## Regarding UPED Basismodul, kull 46

# Feedback for a better teaching - A general questionnaire to collect student ratings of teaching in Norwegian

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#### **Abstract**

The aim of the present work was to develop a Norwegian questionnaire for collecting student rating of teaching (SRT) at university level. For this purpose, an established international questionnaire (*Trier Inventar zur Lehrevaluation, TRIL*) was translated into Norwegian and evaluated using peer-evaluation of the questionnaire. The peer evaluators found that the questionnaire assess the important characteristics of teaching quality, is applicable in all academic fields, and provides feedback that can be utilized to improve teaching behaviour. Thus, the here developed Norwegian version of the TRIL appears to be a suitable instrument to obtain SRTs. However, factor-structure and psychometrical properties of the presented translation remain to be evaluated in future studies.

## **Background**

With the formulation and ratification of the University Law (*Lov om universiteter og høyskoler*) in 2005, the Norwegian government set focus on quality assurance measures in higher education. In  $\S1-6$  it not only explicitly demands that an adequate quality assurance system should be implemented by the universities, it also specifies that it should include feedback by students as an integral part of this evaluation system (Kunnskapsdepartementet, 2005). Consequently, Norwegian universities, like the University of Bergen, have set themselves goals that a certain percentage of lectures and seminars needs to be evaluated by students every semester (University of Bergen, 2014).

In general, such student evaluation – henceforth referred to as *student rating of teaching* (SRT)<sup>1</sup> – can be conducted using questionnaires in which statements regarding different aspects of the lecture/lecturer have to be rated. Several such questionnaires have been proposed (e.g., Gollwitzer & Schlotz, 2003; Marsh, 1982; Rindermann & Amelang, 1994), having in common that SRTs are operationalised as a multidimensional construct (see also Cashin, 1995). Differing in the exact number, the suggested dimensions of teaching quality typically include: structure and content of the course (e.g., workload, difficulty, breadth of coverage), adequacy of the presentation (e.g., clarity of course and material, communication skills), interpersonal interactions (e.g., individual rapport, group interaction), or personal gain by the student (e.g., intellectual stimulation by the course). SRTs have been criticized for various reasons (for an overview see e.g., Marsh & Roche, 2000; Aleamoni, 1999). However, meta-analytical and systematic reviews come to the conclusion that SRTs provide statistically reliable and valid information about teaching quality (e.g., Cashin, 1995; Wachtel, 1998; Cohen, 1981). Thus, SRTs are widely seen as a good source for data when evaluating teaching quality (Benton & Cashin, 2010).

In conversation with colleagues at the University of Bergen, and analysing the online available summaries of the evaluation results of previous years (so-called *quality assurance* reports<sup>2</sup>) it came to the author's attention that there is no generally accepted or standardised

<sup>&</sup>lt;sup>1</sup> Following the suggestion by Cashin (1995) the term "student rating" is preferred over "student evaluation" since: "rating implies that we have data which need to be interpreted ... [which] helps to distinguish between the people who provide the information ...and the people who interpret it in combination with other sources of data (evaluators)" (p.2).

<sup>&</sup>lt;sup>2</sup> See: https://quality.app.uib.no/

Norwegian questionnaire to obtain SRTs. Rather, the universities of Oslo<sup>3</sup> and Trondheim<sup>4</sup> provide instructions to the lecturers on how to best create an SRT questionnaire for student feedback, and in this encourage the lecturers to create their own, idiosyncratic instrument. While this approach obviously leaves many degrees of freedom for the individual lecturer to gain feedback on aspects of teaching she/he is really interested in, it also has obvious downsides compared to using a standardised questionnaire. Most lecturers (maybe with exception of those coming from social sciences) have neither obtained formal education for how to create unbiased questionnaire items nor studied the to-be-measured concept, i.e. quality of teaching, in depth and might encounter problems when defining it. This will probably result in questionnaires that are incomplete, unreliable, and do not measure what they are supposed to measure (i.e., low validity). Also, it makes comparisons between lectures/courses impossible.

