.4	50.3	0.5	1.3	2.9	22.8	0.5	-	22.8	
EDITORIAL/NEWS/COMMENTARY	0.9	0.3	-	-	-	-	-	-	0.5	
FEATURE ARTICLE, ARTICLE ETC.	1.9	1.2	-	-	0.1	-	-	-	0.6	
REVIEWS	0.2	0.2	-	-	-	-	-	-	-	
BROCHURE/ADVERTISING COPY, ETC.	1.2	1.0	-	-	-	-	-	-	0.2	
PHOTO OF HANDICRAFT	0.3	0.1	-	-	-	-	-	-	0.2	
PHOTO OF VISUAL ART	0.1	0.1	-	-	-	-	-	-	-	
TECHNICAL DRAWING	5.0	3.4	-	-	0.1	1.5	-	-	1.5	
OTHER ILLUSTRATION	1.5	0.7	-	-	0.1	0.7	-	-	0.7	
PHOTOGRAPH	1.0	0.6	-	-	-	-	-	-	0.4	
MUSICAL NOTES	3.5	0.9	-	-	0.1	2.5	-	-	2.5	
TABLES ETC.	2.4	1.6	-	-	-	0.8	-	-	0.8	

TABLE A.3.1: COPYRIGHT-PROTECTED MATERIAL BY COUNTRY OF PUBLICATION AND ORIGIN (%)

	FOREIGN WORK		ORIGIN		FOREIGN WORK		FOREIGN PUBLICATION		FOREIGN WORK PUBLISHED ABROAD
	NORWEGIAN WORK PUBLISHED IN NORWAY	ARRANGED INTO NORWEGIAN PUBLISHED IN NORWAY	EDITED/ NORWEGIAN PUBLISHED IN NORWAY	TRANSLATED INTO NORWEGIAN PUBLISHED IN NORWAY	EDITED/ TRANSLATED IN NORWAY	NOT EDITED/ TRANSLATED IN NORWAY	OF WORK BY NORWEGIAN AUTHOR		
ALL COUNTRIES	100	61.1	0.7	1.5	3.5	0.6	32.6		
ARGENTINA	-	-	-	-	-	-	-		
AUSTRALIA	0.1	-	-	-	-	-	0.1		
BELGIUM	0.1	-	-	-	-	-	0.1		
CANADA	0.4	-	-	-	-	-	0.4		
CHILE	-	-	-	-	-	-	-		
COLOMBIA	-	-	-	-	-	-	-		
DENMARK	1.9	-	-	-	-	-	1.9		
FINLAND	0.6	-	-	-	-	-	0.6		
FRANCE	0.7	-	-	-	-	-	0.7		
GREECE	-	-	-	-	-	-	-		
HONG KONG	-	-	-	-	-	-	-		
INDIA	0.1	-	-	-	-	-	0.1		
IRELAND	-	-	-	-	-	-	-		
ICELAND	-	-	-	-	-	-	-		
ISRAEL	0.1	-	-	-	-	-	0.1		
ITALY	-	-	-	-	-	-	-		
JAPAN	-	-	-	-	-	-	-		
CHINA	0.9	-	-	-	-	-	0.9		
MALAYSIA	-	-	-	-	-	-	-		
THE NETHERLANDS	0.7	-	-	-	-	-	0.7		
NEW ZEALAND	0.1	-	-	-	-	-	0.1		
NORWAY	61.1	0.7	1.5	3.5	0.6	32.6			
POLAND	-	-	-	-	-	-	-		
RUSSIA	0.6	-	-	-	-	-	0.6		
SPAIN	-	-	-	-	-	-	-		
UNITED KINGDOM	6.8	-	-	-	-	0.1	6.7		
SWITZERLAND	-	-	-	-	-	-	-		
SWEDEN	1.9	-	-	-	-	0.1	1.8		
SOUTH AFRICA	-	-	-	-	-	-	-		
THE CZECH REPUBLIC	-	-	-	-	-	-	-		
GERMANY	3.3	-	-	-	-	-	3.3		
HUNGARY	-	-	-	-	-	-	-		
USA	14.0	-	-	-	-	0.4	13.5		
AUSTRIA	0.1	-	-	-	-	-	0.1		
UNKNOWN	0.9	-	-	-	-	-	0.9		

TABLE A.3.2: COPYRIGHT-PROTECTED MATERIAL BY COUNTRY OF RESIDENCE AND ORIGIN (%)

	ORIGIN							FOREIGN PUBLISHED ABROAD
	NORWEGIAN WORK PUBLISHED IN NORWAY	FOREIGN WORK EDITED/ARRANGED INTO NORWEGIAN PUBLISHED IN NORWAY	FOREIGN WORK TRANSLATED INTO NORWEGIAN PUBLISHED IN NORWAY	FOREIGN WORK NOT EDITED/TRANSLATED IN NORWAY	FOREIGN PUBLICATION OF WORK BY NORWEGIAN AUTHOR			
ALL COUNTRIES	100	61.1	0.7	1.5	3.5	0.6	32.6	
ARGENTINA	-	-	-	-	-	-	-	
AUSTRALIA	0.1	-	-	-	-	-	0.1	
BELGIUM	0.1	-	-	-	-	-	0.1	
CANADA	0.8	-	-	-	0.1	-	0.7	
CHILE	-	-	-	-	-	-	-	
COLOMBIA	-	-	-	-	-	-	-	
DENMARK	2.1	-	-	-	0.2	-	1.9	
FINLAND	0.3	-	-	-	0.1	-	0.2	
FRANCE	1.5	-	0.1	0.5	0.1	-	0.7	
GREECE	-	-	-	-	-	-	-	
HONG KONG	-	-	-	-	-	-	-	
INDIA	0.1	-	-	-	-	-	0.1	
IRELAND	-	-	-	-	-	-	-	
ICELAND	1.0	-	-	-	-	-	1.0	
ISRAEL	0.2	-	-	-	-	-	0.2	
ITALY	0.1	-	-	-	-	-	0.1	
JAPAN	0.1	-	-	-	-	-	0.1	
CHINA	0.9	-	-	-	-	-	0.9	
MALAYSIA	-	-	-	-	-	-	-	
THE NETHERLANDS	0.6	-	-	-	-	-	0.6	
NEW ZEALAND	0.1	-	-	-	-	-	0.1	
NORWAY	61.3	60.7	-	-	-	0.6	-	
POLAND	-	-	-	-	-	-	-	
RUSSIA	0.7	-	-	-	0.1	-	0.6	
SPAIN	-	-	-	-	-	-	-	
UNITED KINGDOM	6.2	0.1	-	0.2	0.5	-	5.5	
SWITZERLAND	0.1	-	-	-	-	-	0.1	
SWEDEN	3.0	-	0.1	0.4	0.3	-	2.2	
SOUTH AFRICA	-	-	-	-	-	-	-	
THE CZECH REPUBLIC	-	-	-	-	-	-	-	
GERMANY	3.2	-	0.1	0.1	-	-	2.9	
HUNGARY	-	-	-	-	-	-	-	
USA	15.2	0.3	0.4	0.1	1.6	-	12.8	
AUSTRIA	0.4	-	-	-	-	-	0.4	
UNKNOWN	1.7	-	-	-	0.4	-	1.2	

Appendix B

Estimation of copy volume

B.1 An annual volume

Denote by $U = (1, \dots, N)$ the population and by $s = (1, \dots, n)$ the net-sample. Denote by h the stratum indicator for institutions, and by j the post-stratum indicator for persons ($j = 1$ for students, $j = 2$ for academic staff, and $j = 3$ for non-academic staff), and by k the indicator for the sampled institutions. Let Y be the annual copy volume of a certain category. Let y be the observed copy volume of the same category which, unlike Y , is collected during a 14-day survey-period.

First of all one needs to adjust y_i , for $i \in s$, to an annual level with a factor, denote by f_{hjk} , which is determined by the combination of person and institution as following,

$$f_{hjk} = a_j g_{hk} \quad \text{and} \quad g_{hk} = X_{hk} / \left(\sum_j a_j N_{hjk} \bar{x}_{hjk} \right), \quad (1)$$

where X_{hk} is the total annual copy volume — regardless of category — at institution k from stratum h , and \bar{x}_{hjk} the observed mean copy volume of all kinds each person from post-stratum j at institution k and stratum h , and N_{hjk} the size of the corresponding post-stratum. An additional factor, denoted by a_j where $a_j = 1$ for students and $a_j = 46/38$ for staff, has been used due to the fact that the students on average have, a shorter ‘copy-year’ than the staff.

Thus, the annual copy volume of person i is estimated by $f_{hjk} y_i$. The estimator for the annual volume in group j and stratum h is given as

$$\hat{Y}_{hj} = \left(\sum_k N_{hjk} \right) \left(\sum_k n_{hjk} f_{hjk} \bar{y}_{hjk} \right) / \left(\sum_k n_{hjk} \right), \quad (2)$$

where n_{hjk} is the sample size of group j at institution k from stratum h . The total volume for the population is estimated by summing \hat{Y}_{hj} over h og j , i.e.

$$\hat{Y} = \sum_h \sum_j \hat{Y}_{hj}. \quad (3)$$

The variance, conditional to n_{hjk} , is given as, for $N_{hj} = \sum_k N_{hjk}$ and $n_{hj} = \sum_k n_{hjk}$

$$\begin{aligned} \text{Var}(\hat{Y} | n_{hjk}) &= \sum_{h,j,k} \left(\frac{N_{hj}}{N_{hjk}} \right)^2 \left(\frac{n_{hjk}}{n_{hj}} \right)^2 X_{hk}^2 \cdot \text{Var} \left(\frac{N_{hjk} a_j \bar{y}_{hjk}}{\sum_l N_{hlk} a_l \bar{x}_{hlk}} \right) \\ &= \sum_{h,j,k} \left(\frac{N_{hj}}{n_{hj}} \right)^2 \left(\frac{n_{hjk}}{N_{hjk}} \right)^2 \left(\frac{X_{hk}}{\tilde{X}_{hk}} \right)^2 \{ N_{hjk}^2 a_j^2 \text{Var}(\bar{y}_{hjk}) + R_{hjk}^2 \sum_l N_{hlk}^2 a_l^2 \text{Var}(\bar{x}_{hlk}) \\ &\quad - 2R_{hjk} N_{hjk}^2 a_j^2 \text{Cov}(\bar{y}_{hjk}, \bar{x}_{hjk}) \}, \end{aligned} \quad (4)$$

where $\tilde{X}_{hk} = \sum_j N_{hjk} a_j E[\bar{x}_{hjk}]$ and $R_{hjk} = (N_{hjk} a_j E[\bar{y}_{hjk}]) / \tilde{X}_{hk}$. Based on the sample one can estimate $\text{Var}(\bar{y}_{hjk})$ through the corresponding sample variance $\sum_{i \in s_{hjk}} (y_i - \bar{y}_{hjk})^2 / (n_{hjk} - 1)$, and likewise for $\text{Var}(\bar{x}_{hjk})$ and $\text{Cov}(\bar{y}_{hjk}, \bar{x}_{hjk})$.

B.2 A ratio between two annual volumes

Let (Y, X) be two annual copy volumes of different kinds, and $R = Y/X$ the ratio between them. The post-stratified estimator for R is given as

$$\hat{R} = \hat{Y} / \hat{X}, \quad (5)$$

where (\hat{Y}, \hat{X}) both are given by (3). In case that Y is the copyright-protected material and X the total volume of all kinds, R is the proportion of copyright-protected material.

Although the variance of \hat{R} does not have a closed form, certain guidelines are available. Let (S_R, S_Y, S_X) be the standard error of $(\hat{R}, \hat{Y}, \hat{X})$, and (V_R, V_Y, V_X) the variance. Let ρ be the correlation coefficient between \hat{Y} and \hat{X} . Noticing

$$V_R = \frac{1}{X^2}(V_Y + R^2V_X - 2R\rho S_Y S_X) \Leftrightarrow \frac{V_R}{R^2} = \frac{V_Y}{(XR)^2} + \frac{V_X}{X^2} - 2\rho \frac{S_Y}{XR} \frac{S_X}{X},$$

such that the upper limit of the relative standard error of \hat{R} is simply

$$S_R/R \leq S_Y/Y + S_X/X, \quad (6)$$

where (S_Y, S_X) can be estimated using (4). In other words, the sum of the relative standard errors of \hat{Y} and \hat{X} gives the upper limit of the relative error of \hat{R} .