# **Objective**

The objective of the present work was to suggest a self-report SRT questionnaire in Norwegian which in the future might serve as instrument for reliably obtaining student ratings. In this, the questionnaire was supposed to meet the following criteria: (a) completeness, i.e. it should assess multiple characteristics of teaching quality as derived from research on teaching evaluation (e.g., Benton & Cashin, 2010; Wachtel, 1998); (b) generality, i.e. it should be applicable in all academic fields; (c) psychometrical evaluation, i.e. it should promise high reliability and validity (e.g., Fissini, 1997); (d) economy, i.e. it should be adequate in length and easy to be applied; and (e) practical relevance (usefulness), i.e., provide feedback that could be utilized by the lecturer to improve own teaching behaviour. The latter point was given special emphasis since the author feels that acquiring SRTs (despite of also being an administrational act required by university law) should primarily fulfil the purpose of improving one's own lecturing style.

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<sup>&</sup>lt;sup>3</sup> www.uio.no/for-ansatte/arbeidsstotte/kvalitetssystem/kvalitetssystem-utdanning/verktoykasse/metode/sporreskjema.html (retrieved: 29.20.2014).

<sup>&</sup>lt;sup>4</sup> innsida.ntnu.no/wiki/-/wiki/Norsk/Gjennomføre+studentevaluering+av+emne (retrieved 29.10.2014).

#### **Methodological Approach**

Rather than formulating a new questionnaire, it was decided that the above objective could be best reached by translating an established SRT questionnaire into Norwegian. Thus, the first step was to select a candidate questionnaire (based on pre-evaluation by the author), using the above criteria. The selected questionnaire was then translated into Norwegian, to achieve a preliminary version of a SRT questionnaire. The preliminary version was shared with colleagues for peer-evaluation of the questionnaire, again using the above criteria (with the exception of criterion c, see Discussion) as basis for this evaluation.

# Questionnaire selection based on pre-evaluation

Three established and field-tested questionnaires were considered for translation. The *Students' Evaluation of Educational Quality* questionnaire (SEEQ, published in English; Marsh, 1982), the revised version of the *Heidelberger Inventar zur Lehrveranstaltungs-Evaluation* (HILVE, published in German; Rindermann und Amelang, 1994), and the *Trier Inventar zur Lehrevaluation* (TRIL, published in German; Gollwitzer & Schlotz, 2003).

Referring to the above defined criteria "a" to "e", all three questionnaires were found to assess teaching quality as broad multi-dimensional construct (criterion a, see Objectives), were created as general instrument applicable in all academic fields (criterion b), and were successfully evaluated regarding their psychometric properties, i.e. reliability and validity were found to be sufficiently high (criterion c; see Rindermann, 1996; Marsh, 1982; Gollwitzer et al., 2006). Regarding the economy (criterion d) – here evaluated based on the number of items – the HILVE was with 51 main items the longest, followed by the SEEQ with 41 and the TRIL with 28 main items. Finally, all three included items which offer information about improvement of teaching and thus can be considered useful for behaviour adjustment (criterion e). However, the TRIL (in contrast to the other two) was specifically constructed with the "practical relevance" in mind (cf. Gollwitzer et al., 2006, p.91). Thus, given its higher economy and orientation towards teaching style adjustments the TRIL was selected over the other two instruments.

## Properties of the original TRIL

The TRIL (Gollwitzer & Schlotz, 2003; Gollwitzer et al., 2006), see Appendix A, consists of in total 37 items. Items #1 to #31 (numbering here and below according to the original version assess six different dimensions of teaching quality. Four of these items (items #25 to #28) only need to be answered if student presentations were part of the to-be-evaluated seminar.

For all items a six-step response scale is provided, allowing a rating of the provided statements from "does not apply at all" (original: *trifft überhaupt nicht zu*) to "does fully apply" (*trifft voll und ganz zu*). The six dimensions assessed by the main items are factor-analytically derived and are named as follows: (1) structure and didactics (original title: *Struktur und Didaktik*), (2) inspiration and motivation (*Anregung und Motivation*), (3) lecturer-student interaction (*Interaktion and Kommunikation*), (4) personal gain due to attending (*Persönlicher Gewinn durch die Veranstaltung*), (5) relevance for application (*Anwendungsbezug*), and (6) quality of students' contributions (*Referate*; only if applicable).

In addition to the 28 main items, the questionnaire provides one item asking for a summarizing (overall) evaluation of the lecture/seminar (#32), as well as several items assessing how demanding the lecture was perceived (#29-#31 and #33). It offers two more items, for an open, text-based feedback (#41 and #42) to the lecturer, as well as several items to gather personal characteristics of the student (e.g., missing days, reason for participation in lecture, sex, age).

#### Translation and additional adjustments

Following the general rules of good practise for the translation of a questionnaire from one language to another, the translation was done in three main steps (adapted from Sousa & Rojjanasrirat, 2011). First, the items were forward translated from the original language (German) to the target language (Norwegian, bokmål) by a translator team being native Norwegian and German speakers, and familiar with both cultural contexts (specifically the university system). In the second step, the questionnaire was back-translated by a third translator (bilingual, but mother tongue German) who was blind to the original questionnaire. In the third step, the three versions (original, translated, back-translated) were compared in a team formed by all three translators. Apparent differences in wording, sentence structure, or

semantics between original and back-translated version were discussed in relation to the translated version and consensually amended where necessary.

The general structure of the questionnaire was kept as in original version (see Appendix B), that is, it consists of 28 main items (#01 to#28) which are subsumed under six headlines (following the original's factor structure) and it has a six-step response format. The headlines are called: *Struktur og læremetode, Engasjement og motivering, Interaksjon og kommunikasjon, Personlig utbytte, Praktisk relevans*, and *Studentpresentasjoner*. Also the additional items asking about work demands of the lecture and difficulty of the content were kept, along with them item requiring an overall evaluation of the lecture/course (item #34 in the translation) and the two open response items.

Nevertheless, a couple of structural changes were made during the translation process. Firstly, the questionnaire was adapted to fit the Norwegian academic system. For example, the items assessing reasons for participation (original items #35 to #40) where removed assuming that only compulsory lectures are provided within the bachelor and master system. Also, in the original TRIL the item #33 (demands of lecture) had a different response format than the other questions. To keep the response format constant throughout the questionnaire, the question was split into two questions in the translated version, the first asking whether the demands of the lecture were too high (new item #30), and the second asking whether they were too low (new item #33). Both questions were moved to the section which provided additional questions regarding the lecture (in the original called: *Weitere Fragen zur Veranstaltung*). This section is now called work demands (*Arbeidskrav* in Norwegian).

The version of the questionnaire resulting from the above described translation and adjustment process is considered preliminary. It is henceforth referred to as the TRIL-NO beta version since it – although mostly done – still lacks formal evaluation and validation.

# Peer evaluation of the preliminary questionnaire and adjustment

The TRIL-N -beta version was sent out via e-mail to 30 members of the academic and teaching staff of the University of Bergen, Norway, for peer evaluation. To structure the evaluation the peer reviewers were asked to answer the six questions provided in Table 1. The questions were selected to obtain information regarding the criteria for evaluation of the questionnaire as presented in the Objectives section; namely completeness (a), generality (b),

economy (d), and practical relevance (e). Criteron (c), psychometrical evaluation, could obviously not be assessed by peer evaluation and awaits future testing (see also discussion section). A descriptive analysis of the obtained feedback was conducted in order to confirm the pre-evaluation and derive ideas for improvement of the beta version (see Results and Discussion section).

Table 1. Questions for peer-evaluation of the TRIL-NO beta version.

	Question	Criterion	Answer format
1	Does the questionnaire ask for all aspects you consider relevant for good teaching?	completeness	Yes/No; if "no" specification
2	Is the length of the questionnaire appropriate?	economy	Yes/No; if "no" specification
3	Do you believe that the information collected with this questionnaire is useful for reflecting about/improving own teaching behaviour?	practical relevance (usefulness)	Yes/No
4	Is the questionnaire applicable irrespective of the academic field the lecture/seminar is taught in?	generality	Yes/No
5	Would you consider using the questionnaire for student evaluation of your lecture/seminar?	other	Yes/No
6	Do you have additional comments/suggestions for improving the instrument? (incl. suggestions for better formulations)	other	Open answer format

### **Results**

Of the 30 individuals contacted for peer evaluation 14 (46.6%) provided feedback regarding the questionnaire.

Question 1 (completeness) was answered by all but one individual with *yes* (13 out of 14 responses, i.e. 92.9%). The person not agreeing specified that information about the appropriateness of the course literature and about the exams were missing.

Question 2 (length) was by 7 out of 14 answered with *yes* so that 50% considered the length of the questionnaire appropriate. Four responders (28.6%) answered with *no*, specifying that the questionnaire was too long. The remaining three responders expressed that the questionnaire would be too long for the evaluation of a single lecture, but of good length for a lecture series/course.