It also becomes clear that the key to $Var(\hat{R})$ lies in the estimation of ρ . The matter is complicated by the fact that the post-strata cut across the strata, while f_{hjk} depends on the institution. Notice that the problem disappears for $R_{hk} = Y_{hk}/X_{hk}$ at institution k , since (3) then simplifies, i.e.

$$\hat{R}_{hk} = \left(\sum_j N_{hjk} a_j \bar{y}_{hjk} \right) / \left(\sum_j N_{hjk} a_j \bar{x}_{hjk} \right) = \tilde{Y}_{hk} / \tilde{X}_{hk}.$$

The estimated correlation coefficient between \tilde{Y}_{hk} and \tilde{X}_{hk} based on the sample are given as

UiO	NTNU	HiA	HiØ	HiB	HiT	NHH	NLH	BI	NMH	NKH
0.72	0.42	0.79	0.70	0.51	0.32	0.86	0.68	0.17	0.26	0.20

It is possible that ρ (over all institutions) is weaker than ρ_{hk} . However, since the latter can be considered as a conditional version of former, it is highly likely that ρ indeed is positive, in which case the following conservative upper bound is obtained from setting $\rho = 0$,

$$Var(\hat{R}) \leq R^2 \cdot \{Var(\hat{Y})/Y^2 + Var(\hat{X})/X^2\}, \quad (7)$$

where the righthand side probably over-estimates the relative standard error by 20 ~ 40%.

B.3 Decomposition of the proportion of copyright-protected material

In order to study the composition of the proportion of copyright-protected material, denoted by R , we shall adopt an alternative parameterisation. For simplification we also drop the stratification and the factor a_j . Let $g = 1, \dots, m_{jk}$ be the recorded copy-set from group j at institution k . Denote by x_g the number of pages of the g th set. Let $I_g = 1$ if copy-set g is copyright-protected, and $I_g = 0$ if not. The proportion of copyright-protected material at institution k is then given as

$$R_k = \left(\sum_j N_{jk} \bar{M}_{jk} \bar{Y}_{jk} P_{jk} \right) / \left(\sum_j N_{jk} \bar{M}_{jk} \bar{X}_{jk} \right), \quad (8)$$

where M_{jk} denotes the annual number of copy-sets made within the corresponding stratum, and $P_{jk} = (\sum_{g \in U_{jk}} I_g) / M_{jk}$ the proportion of copyright-protected copy-sets, and \bar{Y}_{jk} the mean number of pages in a copyright-protected copy-set, and \bar{X}_{jk} the mean number of pages in a

copy-set of any kind. Notice that M_{jk} is unknown just like X_{jk} . In contrast to X_k , neither is M_k known since $X_k = M_k \bar{X}_k$ where \bar{X}_k is unknown.

In this way the proportion of copyright-protected material R is determined by 4 parameters, namely $(\bar{X}, \bar{Y}, \bar{M}, P)$. We can investigate whether \bar{Y} differs from \bar{X} , i.e. whether the mean number of pages differs in case the copy-set is copyright-protected. Notice that in case $\bar{Y}_{jk} = \bar{X}_{jk}$, $R_{jk} = \bar{Y}_{jk} P_{jk} / \bar{X}_{jk}$ simplifies to $R_{jk}^0 = P_{jk}$. In Figure B.1.1 - B.1.3 we have plotted R_{jk} against R_{jk}^0 for respectively students, academic staff and non-academic staff at all 11 sampled institutions. The results suggest that while the difference between \bar{Y} and \bar{X} is small among students, it becomes larger when it comes to the staff — on average $\bar{X}/\bar{Y} \approx 1$ for students, and $\bar{X}/\bar{Y} \approx 2$ for academic staff, and $\bar{X}/\bar{Y} \approx 3$ for non-academic staff.

Meanwhile, Figure B.2.1 - B.2.3 show the effect of the parameters on R_k at all the sampled institutions. In Figure B.2.1 we study R_k by substituting \bar{M}_{jk} with \bar{M}_j , where the latter denotes the mean number of copy-sets per person within group j regardless of institutions. In Figure B.2.2 we compare R_k with R_k^0 under the assumption that $\bar{Y}_{jk} = \bar{X}_{jk}$. Finally, in Figure B.2.3 we substitute P_{jk} with P_j in the same way as in Figure B.2.1. The results here indicate that the proportion of copyright-protected material is most robust towards \bar{M}_k , somewhat less so towards the assumption that of $\bar{Y}_{jk} = \bar{X}_{jk}$, despite the majority of students in the population. At the same time it becomes clear that R_k varies most closely with P_{jk} , which is perhaps the parameter least effected by variation in time. In other words, the sampling variation is likely more dominant an element than the variation in time for the various proportions.

Figure B.1.1.1 Proportion copyright-protected material for students at the sampled schools

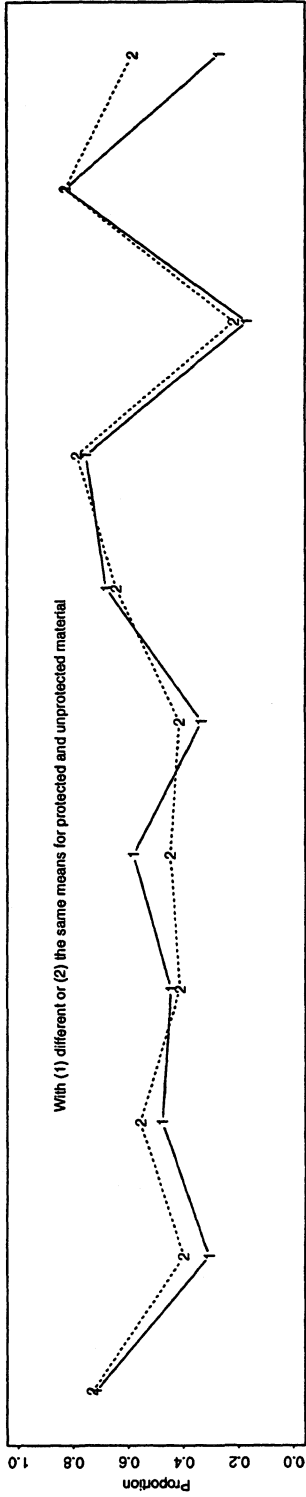


Figure B.1.2 Proportion copyright-protected material for academic staff at the sampled schools

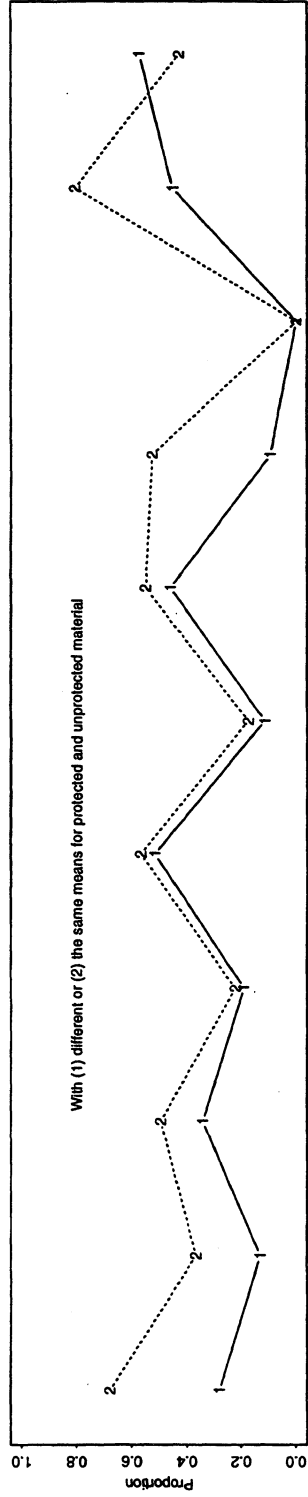


Figure B.1.3 Proportion copyright-protected material for non-academic staff at the sampled schools

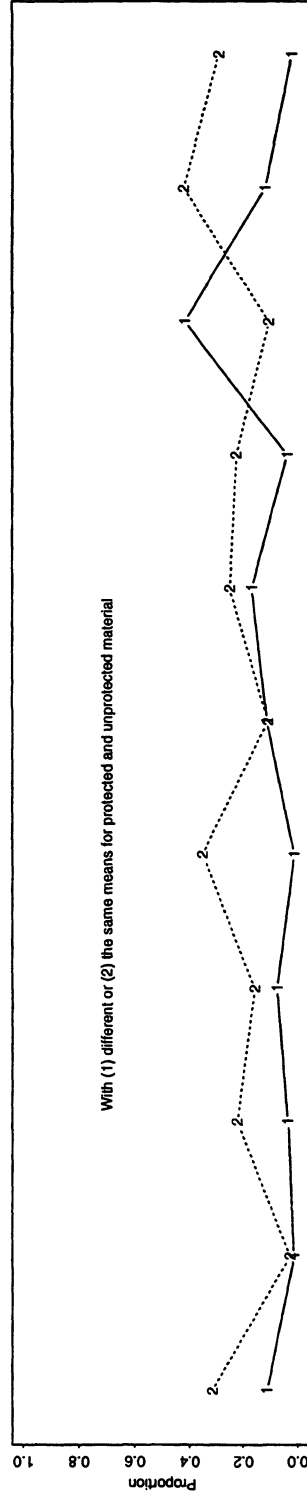


Figure B.2.1 Proportion copyright-protected material at the sampled schools

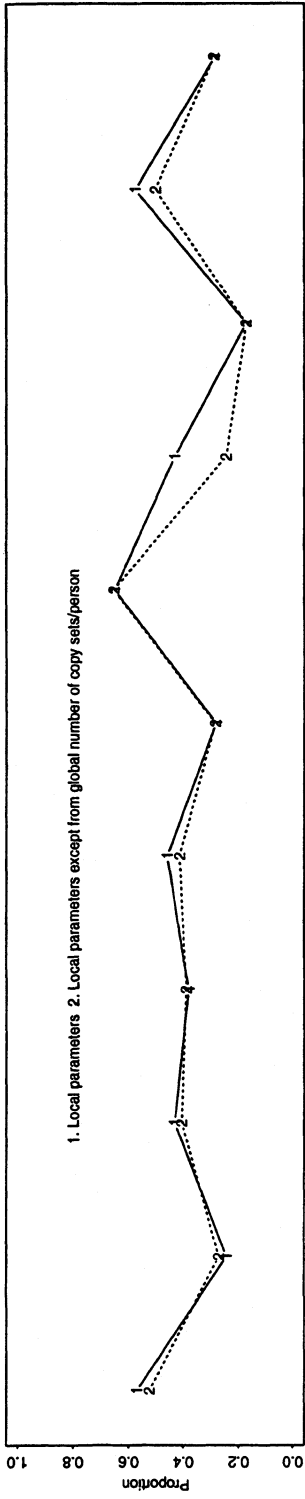


Figure B.2.2 Proportion copyright-protected material at the sampled schools

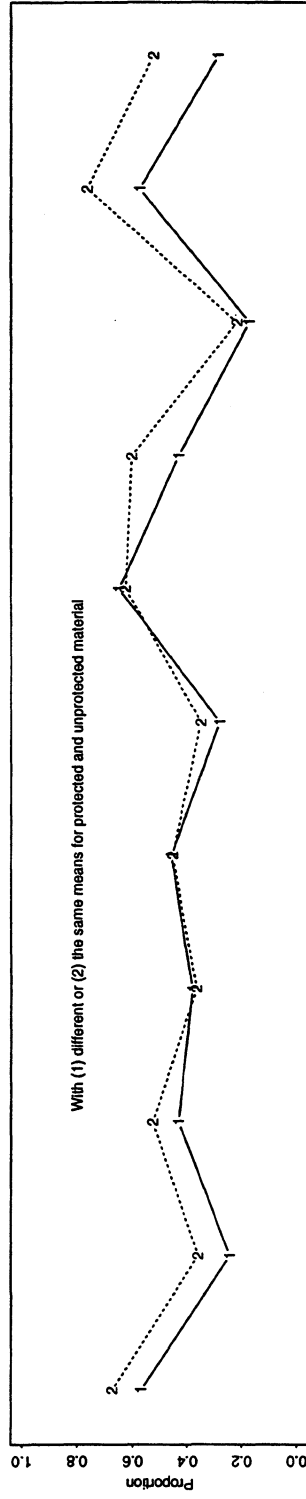
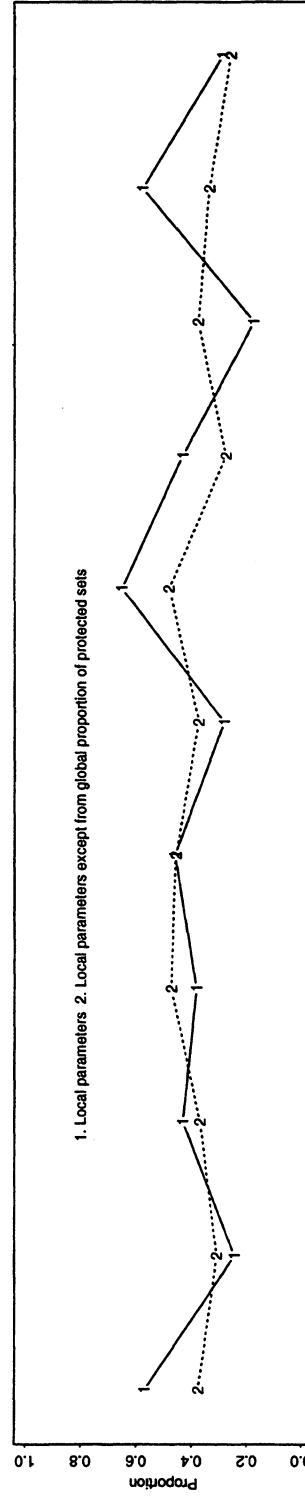


Figure B.2.3 Proportion copyright-protected material at the sampled schools



Appendix C

Oslo, January 1997

Person in charge: Anne Sundvoll, 22 86 46 67

Division for Sample Surveys

Survey on copying at universities and colleges

Statistics Norway is now conducting a national survey of copying at universities and colleges. The purpose of the survey is to compile statistics on student and staff copying in order to measure the consumption of copies from copyright-protected material. The survey is in accordance with the copying agreement for universities and colleges to which inter alia your educational institution is a party. It is being conducted on assignment for the Ministry of Education, Research and Church Affairs and Kopinor. The results from the survey will be used to calculate future copying fees and for distributing the remuneration to rightsholders.

A random sample of students and staff from 11 Norwegian universities and colleges has been drawn for the survey. You are one of the persons drawn to participate. We ask you save all the material that you obtain (buy, receive or copy) during **weeks 5 and 6** (27 January – 9 February). To prevent the occurrence of error sources during collection, we ask that you save books, music, periodical publications (periodicals, magazines, weekly magazines, comics, newspapers), course packs, notes and loose sheets of paper.

The recording will take place during **Week 7**. You are asked to come to our local recording office (see attachment), where representatives from Statistics Norway's interviewer corps will go through your material. **Everyone participating in the survey will receive NOK 300 at the recording site.**

Taking part in the survey is voluntary. To sign up, fill out and return the enclosed reply form within seven days. To achieve usable results, we are dependent on the active participation of those drawn. Everyone who works for Statistics Norway has the duty of confidentiality and handles personal information according to statutory rules (cf. Personal Data Filing Systems Act and Data Inspectorate's framework licence for Statistics Norway).

If you have any questions, please contact the person in charge listed above. We hope that you will participate and look forward to hearing from you as soon as possible.

Sincerely,

Svein Longva
Director General

Gustav Haraldsen
Head of Division

Oslo, January 1997
Person in charge: Anne Sundvoll, 22 86 46 67
Division for Sample Surveys

Survey on copying at universities and colleges

Statistics Norway is now conducting a national survey of copying at universities and colleges. The purpose of the survey is to compile statistics on student and staff copying in order to measure the consumption of copies from copyright-protected material. The survey is in accordance with the copying agreement for universities and colleges to which inter alia your educational institution is a party. It is being conducted on assignment for the Ministry of Education, Research and Church Affairs and Kopinor. The results from the survey will be used to calculate future copying fees and for distributing the remuneration to rightsholders.

A random sample of students and staff from 11 Norwegian universities and colleges has been drawn for the survey. You are one of the persons drawn to participate. We ask you save all the material that you obtain (buy, receive or copy) during **weeks 5 and 6** (27 January – 9 February). To prevent the occurrence of error sources during collection, we ask that you save books, music, periodical publications, course packs, notes and loose sheets of paper.

Representatives from our interviewer corps will visit you during **week 7** at your place of work to go through the material. You will be contacted in advance by telephone to set up the time and place of the appointment.

Taking part in the survey is voluntary. In order to have usable results, we are, however, dependent on the active participation of those drawn. Everyone who works for Statistics Norway has the duty of confidentiality and handles personal information according to statutory rules (cf. Personal Data Filing Systems Act and Data Inspectorate's framework licence for Statistics Norway).

If you have any questions, please contact the person in charge listed above. We look forward to working with you and thank you advance for your cooperation.

Sincerely,

Svein Longva
Director General

Gustav Haraldsen
Head of Division

Oslo, November 1997

Person in charge: Dag Roll-Hansen, tel. 22 86 46 67

Division for Sample Surveys

Survey on copying at universities and colleges

Statistics Norway is now conducting a national survey of copying at universities and colleges. The purpose of the survey is to compile statistics on student and staff copying in order to measure the consumption of copies from copyright-protected material. The survey is in accordance with the copying agreement for universities and colleges to which inter alia your educational institution is a party. It is being conducted on assignment for the Ministry of Education, Research and Church Affairs and Kopinor. The survey is under the direction of a steering committee to which the Ministry has appointed representatives from the universities and colleges. The results from the survey will be used to calculate future copying fees and for distributing the remuneration to rightsholders.

A random sample of students and staff from 11 Norwegian universities and colleges has been drawn to participate. You are one of the persons drawn to participate. We ask that you save the following over the course of **weeks 47 and 48** (17- 28 November):

1. All the material you yourself copy on and off campus
2. Copies received from others
3. All the materials you are supplied with or purchase, with the exception of your own newspapers
4. All course packs, collections of copies or collections of articles acquired by you
5. All computer printouts you make for yourself

During **week 49** (1 – 5 December) you are to come to our local recording office, where representatives from Statistics Norway's interviewer corps will go through your material. Our local interviewer will attempt to reach you by phone prior to this but you are to come to the office even if the interviewer was unable to contact you. **Everyone participating in the interview will receive NOK 300.**

Taking part in the survey is voluntary. In order to have usable results, we are nevertheless dependent on the active participation of those selected. *In order to correctly estimate the volume of copies, it is important that those who have not obtained any material or made any copies also participate in the survey.* Everyone who works for Statistics Norway has a duty of confidentiality and handles personal information pursuant to statutory rules (cf. Personal Data Filing Systems Act and the Data Inspectorate's framework concession for Statistics Norway).

We hope you will participate!

Sincerely,

Svein Longva
Director General

Jørn Y. Leipart
Head of Division

Oslo, November 1997

Person in charge: Dag Roll-Hansen, tel. 22 86 46 67

Divisions for Sample Surveys

Survey on copying at universities and colleges

Statistics Norway is now conducting a national survey of copying at universities and colleges. The purpose of the survey is to compile statistics on student and staff copying in order to measure the consumption of copies from copyrighted material. The survey is in accordance with the copying agreement for universities and colleges to which inter alia your educational institution is a party. It is being conducted on assignment for the Ministry of Education, Research and Church Affairs and Kopinor. The survey is under the direction of a steering committee to which the Ministry has appointed representatives from the universities and colleges. The results from the survey will be used to calculate future copying fees and for distributing the remuneration to rightsholders.

A random sample of students and staff from 11 Norwegian universities and colleges has been drawn to participate. You are one of the persons drawn to participate. We ask that you save the following over the course of **weeks 47 and 48** (17- 28 November):

1. All the material you yourself copy on and off campus
2. Copies received from others
3. All the materials you are supplied with or purchase, with the exception of your own newspapers
4. All course packs, collections of copies or collections of articles obtained by you
5. All computer printouts you make for yourself

During **week 49** (1 – 5 December) representatives from Statistics Norway's interviewer corps will visit you at work and go through your material. You will be contacted by phone in advance to set up the time and place.

Taking part in the survey is voluntary. In order to have usable results, we are nevertheless dependent on the active participation of those selected. *In order to correctly estimate the volume of copies, it is important that those who have not obtained any material or made any copies also participate in the survey.* Everyone who works for Statistics Norway has a duty of confidentiality and handles personal information pursuant to statutory rules (cf. Personal Data Filing Systems Act and the Data Inspectorate's framework concession for Statistics Norway).

We hope you will participate!

Sincerely,

Svein Longva
Director General

Jørn Y. Leipart
Head of Division

Appendix D

1. What is your association with this educational institution?

STUDENT	1
ACADEMIC STAFF	2
ADMINISTRATIVE STAFF	3
OTHER STAFF	4

2. To which field of study/programme do you belong?

ARTS, DIVINITY AND AESTHETIC SUBJECTS.....	(1)
TEACHER TRAINING.....	(2)
COMMERCIAL AND BUSINESS SUBJECTS, SOCIAL SCIENCES AND LAW.....	(3)
NATURAL SCIENCES AND TECHNOLOGY.....	(4)
TRANSPORT AND COMMUNICATION	(5)
PUBLIC HEALTH.....	(6)
AGRICULTURAL, FORESTRY AND FISHERY PROGRAMMES.....	(7)
SERVICE AND MILITARY PROGRAMMES.....	(8)
MUSIC	(9)
ADMINISTRATIVE STAFF	(10)

3. What level are you studying at?

FOUNDATION COURSE, PREPARATORY EXAMINATION IN PHILOSOPHY, PRELIMINARY TESTS, SEMESTER SUBJECTS, = 1 st and 2 nd YEAR COURSES	1
INTERMEDIATE SUBJECT 3 RD and 4 th YEAR COURSES	2
MAIN SUBJECT/MAJOR = 5 TH and 6 TH YEAR COURSES	3
DOCTORATE = 7 TH to 9 TH YEAR COURSES.....	4
OTHER	5

4. How many credits did you earn via examination last semester? _____

5. How many credits do you plan to take via examination this semester? _____

6. Source no.: _____

7. Total number of copy-pages (A4) from source no.: _____

8. Are the copies, or parts of the copies, transparencies?

YES	1
NO	2

9. Describe the type of source for source no.:

Textbook (basic, book of exercises, teacher's book, workbook)/non-fiction book	(1)
Master copies for teaching	(2)
Encyclopaedia, reference work.....	(3)
Original work of fiction (novel, short story, short prose, children's and adolescent literature, poetry, drama).....	(4)
Fiction anthology	(5)
Sheet of music, collection of sheet music	(6)
Songbook	(7)
Newspaper	(8)
Learned journal	(9)
General interest periodical	(10)
Specialized press (magazine for professions, occupations, industries, special interests)	(11)
Monthly publication, magazine, weekly magazine, comic book.....	(12)
Other periodicals and magazines.....	(13)
Government publication, report etc.	(14)
Other printed/publishing company-produced material (postcard, brochures, maps, catalogues etc.)	(15)
Non-publishing company-produced material	(16)

10. What is the copyright holder's country of residence? _____

11. What is the work's country of publication? _____
12. Is the work ...
 edited/arranged into Norwegian..... 1
 translated into Norwegian..... 2
 not edited/arranged/translated 3
12. Original pages, Drama, play: _____
13. Original pages, Poem: _____
14. Original pages, Fiction, prose: _____
15. Original pages, Educational, non-fiction, scientific text: _____
16. Original pages, Editorial, news commentary, news, report: _____
17. Original pages, Feature, other article, other copy: _____
18. Original pages, Reviews of visual art, literature, films, theatre, music: _____
19. Original pages, Brochures, advertising copy, text from government publications etc.: _____
20. Original pages, Photo of handicraft: _____
21. Original pages, Visual art: _____
22. Original pages, Technical drawing, technical illustration: _____
23. Original pages, Drawn and painted illustrations of non-technical nature: _____
24. Original pages, Photographs: _____
25. Original pages, Musical notes: _____
26. Total of original pages from this source? _____
27. What is the title of the publication?: _____
28. Are some of the authors of the publication/article employed at the educational institution?
 YES 1
 NO 2
29. How was the material obtained?
 Purchased in a bookstore..... (1)
 Purchased at educational institution (institute/dept. etc.) (2)
 Purchased by another student..... (3)
 Handed out by teacher in connection with lecture etc. (4)
 Supplied by educational institution (institute, dept. etc.)..... (5)
 Received from another student..... (6)
 Made own copy of master copy (original copy) (7)
 Made own copy of original publication (8)
 Other (9)
- How did you obtain the copy or copies?
 The copies were made on one of the institution's/school's copiers 1
 The copies were made on other machines than those at the educational institution 2
31. Have you copied from more sources than those currently recorded?
 YES 1
 NO 2
32. Source no.: _____

Appendix E

Instructions for copying survey at universities and colleges, at 1 September 1997

Main survey 1997

Product number 576-1

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3.4. Performance of short interview.....	.p. 5
3.5. Coding.....	.p. 7

Project manager:	Dag Roll-Hansen	22 86 46 70
Interviewer contact:	Kari Grøholt	22 86 46 65
Data processing:	Glenn-Erik Wangen	22 86 46 78

1. Introduction

Statistics Norway is currently carrying out a copying survey at 11 of Norway's universities and colleges. The purpose of the survey is to compile statistics on student and staff copying in order to measure the volume of copies from copyright-protected material. The survey is being conducted in accordance with the copying agreement for universities and colleges which these educational institutions are party to. The survey is being carried out on assignment for the Ministry of Education, Research and Church Affairs and Kopinor.