Question 3 (practical relevance) was answered with *yes* by 12 out of the 14 responders (85.7%), while the remaining two did not answer the question. Likewise, question 4 (generality) had 12 *yes* answers, and two missing responses

Finally, in response to question 5 12 out of the 14 (85.7%) of the individuals would consider using the questionnaire. One person did not provide an answer to this question. The one person answering *no* specified that the TRIL-NO was too long, and that it was thus preferred to use a shorter, already used idiosyncratic questionnaire.

Several suggestions for improvements were made in response to question 6. Besides minor reformulations, it was suggested that: there should be space under each block of questions for open feedback (2 individuals). For item 34 (overall evaluation), it was suggested to split it into two items in order to get information about the overall evaluation of the topic and of the lecture, separately (1 person). And it was suggested to add questions about the quality of course literature and exams (1 person). Finally, it was suggested to remove the personal information questions since these might make it possible to identify the person who gave the feedback and endanger anonymity (1 person).

## **Discussion**

The overall peer evaluation of the Norwegian translation of the TRIL questionnaire was positive, as e.g. reflected by that the vast majority of the peers would consider using the questionnaire to obtain SRT. Referring to the criteria set in the Objectives section, most peer evaluators agreed that the questionnaire is complete in assessing the construct of teaching quality in all its facets (completeness). It was consistently evaluated to be applicable in all academic fields (generality), and was perceived to provide feedback which can be utilised to improve teaching (practical relevance).

However, considering the economy of the TRIL, the evaluation was mixed, in as much as it was perceived as being too long (50% of the evaluators). However, it was also pointed out frequently that it was too long when evaluating a single lecture but would be appropriate when a course or lecture series was to be evaluated. Even considering the TRIL to be an instrument for SRTs on a course rather than a single lecture level, it would still be 28.6% of the evaluators seeing it as being too long, indicating that a shortening of the TRIL might be advised. Nevertheless, any shortening attempt needs to consider that the questionnaire in its evaluated form was considered both complete and practically relevant. Both criteria would likely be affected by reducing the number of items leaving a trade-off situation between economy on one side and completeness and practical relevance on the other side. Also, given that the original TRIL was developed under factor-analytical consideration (Gollwitzer & Schlotz, 2003), and also removing redundant items, it is difficult to see any immediate potential for a further reduction in the number of items (given that the same factor structure holds for the Norwegian version). A possible solution for this dilemma was suggested by one of the peer evaluators. The six dimensions, and the items assessing these dimensions, could be considered as "modules" within the TRIL. This would allow to only use a selection of these modules at a time, which then could be varied between courses/semesters to get a comprehensive SRT evaluation by combining the such obtained results.

The psychometrical characteristics (criterion c) of the present Norwegian translation of the TRIL have not been assessed here. And, although following the good practise for such a translation, it is not possible to assume that the translated questionnaire shares validity and reliability of the original instrument. Thus, the good psychometrical properties of the original questionnaire (Gollwitzer & Schlotz, 2003; Gollwitzer et al., 2006), have to be confirmed in future studies. Stability (i.e., short-time re-test reliability) studies and validation against external criteria (Fissini, 1997), such as experts/peer ratings of teaching need to be conducted (for suggestions of approaches, see e.g., Benton & Cashin, 2010; Cashin, 1995). However, the here achieved positive evaluation of the translation with respect to completeness at least indicates a certain level of face validity of the used items with respect to the concept of teaching quality. Despite this lack of information about the translation's psychometrical characteristics, given that the original questionnaire shows good psychometric properties, it appears likely that the psychometric quality of the TRIL-NO is higher than quality of most idiosyncratically created questionnaires which are currently in use.

#### Post-evaluation amendments

Based on the peer-evaluation of the beta version of the TRIL-NO, a new version for use and final/statistical evaluation was created (see Appendix C). Some minor formulation issues were corrected, e.g. changing the title of the questionnaire as depicted on the top of the form to *Undervisningsevaluering*. Also, all items asking personal information about the student were removed to guarantee anonymity also in smaller classes and courses. Although it was suggested by two evaluators to allow for space for open feedback under each group of questions, the author feels that the space available with items #35 and #36 should suffice for this purpose.