Kopinor is an organization that administers the rights to photocopying and similar reproductions on behalf of the rightsholders of printed and published copyright-protected works.

The copying agreement between Kopinor and the Ministry states, inter alia, that:

".....Norwegian universities and colleges have signed an agreement which entitles them to make photocopies from books, periodicals, music, newspapers, etc. for use in teaching, administration, research and studies. The agreement is entered into with the rightsholders' reproduction rights organization Kopinor on the basis of a model agreement negotiated by the Ministry of Education, Research and Church Affairs and Kopinor....."

In 1994 the Ministry of Education, Research and Church Affairs signed a three-year provisional agreement on photocopying at Norwegian universities and colleges. During the course of the agreement period the parties wanted to establish the:

- Annual volume of copies consumed at Norwegian universities and colleges
- Percentage of copies from copyright protected material
- Copies of protected material broken down by country of publication

In the autumn of 1996 Statistics Norway conducted a pilot survey at the University of Oslo and Agder College, inter alia to find out which method could best measure the scope of copying by students and staff.

Experience from the pilot survey showed that the "**collection method**", by which students and staff are told to keep all printed material obtained by them over the course of a set period, is well suited for such a survey. **Observation at the copiers** was also tested during the pilot study.

2. General instructions

2.1. Survey methods

Students and staff at 11 educational institutions will be sent letters instructing them to keep all material they collect (buy, receive or copy themselves) over a 14-day period. The data recording is done immediately after the collection periods.

2.2. Date collection

Data collection will be done with the aid of portable PCs. You will interview both students and staff.

The students

You will be placed at "your" educational institution to man a "Kopinor office" where the students will be asked to bring you their material (see back page of IS letter). Call the IS regardless and try to persuade those who are hesitant to take part. Students can be difficult to find, so it is fine if you take some time to do some detective work to find them. You can also make individual appointments with the students who do not have the opportunity to come to the recording offices. Report students who do not show up for their appointment as non-response (use code 70 "IS did not show up"). If a student comes who is listed in the paper IS list, but does not belong to your recording office, do the interview by going into "do not use this" and keying in the IS number. Offices manned by several persons will have an electronic IS list.

The employees

In addition, you will be given a list of staff you are to visit at their place of work for the same interview and coding of material. Before the recording week begins, contact the IS by phone for individual appointments. Inform them that the interview itself takes about five minutes, but that you can do the coding alone if the IS is short of time and is reluctant about taking part. If you cannot make an appointment, record the non-response (or deletion) in the usual way.

2.3. Data collection period

In order to calculate the annual volume of copied material, the data recording will take place during seven periods in 1997. These periods are:

week 7, week 12, week 17, week 24, week 36, week 42 and week 49

Within each period you will be given individual plans, and we hope to carry out all collections according to the same principle. The remainder of the time you are employed is to be used to visit staff at the educational institutions.

2.4. Sample

A random selection of 3,122 students and 1,008 staff were drawn. The sample was drawn proportionally with the student population at each educational institution. In the first four periods the gross sample was comprised of 446 students and 144 staff. Because it was difficult to make contact with students at some schools we have increased the gross sample to 476 students for the remaining

rounds. Although the survey runs over one year, new IS are drawn each time. This is not a panel survey in other words.

2.5. IS list

The IS list contains name, school, address and phone number. Some of the phone numbers for the staff are switchboard numbers. The students have IS numbers from 1-4,999. The staff have IS numbers 5,000 and up. You will receive the IS list electronically and on paper. The electronic list contains the Kopinor office's IS and staff you are to make appointments with. The paper list contains all the IS drawn for this round.

2.6. Preparation time

Two hours have been set aside for reading instructions and trial interviews. The remuneration will be added by the office.

3. *Performance of field work*

3.1. Recording offices

Eleven educational institutions were selected for the survey. You are assigned to the educational institution closest to your home:

University of Oslo

University of Trondheim

Agder College (Kristiansand, Arendal, Grimstad)

Bergen College

Tromsø College

Østfold College (Fredrikstad, Sarpsborg, Halden)

(NHH) Norwegian School of Economics and Business Administration

Norwegian College of Agriculture

(BI) Norwegian School of Management, Oslo

(ONCA) Oslo National College of Arts

State Academy of Music

See enclosed work list for details.

3.2. Manning of Kopinor offices – recording for students

During the pilot survey the interviewers did the coding work in cooperation with other representatives from Statistics Norway and from Kopinor. During the last three rounds representatives from Kopinor, universities and colleges and the project manager from Statistics Norway will visit most of the recording offices.

Statistics Norway's Division for Sample Surveys has booked the rooms. We do not know exactly where the recording room we have booked is situated in the buildings. If you have problems finding the room, with locking or technical problems etc., the closest reception desk, operations office, etc. should be able to help. People at the school are supposed to know about the survey.

We will make posters which you will pick up at the course on **3 February**. It is important to signpost the door, or set up signs in the hallway, 1st floor, by the exits, etc. so that the students can find you. At the end of this summer we also made posters we sent out with the papers. It would be good if you could hang them up at a centrally located bulletin board. A poster can also be used to mark the room you are using.

Payment to students

All students who take part in the survey and come to the recording site, receive NOK 300. This also applies to students who say that they have *not* collected any material in the course of the period. Kopinor will, immediately after the recording period is over, pay the students NOK 300 per payment order based on the information from your submitted interview.

3.3. Calling on staff

Like students, the staff have been instructed to collect material during the same 14-day period. The IS list contains the work phone numbers of each staff member. You are responsible for making the appointments. It is practical to have as compact workdays as possible. You must nevertheless figure on c. 30-45 minutes per staff (+ any travel time between schools).

3.4. Performance of short interview

Both groups are to answer first a few simple questions, after which you are to begin sorting and coding the material. You may experience that the students who come to the Kopinor office are in a hurry, or that several come at the same time, forming a queue. If this happens, you can ask to perform the interview first and then ask the student(s) to leave the material for coding and collection at the end of the day or the next day. It is then important that the student fill out a short **information form** (you will receive the form at the course), which is to be attached to each set of copies. Be sure to check that you write either the student's IS number or name on the sets of copies before the student leaves the office. For staff, give yourself sufficient time to complete the coding during the visit.

The individual questions

1. Introductory text. Please note that the introductory text is only a guide.

2. Recording of non-response/deletion

Regular lists have been included for recording non-response and deletion. Use code 70 to empty the IS list of students.

3. What is your connection to this educational institution?

To determine whether the IS is a student, academic or administrative staff.

4. To which field of study do you belong?

Response code 1-8

It has been unclear which of the fields of study should be used for some of the programmes. Clarification is therefore provided here:

Arts, divinity and aesthetic subjects includes history, literature, language, philosophy, religion and certain other fields closely related to understanding art and culture.

Teacher training includes pre-school teacher training, general subjects teacher training, technical teacher training, secondary school or lecturer training with certification tests in one's subject, pedagogy, or other subjects in which one studies teaching or learns to be a teacher.

Commercial and business subjects, social science and law includes business studies (typical BI subjects), socio-economic subjects (such as economics), psychology, sociology, political science, other social studies, mass communications and law.

Natural science and engineering includes engineering, mathematics, physics, chemistry, geography, geology, biology, mechanical engineering, electronics, building and construction, etc.

Transport and communication includes navigation studies, maritime mechanical engineering, other maritime studies, postal studies (the Postal Service School etc.), tourism and transport studies.

Public health covers nursing, medicine, dentistry, child nursing, care of the mentally handicapped, pharmaceutical studies, therapeutic studies (physiotherapy, occupational therapy etc.), veterinary science, homeopathy, social work

Agricultural, forestry and fishery programmes include fisheries technology, horticulture, forestry, and typical agricultural college subjects.

Services and military programmes cover hotel and restaurant management, sports and youth leader training, civilian surveillance and security studies, military studies and other services.

Music covers all instrumental and voice studies.

Administrative staff All administrative staff are placed in this category, regardless of which department they are employed by.

5. At which level are you studying?

(Asked only of students. **NB! Jump in the form**)

If in doubt, record the number of years the student has gone to college or university.

New appointments – opportunity to exit programme before the coding starts

If possible, do the coding with the IS. If some of the students visiting the Kopinor office do not have time to be present for the coding, conclude the interview here and make an appointment for picking up the material.

It is also important to get answers from the IS who have not copied or obtained other material – do the introductory interview and tick the box to show that they have not made any copies.

3.5. Coding

1. Each IS has probably made a number of copies. We say that a loose sheet or collection of sheets of the same origin or copied from the same work, has the same **source**. Begin by sorting copies. **Pay particular attention to course packs** which can be comprised of copies of texts and/or illustrations from many different publications (sources).

The IS has been told to keep all material he/she has obtained. This means that some of the material may be original works. *Only the copies are to be coded*. Everything else is set aside before the coding. If the IS has not made any copies, mark this on the form and conclude the appointment.

2. The total number of physical (A4) copy-pages are to be coded for each source. Record the first source. (Write the number of copy-pages from the first source).
3. The copy-pages are coded according to the **type of source**. Classify according to the following divisions:

- 1 = Textbook (basic textbook, exercise book, teacher's guide) or non-fiction book
- 2 = Master copy
- 3 = Encyclopaedia, reference work
- 4 = Original work of fiction (novel, short story, poetry, drama)
- 5 = Fiction, collected works/anthology
- 6 = Sheet of music, collection of sheet music
- 7 = Songbook
- 8 = Newspaper
- 9 = Learned journal
- 10 = General interest periodical
- 11 = Specialized press (magazines for professions, occupations and trades and industries)
- 12 = Monthly publication, magazine, weekly magazine, comic book
- 13 = Other periodicals and magazines
- 14 = Government publication, report
- 15 = Other printed publishing company-produced material (postcards, brochures, maps, catalogues)
- 16 = Non-publishing company-produced material

NB! Course packs are to be coded according to the following principle:

- 1) If the student has purchased or received a course pack written and published at the educational institution, this is regarded as an original work, but should be coded under 16¹.
- 2) If the student has taken copies from such a course pack, these are to be coded as copies from printed/publishing company-produced material (codes 1-15)
- 3) If the student has obtained a course pack consisting of **excerpts from one or more original works**, each source is to be coded separately. Count up the number of sources and do the coding for each source.
- 4) Government publications and the like
The category "government publication" needs more explanation.

¹One version of the instructions incorrectly stated that course packs written at the educational institution should be regarded as original works and not be coded, instead of being coded as non-copyright protected material. Interviewers were made specially aware of all the changes in the instructions, with the exception of this error. Analyses of the material do not indicate that the mistake has had an impact on the results.

It is very easy to be tempted to list everything published by the public sector in this source category. Do not do this. Only certain publications fall under this category.

These publications are: copies of Reports to the Storting, parliamentary bills, NOUs (Official Norwegian Reports) and other reports, proposals and statements concerning the public exercise of authority.

Such publications do not enjoy the protection of the Copyright Act and no remuneration is to be paid for these to Kopinor. On the other hand it happens that such publications contain types of material — drawings, illustrations and the like—that are protected. In such cases you have to state how many pages of that type of material there are from public publication sources. The other text in the publications is to be coded as non-publishing company-produced material and is therefore not subject to remuneration.

The public sector publishes many publications protected by the Copyright Act. For instance, Statistics Norway's public publications are protected. These publications must then be classified under the relevant type of source. For instance, Statistics Norway's "Weekly Bulletin of Statistics" is a periodic publication and must be coded as "Specialized press". On the other hand, Statistics Norway's yearbook must be coded as a non-fiction book. Other examples of publications published by the government include research reports, and studies published by the directorates and other public bodies. These will as a rule be coded as a non-fiction book or as a periodical if the publication is published periodically.

NB! Jump in the form. If the material is not protected (code 16), the coding is concluded for this source and the programme jumps to the question of how the material was obtained. For material from other types of sources you must also record:

- | | |
|--|---------------------------|
| 4. The copyright holders' country of residence | Country codes are entered |
| 5. The country in which the source was published | Country codes are entered |

In case of foreign origin and Norwegian origin, choose either

- 1 = Edited into Norwegian
- 2 = Translated into Norwegian
- 3 = Not edited/translated

6. The number of original pages is then coded from each source by type of material (subsource). Two original pages are often copied on *one* physical A4 page. You must now refer to the number of pages in the *original work*. Give the answer with a decimal. The original pages are classified according to:

1. Drama, play
2. Poem
3. Fiction, prose
4. Textbook, non-fiction book, scientific text
5. Editorial, news commentary, news, report
6. Feature, article, other copy
7. Reviews of visual art, literature, films, theatre, art
8. Brochures, advertising copy, text from public publications

9. Photo of handicraft
10. Visual art
11. Colour drawing/technical illustration
12. Drawn and painted illustrations of non-technical character
13. Photographs
14. Musical notes
15. Table/numerical presentation

It happens that a source can consist of several types of material or subsources. For instance, four copied newspaper pages may consist of four original pages of features and four original pages of reviews.

NB! Jump in the form. Questions 7, 8 and 9 are to be answered only by students.

7. Title of the publication

8. How was the material obtained? Answer code 1-9

9. Where were the copies made? (**Jump!** To be answered only if the answer to question 8 is 7 or 8)

10. The programme asks if IS has copied from more sources, and goes through the list until all sources are recorded.

11. When you are done, answer "no" to the question regarding more sources. Conclude.

INSTRUCTIONS FOR

RECORDING COMPUTER PRINTOUTS

obtained from the Internet, local network/databases, CD-ROMs or other electronic sources

It has now been clarified how printouts are to be handled. The steering committee for the survey has decided that it is to be done in the following way:

A form is to be filled out for each computer printout the IS has made which contains something taken from the Internet, local network/databases, CD-ROMs or other electronic sources. Copies are to be taken of these printouts too. The IS number is written on both this form and on the copy of the printout. The form is enclosed. *Do not fill out a form for printouts that only contain self-produced material, and they are not to be coded or copied.*

If the IS brings a copy of a computer printout this is to be classified in the same way as other regular copies the IS has made.

The educational institutions are obliged to make a copier available so that you can make the copies that are necessary. This is established in the agreement of 6 May 1994 between the Ministry of Education, Research and Church Affairs and Kopinor.

We have been in contact with most of the educational institutions to ensure that it is all right that you make copies. Unless you hear otherwise, contact the contact person at the school to make copies. For the staff's part it is probably the simplest to ask if you can use the copier normally used by the staff member – it is probably the closest. Refer to the agreement if necessary. Try to get the students to leave material, so that you can copy it after the opening hours of the office, and the students can collect it afterwards. If the students cannot or do not want to collect the material you can offer to send it in the mail. Envelopes are enclosed. Try to send them from the school and get the school to stamp the envelopes. Talk to the contact person about this. If permission is refused, you must pay for postage. We will pay anyone you get to help you make copies.

We do not believe that there will be much to copy. Contact us if there are practical problems, so that we can work out solutions together. The objective is to find a solution which means that you can make copies without having to leave the office during opening hours....

We apologise for the lateness of this message.

Appendix F

Survey of copying at universities and colleges 1997

CODING INSTRUCTIONS¹

Directions for filling in the coding form

10 August 1996

HI\UH\KODINSTR.DOC

¹ These coding instructions were originally used in an earlier survey. Some references to material used then, were not removed when we used the instructions in the present survey. They have been removed in this version, for the convenience of the reader. Some errors have also been corrected.

SURVEY OF COPYING AT UNIVERSITIES AND COLLEGES 1997

INSTRUCTIONS FOR FILLING IN THE CODING FORM

SECTION 1 NUMBER OF COPY-PAGES (A4) FROM THIS SOURCE

If the extra copy/set of copies contains several **different sources** (e.g. material from both books and newspapers, or from songbooks and materials written/drawn at the institution), a CODING FORM is to be filled in for each source component if it consists of more than one A4 page. State the dominant source if the source component is less than one A4 page.

Enter the number of copy-pages of the set of copies that you process further on the CODING FORM. For instance you may have three A4 pages containing two sources: The person who made the copies may have used one and a half pages for a memo, and one and a half pages for a newspaper clipping. You then have to use two CODING FORMS because you are dealing with two **different** sources which are both more than one A4 page. For the one you are to enter 1.5 pages; then do the same for the other on another form. If the copy-pages from each of the sources the set of copies is made of are added up, you will get "the number of pages in the set of copies". The total should be entered on both forms.

SECTION 2 ORIGINAL PAGES BY SOURCE

In this section you are to circle one and only one ring around one of the code numbers from 1 to 16.

2.1 Printed/publishing company-produced material

If the original pages that were copied from were obtained from publishing company-produced material (e.g. a book, periodical, music book, newspaper and other original products), circle one of the code numbers 1-16.

2.1.a (No. 1) Textbook, non-fiction book, factual literature

Use code number 1 if the original pages were in a source made for educational use, i.e. textbooks (e.g. for pre-schools, primary and lower secondary schools, upper secondary schools and universities and colleges), as well as for private study, or non-fiction books such as scientific monographs, popular science books and factual literature such as reports, debate books, biographies, travelogues and the like.

If the title of the source does not make it obvious or it is otherwise uncertain to what extent the source is specifically made for use in teaching, you should still use 1 if it is educational material.

Code number 1 should also be used for sets of exercises, teacher's instructions, workbooks, etc.

Always use code 7 for sheets of music and collections of sheet music.

2.1.b (No. 2) Master copies for teaching

Use 2 if the copying basis (original pages) is master copies. Such originals are usually marked "master copy". Originals from so-called Herico folders are always master copies.

2.1.c (No. 3) Encyclopaedia, reference work

Use 3 if the source is a reference work or encyclopaedia – i.e. that the information is systematically organized (e.g. alphabetically by entry).

2.1.d (No. 4, 5) Novel, short story, short prose, poetry, drama

(No. 4) Original work

Use 4 if the copying basis is from a novel, book of short stories, collection of short prose, collection of poems, drama or play, which only contains works by the same author.

(No. 5) Collected works

Use 5 if the copying basis is obtained from a novel, collection of short stories, collection of poems, collection of short prose, drama or play that is a part of a collected works or an anthology in which **several** authors are represented (collected works means a book with texts assembled by an editor). Use 1 if the collected works are made for use in teaching.

2.1.e. (No. 6) Sheet of music/collection of sheet music

Use 6 if the copying basis is obtained from one source containing only music. The same applies if text that can only be sung to accompanying musical notes. Use 1 if the source includes text other than lyrics of a scope and/or nature that it must be described as a textbook or non-fiction book. Of musical works, Bisgård's "Musikkboka" is to be listed under 6.

2.1f (No. 7) Songbook

Use 7 if the source/copying basis was obtained from a book of lyrics with simple notes (music voice with or without figuration). If the source contains no music whatsoever, and it is clear that the source is a songbook, use 7. If not, use 4 or 5. Use 1 if the source contains text other than songs or/and lyrics, etc. of a scope and/or nature that it must be characterized as a textbook or non-fiction book. The following (Norwegian) musical works are to be listed under 7: "Mi 1. and 2. visebok", "Skolens sangbok", "Visesangboka", "Sang for grunnskolen 1 og 2", "Sang for ungdom" and "Blomstre min sang".

2.1.g (No. 8-14) Press and periodicals

(No. 8) Newspapers

Use 8 if the copying basis is obtained from a source with the character of newspaper or title of a newspaper, even though the source is published less than twice a week (e.g. Dag og Tid, Ny Tid etc.)

(No. 9) Learned journals

Use 9 for a source that is published periodically and whose title and content shows that it concerns research or research results, i.e. contents of a scientific nature.

(No. 10) Cultural periodicals (literature, art, music, theatre, film, general social issues and other general interest material, etc.)

Use 10 for a source that is published periodically and which through its title and content shows that it is of a general interest nature. Periodicals like "Nytt norsk tidsskrift", "Syn og Segn" and "Samtiden" also belong here.

(No. 11) Specialized press, magazines for professions, occupations, industries and special interests

Use 11 if the source's title and content shows that it is intended for a limited readership and is of a professional nature. Leisure magazines, membership publications and popular science magazines (special interest areas) also belong under 11.

(No. 12) Monthly publication, magazines, weekly magazines, comics

Use 12 for a source that is published regularly, is intended for the general public, has a varied content and cannot be characterized as a newspaper or periodical, but is a monthly publication, magazine, weekly comic book or magazine.

(No. 13) Other periodicals and magazines

Use 13 for periodical publications, which do not fall under 8, 9, 10 11 or 12.

2.1.h (No. 14) Government publication, report, etc.

Use 14 if the copying basis is obtained from government publications, public reports such as NOU (Official Norwegian Reports), etc. Use 1 if the material is not a report from public committees of inquiry, but is a scientific work etc. from an individual.

2.1.i (No. 15) Other printed /publishing company-produced material

Use 15 if the copying basis is obtained from printed material other than that listed above, such as picture postcards, brochures, catalogues, technical standards, etc.

2.2. (No. 16) Non-publishing company-produced material

Use 16 if the copying basis is made at the place of service (and not published in a publishing format). NB: If this self-produced material partly contains copies or printouts and the like of publishing company-produced material, use two or more CODING FORMS, one for each source. The publishing company-produced part is to be recorded under nos. 1-15, but only one of the items is to be used on each form.

No. 16 is to be used if the copying basis is obtained from manuscripts, academic memos, etc. that are not produced by a publishing company (i.e. as a rule typed). But be aware that some books, including scientific books published by publishing companies, are set by word processing (with typewriter-like type). They of course must be recorded under nos. 1-15.

SECTION 3 IS THE ORIGINAL OF NORWEGIAN OR FOREIGN ORIGIN?

For subsections a and b use one of the following national codes found in the separate appendix to the coding instructions (see also the code for "other country" and "unknown country"):

3.a The country in which the copyright holder lives

Copyright holders refers to the main author or composer. (The numerical code for the main author's/composer's country is still used if the work has several copyright holders, e.g. because it is illustrated with a drawing or photo.)

Try to find the country the copyright holder resides in irrespective of language and nationality. An exception here is Sami (Laplander) copyright holders. The code for Lapland is 41. Lapland stretches across Norway, Sweden, Finland and Russia. Use this code for works written in Sami (Lapp), irrespective of the country the copyright holder is a resident of.

3.b The work's country of publication

Country of publication means the country in which the publishing company has its business, regardless of which country the copying basis is printed in (Norwegian books are often printed abroad!).

If you are in doubt about the country of publication and about the country in which the copyright holder(s) is/are a resident of, state that the work was published in Norway.

3.c Circle only one of the choices. Check to see that the marking fits with what is coded in 3a and 3b with respect to whether the author and the country of publication are of Norwegian or foreign origin.

1. Foreign author, edited/arranged into Norwegian by Norwegian author(s), Norwegian publication. Editing means professional editing, recreation or adaptation to Norwegian conditions. "Arranged" refers to music arranged by a Norwegian copyright holder.
2. Foreign author, translated into Norwegian by Norwegian translator(s).
3. Foreign author, not translated/edited into Norwegian.

SECTION 4 DISTRIBUTION OF ORIGINAL PAGES BY TYPE OF MATERIAL

Note that it is the original pages and not the copy-pages that make up the unit. The starting point is that a page of a book or periodical is always an original page. Two pages of a book or periodical can be copied on one A4 copy-page! If one copy (in A4 format) contains more than one original page, e.g. two book or periodical pages or a songbook page and a clipping from a newspaper, it is regarded as two original pages.

If one copy-page (in A4 format) is a composite of material clipped from several printed sources (this is particularly true of newspapers), every clipping smaller than A4 is to be regarded as one original page. A clipping from a newspaper or magazine that fills up a copy-page is regarded as an original page.

For each copying basis (one or more original pages), you are to note what kind of material it contains of the types listed below from a to o. For each type of material that exists you are to note how much of the copying basis consists of this type of material. State how many pages (with one decimal) each type of material accounts for. The basis for the distribution is in other words all the original pages as a whole.

Example: If there is only one original page and it contains a photo making up c. one-tenth of the page and the rest is a text from a non-fiction book, fill out subsection d (non-fiction text) with 0.9 and subsection m (photograph) with 0.1.

The various types of materials are explained below.

TEXT (PRINTED/PUBLISHED)

4.a (1) Drama, play

Mark this column if the copying basis contains an entire or parts of a drama/play (including lines and stage direction). The text part of an opera score belongs here, as do scene descriptions and stage directions for operas, operettas or musicals.

4.b (2) Poem/lyrics.

Mark 2 if the copying basis contains an entire or parts of poems, songs, etc. This also applies even if the poem is an integrated part of the work of prose. If a song is included together with

music, so that the text stands in lines between the music, and there are no more verses below, the text is regarded as being 1/3 of the space the music and text make up together. If the song has several verses, the text is regarded as being 1/3 of the space that music and text make up together, and the part of the song in which there is no music is regarded as only being text.

4.c (3) Fiction, prose

Mark 3 if this column if the copying basis contains texts from novels, collections of short stories, short prose, prose for children and adolescents, etc. Be aware that travelogues and memoirs may have the characteristics of fiction, but should nevertheless be marked in column 4.

4.d (4) Educational, non-fiction and scientific texts

Use column 4 when the copying basis contains texts (not fiction, poems or play) from textbooks or other material specially aimed at teaching, or contains texts from professional literature, factual literature, reference works, scientific texts, etc.