#### Concluding remarks

It has to be kept in mind that SRT only represent *one source* of data about teaching quality and that a full evaluation of teaching abilities can only be achieved by also considering other sources of information (such as expert ratings, Benton & Cashin, 2010). Nevertheless, SRTs *are* one source information, which can easily be obtained and which can be used to reflect about own teaching behavior. The here developed Norwegian version of the TRIL appears to be one ready-to-use and generally applicable questionnaire which is suitable to obtain SRTs. Nevertheless, the author would like to encourage the users of the questionnaire to share their data with him so that a formal factor-analytical and item evaluation of the questionnaire can take place.

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# **Appendix A: The Trierer Inventars zur Lehrevaluation (TRIL)**

	Trierer Inventar zur Lehrev	aluation	w
	© Arbeitskreis "Lehrevaluation" im Fach Psychologie (Gläßer, E., d W., Schnell, T. & Voß, A.) in Zusammenarbeit mit dem Zentrum fü Evaluation (ZDiag) an der Universität Trier, 2002.		
bitte zu" k	bewerten Sie anhand dieses Fragebogens die von Ihnen besuchte Lehrveran selbständig und möglichst genau. Sie können hierbei zwischen Abstufungen v iis "trifft voll und ganz zu" reichen. <b>Setzen Sie Ihr Kreuz bitte GENAU in das</b> n maschinell erfassen können:	wählen, die von "trifft überhaupt nich	t
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1	Die Lehrziele waren klar und nachvollziehbar.		
2	Der inhaltliche Aufbau der Veranstaltung war den Zielen angemessen.		$\Box$
3	Die gesetzten Lehrziele sind erreicht worden.		
4	Die Dozentin wirkte stets gut vorbereitet.		
5	Sie hat didaktische Hilfsmittel (z.B. Folien, Tafelbilder) sinnvoll eingesetzt.		
6	Sie hat komplizierte Dinge strukturiert erklärt.		
		trifft überhaupt triff nicht zu und ga	ft voll
ANR	EGUNG UND MOTIVATION	ment zu und gal	niz zu
7	Die Dozentin wirkte in der Veranstaltung engagiert.		
8	Sie hat anregend und akustisch verständlich gesprochen.		
9	Sie hat die Veranstaltung interessant gestaltet.		
10	Sie hat mich motiviert, konzentriert bei der Sache zu bleiben.		
11	Die Veranstaltung zog sich schleppend dahin.		

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12	In der Veranstaltung herrschte ein offenes Klima für eigene Beiträge.					
13	Es fanden ausreichend Diskussionen statt.					
14	Die Diskussionen der Studierenden waren produktiv.					
15	Fragen und Beiträge waren stets willkommen.					
16	Die Dozentin hat es verstanden, Diskussionen gut zu leiten.					
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17	Das Thema der Veranstaltung hat mich interessiert.					
18	Die behandelten Themen waren für mich bedeutsam und relevant.					
19	Ich habe in dieser Veranstaltung etwas Sinnvolles und Wichtiges gelernt.					
20	Mein Verständnis für das Studienfach hat sich durch die Veranstaltung weiterentwickelt.					
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21	Es wurden Bezüge zwischen Theorie und Praxis aufgezeigt.					
22	Die Dozentin hat den Stoff an lebensnahen Beispielen veranschaulicht.					
23	Sie hat zur kritischen Auseinandersetzung mit den behandelten Themen angeregt.					
24	Die behandelten Inhalte waren lebensfern.					
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<b>]</b> ;	m Neber	ıfach						
<b>-</b> -	der:							
ines Co	des. Wii	können s	o Ihre Bev utlicher S	wertu S <b>chri</b> f	ingen mite ft Ihren Co	einander verg ode ein:	gleichen, abe	len, bitten wir Sie zusätzlich um die er Ihre Anonymität bleibt trotzdem
				,	(2)	(0)	(-)	
	(2): E (3): E	rster Buch rster Buch	nstabe Ihr nstabe de	es ei s Vo	genen Vo rnamens	rnamens (z Ihrer Mutter	z.B. "S" für S r (z.B. "A" fü	tefan) r Adele)
								Vielen Dank für Ihre Teilnahme
	er:ehseme: schlech n(e) Str studiere ii ii cesen Frances Co	er: Jalehsemester: schlecht: n(e) Studienfact studiere das Fa im Haupti im Neben oder: esen Frageboge nes Codes. Wir Bitte tragen Sie I (1): T (2): E (3): E	studiere das Fach dieser im Hauptfach (Diplo im Nebenfach oder: esen Fragebogen möglichenes Codes. Wir können s Bitte tragen Sie hier in der (1): Tag Ihrer ( (2): Erster Buck (3): Erster Buck	Jahre chsemester: schlecht:	in: Jahre  chsemester:  schlecht:	in Hauptfach (Diplom, Magister, Staatsexar im Nebenfach  clase Codes. Wir können so Ihre Bewertungen mite Bitte tragen Sie hier in deutlicher Schrift Ihren Codes:  (1): Tag Ihrer Geburt (z.B. "04", wenn Schrift Buchstabe Ihres eigenen Vodes) (3): Erster Buchstabe des Vornamens	schlecht: Frau Mann  n(e) Studienfach/-fächer: studiere das Fach dieser Veranstaltung  im Hauptfach (Diplom, Magister, Staatsexamen etc.)  im Nebenfach  oder:   sesen Fragebogen möglicherweise in mehreren Lehrveranstaltunes Codes. Wir können so Ihre Bewertungen miteinander verg Sitte tragen Sie hier in deutlicher Schrift Ihren Code ein:  (1) (2) (3)  (1): Tag Ihrer Geburt (z.B. "04", wenn Sie am 04.05 (2): Erster Buchstabe lhres eigenen Vornamens (z.3): Erster Buchstabe des Vornamens Ihrer Mutter	chsemester: Jahre chsemester:

# Appendix B: Norwegian translation of the TRIL (pre-evaluation; beta version)

	Inventar for undervisnin (TRIL-NO)	gsev	/alu	erir	ıg		
	Vennligst svar på følgende spørsmål for å vu	ırdere	emne	t/for	elesn	ingen	
Info	rmasjon om undervisningsenheten						
Enhe	t:						
Fore	leser:	-					
Stru	ıktur og læremetode	ikke enig					helt enig
(01)	Læringsmålet var klart og tydelig.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(02)	Emne-/forelesningsstrukturen passet til læringsmålet.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	0
(03)	Læringsmålet ble oppnådd.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(04)	Foreleseren virket alltid godt forberedt.	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	0
(05)	Hjelpemidler (f. eks. powerpoint, tavle) ble brukt på en passende måte.	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$	0
(06)	Kompliserte forhold ble grundig forklart.	$\bigcirc$	$\bigcirc$	0	0	$\bigcirc$	$\bigcirc$

	asjement og motivering	ikke enig					helt enig
(08)	Foreleseren virket engasjert.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	Foreleseren snakket klart og tydelig.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(09)	Emnet/forelesningen ble formidlet på en interessant måte.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(10)	Foreleseren motiverte meg til å følge med/holde meg konsentrert.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(11)	Emnet/forelesningen føltes kjedelig og lang.	0	0	0	0	$\bigcirc$	0
		ikke					helt
	eraksjon og kommunikasjon Atmosfæren under emnet/forelesningen	enig					enig
	oppmuntret til deltakelse.	$\cup$	$\cup$	$\cup$	$\cup$	$\cup$	$\cup$
(13)	Det fant sted en tilstrekkelig mengde diskusjoner.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(14)	Studentdiskusjonene var produktive.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(15)	Det var alltid rom for spørsmål og deltakelse.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(16)	Foreleseren ledet diskusjonene på en god måte.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
D		ikke					helt
	sonlig utbytte Jeg synes emnets/forelesningens tema var	enig			$\bigcirc$		enig
	interessant.	$\cup$	$\cup$	$\cup$	$\cup$	$\cup$	$\cup$
1101	Emnene som ble omhandlet var relevante og av betydning for meg.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(18)	Jeg har lært meningsfulle og viktige ting i løpet av	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(18)	Min forståelse for faget har utviklet seg som følge av dette emnet/forelesningen.	$\bigcirc$	$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$
(18)	Jeg har lært meningsfulle og viktige ting i løpet av dette emnet/forelesningen. Min forståelse for faget har utviklet seg som følge	0	0				