4.e.f.g.h. (5-7) Newspaper text, periodicals (not advertising copy)

Use 5 if the copying basis contains editorials, news commentary, reports, purchased news copy, etc. from the daily press, weekly press, specialized press, etc.

Use column 6 to indicate features, articles, etc.

Use column 7 for reviews of visual art, literature, film, music, theatre, etc. from the daily press, weekly press, specialized press, general interest periodicals, etc.

4.h (8) Brochures and advertising copy, text from govt. publications etc.

Use column 8 if the copying basis contains text from brochures and advertisements from the daily press and periodical press as well as other sources, and text from government publications, official reports, etc.

PRINTED/PUBLISHED ILLUSTRATIONS (INCL. PHOTO OF ART ETC.)

4.i (9) Photo of handicraft

Use column 9 when the copying basis includes photographs of handicrafts such as pottery, weaving, textile printing, metal art/jewellery, glass, leather, wood, etc.

4.j (10) Visual art

Use column 10 if the copying basis contains photographs of an independent artwork such as a painting, graphic work, drawing, sculpture, tapestry, etc.

4.k (11) Technical drawings/technical illustrations

Use column 11 if the copying basis contains technical drawings, graphical images, diagrams, maps, schematic outlines, cross-section/x-ray pictures, exploded drawings and other directly descriptive drawings, as well as symbols, emblems, etc.

4.l (12) Drawn and painted illustrations of non-technical character

Use column 12 when the copying basis is illustrated by drawn and painted illustrations, pictures, etc., which are not technical drawings and visualise or support the text in a freer way.

PHOTO (PRINTED/PUBLISHED)

4.m (13) Photograph

Use column 13 if the copying basis includes photographs in which the object per se is not protected by copyright, e.g. photographs of nature, buildings or people (not of visual art or handicrafts).

MUSICAL NOTES

4.n (14) Music

Use column 14 if the copying basis contains music. When it comes to copying bases containing both music and text in such a way that the text is interspersed with the music, see the comment under 4 b.

FIGURES

4.o (15) Table

Use 15 if the copying basis is a tabular presentation of figures. Tabular presentations of text will usually belong under subsection 4 b Poems/lyrics or 4d Educational, non-fiction text, e.g. text from catalogues etc.

TOTAL Total of number of pages under subsections a – o are added here. The total must always be a whole number.

NUMBER OF COMPOSITE PAGES

A page is a composite when the original page contains several elements such as illustration, photographs, typographic arrangements, graphical presentations etc.
State how many pages this source is compiled of.

APPENDIX – NATIONAL CODES

Name	no.	national code	Name	no.	national code	Name	no.	national code
Afghanistan	004	AF	Kazakhstan	398	KZ	Uganda	800	UG
Algeria	008	AL	Kenya	404	KE	Ukraine	804	UA
Angola	024	AO	China	156	CN	Hungary	348	HU
Argentina	032	AR	Croatia	191	HR	USA	840	US
Armenia	051	AR				Uruguay	858	UY
Australia	036	AU	Latvia	428	LV	Uzbekistan	860	UZ
Azerbaijan	031	AZ	Lebanon	422	LB			
			Lithuania	440	LT	Venezuela	862	VE
Bangladesh	050	BD	Luxembourg	442	LU			
Belgium	056	BE				Zaire	180	ZR
Bolivia	068	BO	Malawi	454	MW	Zambia	894	ZM
Bosnia-Herzegovina	070	BA	Malaysia	458	MY	Zimbabwe	716	ZW
Botswana	072	BW	Malta	470	MT			
Brazil	076	BR	Morocco	504	MA	Austria	040	AU
Bulgaria	100	BG	Mexico	484	MX			
			Mozambique	508	MZ	Other country	900	ZZA
Canada	124	CA				Unknown country	999	ZZZ
			Namibia	520	NA			
Chile	152	CH	Netherlands	528	NL			
Colombia	170	CO	New Zealand	554	NZ			
Costa Rica	188	CR						
Cuba	192	CU	Nigeria	566	NG			
			Norway	578	NO			
Denmark	208	DK						
			Pakistan	586	PK			
Egypt	818	EG	Peru	604	PE			
Estonia	233	EE	Poland	616	PL			
			Portugal	620	PT			
Philippines	608	PH						
Finland	246	FI	Romania	642	RO			
France	250	FR	Russia	643	RU			
Faroe Islands	238	FO						
			Saudi Arabia	682	SA			
Gambia	270	GM	Singapore	702	SG			
Georgia	268	GE	Slovakia	703	SK			
Ghana	288	GH	Slovenia	705	SI			
Greenland	304		Spain	724	ES			
			Sri Lanka	144	LK			
Greece	300	GR	United Kingdom	826	GB			
Hong Kong	344	HK	Sweden	756	SE			
			Switzerland	756	SZ			
Iceland	352	IS	Syria	760	SY			
India	356	IN	South Africa	710	ZA			
Indonesia	360	ID	South Korea	410	KR			
Iraq	368	IQ						
Ireland	372	IE	Tanzania	834	TZ			
Iran	364	IR	Thailand	764	TH			
Israel	376	IL	Czech Republic	203	CZ			
Italy	380	IT	Turkey	792	TR			
			Germany	276	DE			
Jamaica	388	JM						
Japan	392	JP						
Jordan	400	JO						



Appendix G

Implementation of the various rounds in the survey

The memorandum gives a detailed account of the implementation of the survey in the various collection rounds. The presentation is based on reports written after each of the concluded rounds. They describe how the data collection progressed, and the adjustments that were made in the survey process along the way. The percentages given are the percentages of the selected students and staff who actually took part in the survey. Those who no longer study or work at the educational institution are also consequently included. Given the desire to have a sufficient number of respondents, this can be a fruitful way of presenting the data. It is nevertheless not a normal way of calculating response rates. Before the response rate is calculated, those who are not a part of the population one wishes to make generalizations about are usually omitted. In this case this will mainly apply to those who are no longer associated with the institution.

Collection round 1

Facilitation

During week 50 1996 a letter was sent to all the educational institutions explaining the survey and pointing out the type of assistance necessary to be able to run the local recording offices. Each of the institutions was asked to appoint a contact person and in most cases this was done. This was not, however, decided in time at some institutions, and as a result we operated with more random contact persons in the early part of the survey.

Rooms were booked at all the institutions during weeks 1 and 2 in 1997. Due to the pressure of time, the rooms were ordered at the same time as the sample was drawn, making it impossible to fit the location of the recording offices to the student population drawn at the each institution .

Mailing and reminders

During week 3 a letter about the survey and an overview of the recording offices were sent to the selected students. A sign-up form and return envelope were enclosed. An information letter was sent to the staff that same week.

During week 4 a reminder was sent to the students. It was sent to all regardless of the fact that some had returned the sign-up form saying that they did not wish to participate.

During week 5 all interviewers attended a day-long course at Statistics Norway's offices. There were too many participants at the course to permit each interviewer to receive the training and guidance that was desirable. Some of the interviewers subsequently said they were uncertain about coding the material. The interviewers used during the pilot survey were more certain of how to go about their tasks.

During weeks 5 and 6 the interviewers called the staff drawn for the survey and set up appointments for recording their copies. In some cases the interviewers called too late, which meant that a number of staff had not collected material during the first few days of the collection period (weeks 5 and 6). In some cases this was resolved by reconstructing the material.

Recruiting students

Information on the students who had returned the sign-up form was recorded daily. Their semester address and phone number were linked to the sample file so that the interviewer had the most correct possible information about the students.

We received altogether 144 replies on the forms we sent to the students. Eighty-seven were willing to participate, while 52 said no. Four replied that they were working and were thus not candidates for the survey, while one student gave another reason for not wanting to participate.

Three hundred and two students did not answer the letter. When recording started in week 7 the interviewers consequently had insufficient information about many of the students, making it difficult to contact them.

Administration of the recording offices

The interviewers were posted at the recording office during week 7. It turned out that Statistics Norway had not done a satisfactory job of booking the rooms, causing practical problems for many of the interviewers in the beginning. In addition, some of the interview staff had to be reassigned due to illness.

It turned out that the opening hours at the recording offices were too long in relation to the number of students we were able to recruit.

Several of the interviewers took the initiative to check the list of interview subjects given to them. In many cases it turned out that a high percentage of the students no longer attended the institution. Moreover, there also seemed to be an overrepresentation of third-year students.

Survey turnout

Table 7: Response rate of students and staff, round 1

	number drawn for survey	identifiable deletions	number who were candidates for the survey*	number that participated	response rate
students	446	162	284	74	26.1
staff	144	8	136	82	60.3

* We have subtracted the respondents we know were no longer employed at/attending the school at the time they were candidates for the survey.

Experiences from round 1

The situation concerning the student register and student addresses turned out to be more problematic than we expected in advance. The same was true of the students' willingness to participate. The registers at Statistics Norway's disposal were not sufficiently updated to secure an adequate number of student participants. This was remedied by switching to the State Educational Loan Fund's student register. There was also a need to make firmer agreements with the students than those planned during round 1.

Collection round 2

Facilitation

We experienced considerable problems with our routines concerning contact persons at the educational institutions. The administration of the project was complicated by the fact that we did not have contact persons at all institutions. NTNU and Bergen College were particularly problematic. Statistics Norway

has no authority to impose administrative tasks on the institutions. We expected the institutions to have a positive attitude towards the survey, which, unfortunately, was not always the case. The problems this created for the survey were discussed with the commissioners of the survey at a meeting on 7 April. A letter was written by the Ministry of Education, Research and Church Affairs to the individual institution reminding them of their obligations in connection with the survey.

During round 2 we used in most cases the same rooms as during round 1. At some institutions, the rooms we had been promised were being used by others, so the interviewer used a different room than the one the student had been told to go to. Moreover, in some cases the procedures for signposting the rooms were unfortunately not followed.

We opened two new recording offices during the second collection round. In cases where the students were unable to meet with the interviewer and there was relatively little to code, we allowed phone interviews. This was of course not as precise as a face-to-face meeting since the responsibility for counting the pages and classifying the material was left up to the interview subject.

Once again, the opening hours of the recording offices during this round proved to be too long in relation to the number of students we managed to recruit. This was mainly because the first letter to the interview subjects in round 2 went out *before* we could evaluate the implementation of round 1. We told the interviewers to try to schedule all the interviews with students on the same day to save office hours. This proved difficult in some cases because the interviewer was unable to reach all of his/her interview subjects by phone, so it happened that some students would turn up after the interviewer had closed the recording office.

Mailing and reminders

An information letter containing an overview of the recording offices was sent to the students during week 6. An individual sign-up form and reply envelope were enclosed. A similar information letter was sent to staff that same week.

A reminder card was sent to the students during week 8. The reminder card was sent to all, including those students who had returned the sign-up form with a negative answer.

Telephone appointments with both students and employees

A new practice in this round was that we manually looked up the phone numbers of the student's reference person. This list was matched against the information given by the students on the sign-up form. Students are otherwise a difficult group to track down. Pursuant to the National Registration Act, unmarried students who move away to attend school do not report their change of address to the Population Registry and are therefore regarded as residing at the address of their parents or next of kin.

During weeks 9, 10 and 11 the interviewers called the students and staff drawn for the survey to schedule a time and place for recording the copies. It became evident that some of the interviewers still set up appointments too late, so that in some cases the interview subject had forgotten to collect material.

Recruiting of students

Information the students had supplied on the sign-up form was checked and recorded daily during weeks 7 and 8. The new semester address and phone number was linked to the sample file, so that the interviewers could be sent the most correct information about the students.

We received altogether 106 replies on the information forms from the students. Sixty-one wanted to participate, while 42 answered in the negative and three were living abroad, making them ineligible for the survey.

Three hundred and forty students did not answer the letter. Our experience from the first and second rounds was that this type of sign-up did not secure a sufficiently large sample.

Administration of the recording offices

The interviewers were posted at the recording offices during week 12. As far as possible, the interviewers were placed at the same institutions as during the previous collection round. Assigning the same institutions to the interviewers gave them an opportunity to get to know the contact persons and premises, making it easier for them to deal with any practical problems that might occur.

Survey turnout

Table 8: Response rate of students and staff, round 2

	number drawn for survey	identifiable deletions	number who are candidates for survey*	number that participated	per cent of those drawn who participated	response rate
students	446	157	289	124	27.8	42.9
staff	144	15	129	85	59.0	65.9

* We have subtracted the respondents we know were no longer employed at/attending the school at the time they were candidates for the survey.

Sample in rounds 1 and 2

The sample was drawn as described in the contract. Altogether 446 students were drawn from Statistics Norway's education register, which at the time of the selection was updated as of spring semester 1996 for the universities and as of autumn semester 1995 for the colleges. Altogether 144 staff were drawn from lists and internal phonebooks provided by the institutions. The samples were drawn and finalized during week 5. It was obvious that the register situation for the students was unsatisfactory. To obtain a more updated register in the subsequent collection rounds we therefore switched to drawing students from the State Educational Loan Fund register. On 16 April, we received the file of the Fund's spring semester 1997 student register, which contained the names of c. 46,000 students. We used the file to draw samples for the remaining collection rounds.

Collection round 3

Changes in the collection process:

Round 3 was carried out *without* the use of student sign-up forms. The lack of response in previous rounds made it necessary to call all the students. No attempt was made to personally contact those students who in talking with Statistics Norway had made it very clear that they did not wish to participate.

Before round 3 took place a letter was sent to the institutions asking them to draft a standard letter to all the staff in the sample. This letter was meant to function as a request from the institution asking its staff to participate in the survey. In each case, the original letter was returned to Statistics Norway, where it was printed and enclosed with the information letter about the survey.

In cooperation with Kopinor, Statistics Norway prepared a brochure explaining the purpose of the survey more fully and otherwise serving as supplementary information to the information letter sent to everyone drawn for the survey.

The text of the information letter was changed, making it clearer what type of material was to be collected. Everyone was told to keep computer printouts. The computer printouts were coded according to instructions from Kopinor. Special coding instructions were also prepared for government publications.

The office hours were shortened. With the exception of the University of Oslo there was only one recording day at each institution.

Sample

The sample in round 3 was drawn from the State Education Loan Fund student register, which contained the names of all students who received financial assistance (loans and/or grants) for spring semester 1997. Due to a delay in receiving the Data Inspectorate's permission to use the register, we did not have the register in our hands until the middle of April. As a result, the recording period for round 3 had to be postponed from week 17 to week 21. Because the student register contains neither the student's address at his/her place of study nor his/her phone number, we had to find the phone numbers manually based on the address of the student's parents. The sample was drawn and finalized during weeks 16 and 17.

Mailing and reminders

Information letters were sent during week 17 to 446 students and 144 staff. Having a phone number link was not a criterion for participation. We nevertheless hoped that those whom we could not contact by phone would come to the stated sites.

Reminders were sent to the students during week 19.

Administration of the recording offices

The interviewers were posted at the recording offices during week 21.

Survey turnout

Table 9: Response rate of students and staff, round 3.

	number drawn for survey	identifiable deletions	number who are candidates for survey*	number that have participated	per cent of those drawn who participated	response rate
students	446	26	420	232	52.0	55.2
staff	144	16	128	82	56.9	64.1

* We have subtracted the respondents we know were no longer employed at/attending the school at the time they were candidates for the survey.

Experiences from round 3

The new student register aided recruitment for the survey. At the same time, we received feedback that the survey had gradually become well known at the institutions. The interviewers also seemed to be more certain about coding and got better at making appointments. Phone calls to Statistics Norway tapered off.

Collection round 4

Changes in the collection process

We sent a letter to the students chosen to participate in this round asking for their help in supplying the phone numbers of students whose phone numbers we were unable to find. We did this because we had had positive experiences with this technique from other surveys. In the letter we asked the student to write down the phone numbers and return the letter in an enclosed reply envelope. This proved successful: we received around 35 phone numbers this way and the information was relayed in each case via e-mail to the interviewer in question.

At a meeting of the steering committee for the survey it was decided that all computer printouts had to be put aside during the coding of the material in round 4. It was also agreed at the meeting that it was desirable to include questions about "number of credits" as part of the background interview. This question was originally in the reply form sent out for rounds 1 and 2, but in abandoning written reminders, we lost this information.

Sample

The sample of students in round 4 was also chosen from the State Educational Loan Fund's student register. The sample was finalized in week 19. Staff were chosen in the same way as before.

Mailing and reminders

An information letter was sent to 446 students and 144 staff during week 20. A reminder card was sent to the students during week 22.

Administration of the recording offices

The interviewers were posted at the recording offices during week 24.

Survey turnout

Table 10: Response rate of students and staff, round 4

	number drawn for survey	identifiable deletions	number who are candidates for survey*	number that have participated	per cent of those drawn who participated	response rate
students	446	32	414	230	51.6	55.6
staff	144	13	131	87	60.4	66.4

* We have subtracted the respondents we know were no longer employed at/attending the school at the time they were candidates for the survey.

Experience from round 4

We had received notice in advance that many students were finished for the spring when the recording of copies during round 4 was to take place. In many cases they had completed their studies several weeks earlier, so that a significant percentage of the students interviewed had not copied anything during that period. By conducting the survey so late in the semester we nevertheless obtained a good measure of the activity level around examination time.

Collection round 5

Staff changes

Solveig Myklestad replaced Johnny Johansen as the person in charge of data processing and Dag Roll-Hansen took over as project manager after Anne Sundvoll.

We had problems with illness and resignations among interviewers during this round. The problems were basically solved by the interviewers and the project manager putting in extra time at the recording offices. Because of the loss of the interviewers the follow-up of the interview subjects was nevertheless not as good as it should have been.

Changes in collection process

Four changes were made in the survey process before round 5.

Firstly, a separate category was established for music students under the classification of subjects. Music students are therefore no longer classified under arts, divinity and aesthetic subjects. This allowed us to separate all music students, not just those studying at the State Academy of Music.

Secondly, administrative staff were put into a special category under the division by field of study. This category is now called "Administrative staff". The reason for the change was that many in this category had difficulty classifying themselves under a certain field of study/programme. This was particularly true of centrally placed administrative staff. The steering committee for the survey assumed that the field the administrative staff members belonged to did not have an impact on how much and what they copied.

Thirdly, we included a question about how many credits the interview subjects planned to take examinations in this semester and had taken examinations in during the previous semester. This was done with the help of the following two questions:

How many credits did you earn via examination last semester?

How many credits are you planning to earn via examination this semester?

Credits turned out to be a little known concept at some schools. This applied to the Oslo National College of the Arts, State Academy of Music, NHH and NTNU. At these institutions we instructed the interviewers wherever possible to estimate credits on the basis of normal study progression in relation to the examinations the student had taken or planned to take.

Fourthly, the interviewers now took copies of computer printouts of material copied by interview subjects from the Internet, local networks/databases, CD-ROMS or other electronic sources, insofar as the interview subject allowed it. As it turned out, it was rarely a problem to obtain permission from the interview subject to make a copy of the material. The interviewer filled out a form in which the source of the printout was specified, and whether all or part of the printout was obtained from this source. The scope of this type of printout was relatively limited, and our impression was that making copies created few problems for the interviewers. It is worth noting that computer printouts were not recorded as copies beginning with round 4. Copies of computer printouts were on the other hand coded as other copied material. We updated the instructions given to the interviewers according to the changes made along the way. The new version also contained a specification of how the subject classifications was to be used. The specification was done because we received feedback from the interviewers that they were occasionally uncertain of how subjects should be classified.

Sample

The sample of students for round 5 was also drawn from the State Educational Loan Fund student register. Forty more students were drawn than during the previous rounds. They were drawn from institutions that had previously had a particularly low turnout of students. Of the 40 students 30 were chosen from the University of Oslo and 10 from BI.

Mailing and reminders

An information letter was sent to 486 students and 144 staff during week 33.

Reminder cards were sent to the students during week 34.

Administration of the recording offices

The interviewers were posted at the recording offices during week 36.

*Survey turnout***Table 11: Response rate of students and staff, round 5**

	number drawn for survey	identifiable deletions	number who are candidates for survey*	number that have participated	per cent of those drawn who participated	response rate
students	486	91	395	211	43.4	53.4
staff	144	15	129	94	65.3	72.9

* *We have subtracted the respondents we know were no longer employed at/attending the school at the time they were candidates for the survey.*

The participation rate of students was lower than during rounds 3 and 4. The main reason for this was that the register we drew from was not updated with the changes in the student population caused by the start of the new school year. We had the same problem in the sixth and seventh collection rounds. Other circumstances also probably negatively influenced the number of participants. Firstly, poor follow-up due to staffing problems in some institutions had an effect. Secondly, we drew more students at institutions where the response rate had been low, thereby drawing the average response rate down. Thirdly, we probably lost some of those who began studying late because the round was conducted relatively early in the new academic year. If the participation rate was calculated on the basis of 446 students, we had attained a participation rate of 47%.

*Collection round 6**Staffing*

We did not have problems with manning at the recording offices during round 6. No one was absent due to illness during this period. We had other interviewers who could step in on short notice in case any of the interviewers were ill.

Mailing and reminders

An information letter was mailed to 486 students and 144 staff during week 39. A reminder was sent to the students during week 40.

Administration of the recording offices

The interviewers were posted at the recording offices during week 42.

*Survey turnout***Table 12: Response rate of students and staff, round 6**

	number drawn for survey	identifiable deletions	number who are candidates for survey*	number that have participated	per cent of those drawn who participated	response rate
students	486	86	400	202	41.6	50.5
staff	144	15	129	86	59.7	66.7

* *We have subtracted the respondents we know were no longer employed at/attending the school at the time they were candidates for the survey.*

At a meeting of the steering committee it was decided that the participation rate should be calculated on the basis of the original target for the number of students and not the increased sample. The reason was that one would then have a better description of how the target of getting a certain number of students to participate was achieved. The participation rate for students increases to 45% if one use this method of calculation.

Collection round 7

Mailing and reminders

An information letter was mailed to 486 students and 144 staff during week 46.
A reminder card was sent to the students during week 47.

Administration of the recording offices

The interviewers were posted at the recording offices during week 49.

Survey turnout

Table 13: Response rate of students and staff, round 7

	number drawn for survey	identifi- able deletions	number who are candidates for survey*	number that have participated	per cent of those drawn who partici- pated	response rate
students	486	90	396	231	47.5	58.3
staff	144	12	132	84	58.3	63.6

* *We have subtracted the respondents we know were no longer employed at/attending the school at the time they were candidates for the survey.*

Above the participation rate is calculated as an actual percentage of the sample drawn. If the participation rate were calculated on the basis of 446 students, it would increase to 52%.

Appendix H

Division for Sample Surveys
Oslo, 1 December 1997
Person in charge: Dag Roll-Hansen
Phone: 22 86 46 7
e-mail: roh@ssb.no

Universities and colleges
participating in the Copying Survey

SURVEY ON COPYING AT UNIVERSITIES AND COLLEGES

Statistics Norway is now conducting a national survey on copying at universities and colleges. The purpose of the survey is to measure the scope of the copying, and what kind of material is copied. The results of the survey will serve as underlying material for negotiations on future copying remuneration to rightsholders. The survey is part of the copying agreement between the universities and colleges and Kopinor. See otherwise the enclosed brochure for a more detailed description of the survey and the legal authority for it.

In connection with the sample survey we need further information about staff, students and copy volume. Further details of the information we would like to have are given in the enclosed memos. The information is necessary to be able to provide as correct as possible estimates of the scope and composition of the copying.

Those providing the information are welcome to contact Dag Roll-Hansen at Statistics Norway on 22 86 46 70 should they have any questions. We would like to know who we can contact at the school concerning this information. Questions about the survey can also be directed to Helge Jagland, senior statistician, Kopinor, on 22 17 94 17. We hope that it is possible to obtain this information as soon as possible, **by 15 January at the latest**. We have sent a copy of this letter to our appointed contact person at the school for his/her information.

Sincerely,

Jørn Y. Leipart
Head of Division

Dag Roll-Hansen
Planner

Enc.:

Orientation on the registration of copy volume
Three different forms for recording copy volume

Orientation on supplementary information about students and staff at the school
Paper list and Excel sheet (for filling out)

Brochure about the Copying Survey



Appendix I

roh, 1 December 1997

To: Universities and colleges taking part in the copying survey
From: Statistics Norway, Division for Sample Surveys

BRIEFING ABOUT COLLECTING INFORMATION FOR THE COPYING SURVEY

Statistics Norway is currently conducting a national survey about copying at universities and colleges. The purpose of the survey is to measure the extent of copying, and which types of material are copied.

The purpose of the enclosed Excel-sheet/paper forms is to collect individual supplementary information about the students chosen for the survey. This is necessary in order to check if our sample is representative, and to make up for any imbalances. We therefore need your help to provide as correct as possible estimates of the scope of the copying. We need the following information about the students:

- 1) whether the students were registered during the semester they were drawn to participate
- 2) if the selected students were registered at the school we furthermore would like to know
 - a) which field of study/programme they were enrolled in during the semester in question
 - b) whether they were full-time or part-time students this semester
 - c) how many credits they have signed up to earn via examination during this semester

In addition, we would like spring semester and autumn semester information from each school about

how many registered students your school had
how many students there are/were in each field of study/programme
the breakdown between full-time and part-time students
total number of credits the students have signed up to earn via examination

We also need information about the number of administrative and academic staff in each programme.

The following categorization of field of study/programmes will be used:

- 1. Arts, divinity and aesthetic subjects** includes history, literature, language, philosophy, religion and certain other fields closely related to understanding art and culture.
- 2. Teacher training** includes pre-school teacher training, general subjects teacher training, technical teacher training, secondary school or lecturer training with certification tests in one's subject, pedagogy, or other subjects in which one studies teaching or learns to be a teacher.
- 3. Commercial and business subjects, social science and law** includes business studies (typical BI subjects), socio-economic subjects (such as economics), psychology, sociology, political science, other social studies, mass communications and law.

4. Natural science and engineering includes engineering, mathematics, physics, chemistry, geography, geology, biology, mechanical engineering, electronics, building and construction, etc.

5. Transport and communication includes navigation studies, maritime mechanical engineering, other maritime studies, postal studies (the Postal Service School etc.), tourism and transport studies.

6. Public health covers nursing, medicine, dentistry, child nursing, care of the mentally handicapped, pharmaceutical studies, therapeutic studies (physiotherapy, occupational therapy etc.), veterinary science, homeopathy, social work

7. Agricultural, forestry and fishery programmes include fisheries technology, horticulture, forestry, and typical agricultural college subjects.

8. Services and military programmes cover hotel and restaurant management, sports and youth leader training, civilian surveillance and security studies, military studies and other services.

9. Music covers all instrumental and voice studies.

It is enough to write the number of the field of study/programme in the column in which you are asked to give the field of study. If you wish, you may of course state the field of study in another way.

The information can either be given on the enclosed Excel file or paper form. We hope it is possible for you to respond as soon as possible and **no later than 15 January**. Contact Dag Roll-Hansen at Statistics Norway on 22 86 46 70 if you have any questions.

Appendix J

roh, 01 December 1997

To: Universities and colleges participating in the Copying Survey

From: Statistics Norway, Division for Sample Surveys

RE: THE COLLECTION OF COPY VOLUME FOR THE COPYING SURVEY AT UNIVERSITIES AND COLLEGES

Statistics Norway is now conducting a national survey on copying at universities and colleges. The aim of the survey is to measure the scope of the copying, and what kind of material is copied.

The purpose of the enclosed forms is to gather information on how many copies are made at the school over the course of the past year. We are interested in the total number of copies made on all of the school's copiers. This includes all machines available to students and/or staff, as well as in-house printshops, repro centres and external printing businesses. We furthermore want information about who owns the machines, who their main users are and the field of study/programme of the users. Please read the instructions on the forms for more details about the type of information we are seeking.

We are interested in finding out how many copies are made over the course of one year. We ask that reading be taken of the annual volume of the aforementioned copiers and that the enclosed forms be filled out and returned to us. We hope you can return the forms as soon as possible and **no later than 15 January**.

We are aware that it is difficult to take a direct reading of the annual volume on some machines. For these machines we therefore ask you to estimate how many copies have been made over the course of the last 12 months. Contact the project manager at Statistics Norway if you have any questions about this.

Appendix K

Data on copiers

(use separate form for in-house printshops and repro centres)

Copier make and model description	Annual volume number of copied pages	Owner of the machine			Estimate how large a percentage of the copying is done by			Location
		insti- tution	other	staff	students	don't know (mark X)	institute, building, room number	

Educational institution/faculty/institute/department:.....

Programme:.....

Name of person filling in form:.....

Date:

Phone:

Fax:

E-mail:

Directions for filling in the form

On this form we ask you to give us data about all copiers in use at the institution. Absolutely all copiers (large and small) are to be listed. A form is to be filled out for each of the following programmes in existence at the educational institution:

Arts, divinity and aesthetic subjects includes history, literature, language, philosophy, religion and certain other fields closely related to understanding art and culture.

Teacher training includes pre-school teacher training, general subjects teacher training, technical teacher training, secondary school or lecturer training with certification tests in one's subject, pedagogy, or other subjects in which one studies teaching or learns to be a teacher.

Commercial and business subjects, social science and law includes business studies (typical BI subjects), socio-economic subjects (such as economics), psychology, sociology, political science, other social studies, mass communications and law.

Natural science and engineering includes engineering, mathematics, physics, chemistry, geography, geology, biology, mechanical engineering, electronics, building and construction, etc.

Transport and communication includes navigation studies, maritime mechanical engineering, other maritime studies, postal studies (the Postal Service School etc.), tourism and transport studies.

Public health covers nursing, medicine, dentistry, child nursing, care of the mentally handicapped, pharmaceutical studies, therapeutic studies (physiotherapy, occupational therapy etc.), veterinary science, homeopathy, social work

Agricultural, forestry and fishery programmes include fisheries technology, horticulture, forestry, and typical agricultural college subjects.

Services and military programmes cover hotel and restaurant management, sports and youth leader training, civilian surveillance and security studies, military studies and other services.

Music covers all instrumental and voice studies.

We would like the following information:

Copier

List the copiers in use at the institution by make and model description. Use one line for each machine.

Annual volume

State the total number of copies made on the machine over the course of the past year. It is possible as a rule to find the annual volume by looking at the readings of the machine's counter. You will usually find it in the service book. One way of finding out the annual volume is to read the counter now and give the difference between the number it shows today and the number it showed about one year ago. Another way is to take the difference between

the last reading and a reading made one year earlier. If you do not know how many copies were made over the course of the past year, we ask that you list an estimate for the annual copy volume for the machine.

Owner of the machine

We would like to know here who the owner of the machine is. Mark an "X" to show if the machine is owned by the institution or by others than the institution. A typical example of a copier owned by others than the institution is when a copier supplier has placed a machine at the institution.

Users of the machine

We want to know to what degree students or staff are making copies on the machine. Try to estimate the percentage of copies made by students and how many copies the students make. If it is not possible to say anything about this, put an "X" under "don't know".

Location of the machine

Here we would like a description of where the copier is so that we can identify it.

If there are not enough copies you can call to have more sent or make copies of a blank form. You should also contact us if you have any uncertainties about how to fill out the form. The contact person at Statistics Norway is Dag Roll-Hansen, tel. 22 86 46 70.

The deadline for returning forms is 15 January 1998.

Data on in-house printshops and repro centres

Copier/printing machine	Annual volume	Owner of the machine		Location
make and model designation	number of copied pages	insti- tution	other	(address, building, room number)

Copying or printing jobs for external users

Copier/printing machine	Annual volume	Owner of the machine		Location
make and model designation	number of copied pages	insti- tution	other	(address, building, room number)

Mark an "X" in the box if the institution does not have an in-house printshop or repro centre:

School/faculty/institute/department:.....

Programme:.....

Name of person filling out form:.....

Date:

Phone:

Fax:

E-mail:

Instructions for filling in the form

On this form you are to list all copiers/printing machines found in in-house printshops and repro centres at the institution.

If the institution does not have an in-house printshop or repro centre, state this at the bottom of the form. The form must also be returned to Statistics Norway in this case.

Fill out one form for each field of study/programme if possible. The following categorization of programmes will be used:

Arts, divinity and aesthetic subjects includes history, literature, language, philosophy, religion and certain other fields closely related to understanding art and culture.

Teacher training includes pre-school teacher training, general subjects teacher training, technical teacher training, secondary school or lecturer training with certification tests in one's subject, pedagogy, or other subjects in which one studies teaching or learns to be a teacher.

Commercial and business subjects, social science and law includes business studies (typical BI subjects), socio-economic subjects (such as economics), psychology, sociology, political science, other social studies, mass communications and law.

Natural science and engineering includes engineering, mathematics, physics, chemistry, geography, geology, biology, mechanical engineering, electronics, building and construction, etc.

Transport and communication includes navigation studies, maritime mechanical engineering, other maritime studies, postal studies (the Postal Service School etc.), tourism and transport studies.

Public health covers nursing, medicine, dentistry, child nursing, care of the mentally handicapped, pharmaceutical studies, therapeutic studies (physiotherapy, occupational therapy etc.), veterinary science, homeopathy, social work

Agricultural, forestry and fishery programmes include fisheries technology, horticulture, forestry, and typical agricultural college subjects.

Services and military programmes cover hotel and restaurant management, sports and youth leader training, civilian surveillance and security studies, military studies and other services.

Music covers all instrumental and voice studies.

Copier/printing machine:

Give the make and model designation of every machine in the in-house printshop/repro centre. Use one line for each machine.

Annual volume (annual number of printed pages):

State the total number of copies made on the machine over the course of the past year. If you do not know the volume for the past year, make an estimate. It is possible as a rule to find the annual volume by looking at the readings of the machine's counter. You will usually find them

in the service book. One way of finding out the annual volume is to read the counter now and give the difference between the number it shows today and the number it showed about one year ago. Another way is to take the difference between the last reading and a reading made one year earlier.

Owner of the machine

We would like to know here who the owner of the machine is. Mark an "X" to show if the machine is owned by the institution or by others than the institution. A typical example of a copier owned by others than the institution is when a copier supplier has placed a machine at the institution.

Location of the machine

Here we would like a description of where the copier is so that we can identify it.

If there are not enough copies you can call to have more sent or make copies of a blank form. You should also contact us if you have any uncertainties about how to fill out the form. The contact person at Statistics Norway is Dag Roll-Hansen, tel. 22 86 46 70.

Printing jobs for external users

Please state the scope of any external copying or printing jobs undertaken for external users.

If there are not enough copies you can call to have more sent or make copies of a blank form. You should also contact us if you have any uncertainties about how to fill out the form. The contact person at Statistics Norway is Dag Roll-Hansen, tel. 22 86 46 70.

The deadline for returning forms is 15 January 1998.

**Data on external copying and printing businesses that have
produced compendia, collections of copies etc. for the institution**

Name of copying and printing business	Number of pages printed/copied

Mark an "X" in the box if the institution has not used external copying and
printing businesses for the production of course packs and collections of copies:

School/faculty/institute/division:.....

Programme:.....

Name of person filling out form:.....

Date:

Phone:.....

Fax:.....

E-mail:

Directions for filling in the form

On this form we ask that you give us data on all external copying and printing businesses the institution has used over the course of the past year for the production of compendia and collections of copies.

*State if the institution **does not** use external businesses to produce compendia, collections of copies, etc. The form must be returned to Statistics Norway even if the institution does not have any dealing of this type.*

Fill out the form for each field of study/programme if possible. The following categorization of field of study/programmes will be used:

Arts, divinity and aesthetic subjects includes history, literature, language, philosophy, religion and certain other fields closely related to understanding art and culture.

Teacher training includes pre-school teacher training, general subjects teacher training, technical teacher training, secondary school or lecturer training with certification tests in one's subject, pedagogy, or other subjects in which one studies teaching or learns to be a teacher.

Commercial and business subjects, social science and law includes business studies (typical BI subjects), socio-economic subjects (such as economics), psychology, sociology, political science, other social studies, mass communications and law.

Natural science and engineering includes engineering, mathematics, physics, chemistry, geography, geology, biology, mechanical engineering, electronics, building and construction, etc.

Transport and communication includes navigation studies, maritime mechanical engineering, other maritime studies, postal studies (the Postal Service School etc.), tourism and transport studies.

Public health covers nursing, medicine, dentistry, child nursing, care of the mentally handicapped, pharmaceutical studies, therapeutic studies (physiotherapy, occupational therapy etc.), veterinary science, homeopathy, social work

Agricultural, forestry and fishery programmes include fisheries technology, horticulture, forestry, and typical agricultural college subjects.

Services and military programmes cover hotel and restaurant management, sports and youth leader training, civilian surveillance and security studies, military studies and other services.

Music covers all instrumental and voice studies.

If the institution uses external copiers and printers we would like the following information:

Name of the copying or printing business

We would like to know the name of the external businesses. State the name of the copying or printing business or businesses you have used over the course of the last 12 months. Use one line for each name. By copying and printing businesses we mean everything from advanced printing plants to small job printers or copying stores.

Number of pages printed/copied:

We want to know how many pages are printed or copied by external businesses. If it is difficult to give an exact figure, it is desirable that you estimate the volume.

The invoice, order or order confirmation for the printing job will usually state the volume if you do not know what it is. If this is not the case, make an estimate.

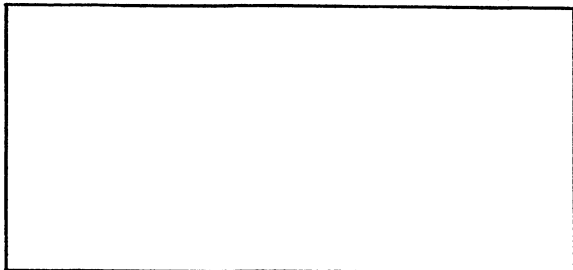
If there are not enough copies you can call to have more sent or make copies of a blank form. You should also contact us if you have any uncertainties about how to fill out the form. The contact person at Statistics Norway is Dag Roll-Hansen, tel. 22 86 46 70.

The deadline for returning forms is 15 January 1998.

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