(21) (22) (23) (24)	virkelighetsnære eksempler. Foreleseren har inspirert til kritisk tenkning rundt temaene. De omhandlede temaene var virkelighetsfjerne.	ikke enig		0000	0000	0000	helt enig
	lentpresentasjoner	ikke					helt
ICTO ICT.	es ut kun hvis relevant) Presentasjonene var en nyttig del av emnet.	enig					enig
	Presentasjonene var strukturerte og forståelige.	0		0		0	0
(27)	Presentasjonene var interessante.	$\tilde{\bigcirc}$	$\overline{\bigcirc}$	$\tilde{\bigcirc}$	$\overline{\bigcirc}$	$\tilde{\bigcirc}$	$\overline{\bigcirc}$
(28)	Foreleseren supplerte studentpresentasjonene på en god måte.	Ö	$\circ$	$\circ$	$\circ$	$\circ$	Ö
		ikke					helt
	eidskrav	enig					enig
(29)	Jeg har regelmessig forberedt meg til forelesningene (f.eks. ved å lese litteraturen)	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(30)	Arbeidskravet til forelesningen var for høyt.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(31)	Jeg har pleid å gå gjennom forelesningene i etterkant (f.eks. ved medstudent-diskusjoner	0	0	0	0	0	0
(32)	eller å lese litteraturen). Foreleseren var tilgjengelig for spørsmål o.l. også utenom undervisningen.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(33)		$\bigcirc$	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	let vurdering Alt i alt har jeg hatt utbytte av å ta emnet/å gå på forelesningen(e).	ikke enig	0	0	0	0	helt enig

	uttende spørsmål Hva likte du spesielt godt ved emnet/forelesningen(e)?
(36)	Hva likte du minst, og hva kan forbedres?
	onopplysninger Alder:
(38)	Kjønn:
(39)	Studieretning(er):
	Takk for tilbakemeldingen!
	4(4)

# **Appendix C: Norwegian translation of the TRIL (post-evaluation)**

Undervisningsevaluering (TRIL-NO)										
Vennligst svar på følgende spørsmål for å vurdere emnet/forelesningen.  Emne:										
Fore	eser:									
	<b>ktur og læremetode</b> Læringsmålet var klart og tydelig.	ikke enig	0 (	00	helt enig					
(01) (02)	Læringsmålet var klart og tydelig.  Emne-/forelesningsstrukturen passet til læringsmålet.	enig			enig					
(01) (02) (03)	Læringsmålet var klart og tydelig.  Emne-/forelesningsstrukturen passet til	enig	0 0		enig					
(01) (02) (03) (04)	Læringsmålet var klart og tydelig.  Emne-/forelesningsstrukturen passet til læringsmålet.  Læringsmålet ble oppnådd.	enig			enig					

Engasjement og motivering	ikke enig					helt enig
(07) Foreleseren virket engasjert.	0	0	0	0	0	0
(08) Foreleseren snakket klart og tydelig.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(09) Emnet/forelesningen ble formidlet på en interessant måte.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(10) Foreleseren motiverte meg til å følge med	/holde	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
meg konsentrert. (11) Emnet/forelesningen føltes kjedelig og lan	g.	0	0	0	0	0
Interaksjon og kommunikasjon	ikke					helt
(12) Atmosfæren under emnet/forelesningen	enig	O	0	0	0	enig
oppmuntret til deltakelse. (13) Det fant sted en tilstrekkelig mengde diskt	usjoner.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(14) Studentdiskusjonene var produktive.	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(15) Det var alltid rom for spørsmål og deltakel	ise.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(16) Foreleseren ledet diskusjonene på en god	måte.	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Personlig utbytte	ikke enig					helt enig
(17) Jeg synes emnets/forelesningens tema var		O	0	0	0	
(18) Emnene som ble omhandlet var relevante	og av	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
(19) Jeg har lært meningsfulle og viktige ting i l	øpet av	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
	m følge	0	$\bigcirc$	0	0	0
<ul> <li>interessant.</li> <li>(18) Emnene som ble omhandlet var relevante betydning for meg.</li> <li>(19) Jeg har lært meningsfulle og viktige ting i l dette emnet/forelesningen.</li> <li>(20) Min forståelse for faget har utviklet seg so</li> </ul>	og av O	0 0 0	000	000	000	

Praktisk relevans  (21) Forholdet mellom teori og praksis ble tyd  (22) Foreleseren har belyst temaene med  virkelighetsnære eksempler.  (23) Foreleseren har inspirert til kritisk tenkni  temaene.  (24) De omhandlede temaene var virkelighet.	ing rundt	0000	0000	0000	0000	helt enig
Studentpresentasjoner (fylles ut kun hvis relevant) (25) Presentasjonene var en nyttig del av emi (26) Presentasjonene var strukturerte og fors (27) Presentasjonene var interessante. (28) Foreleseren supplerte studentpresentasjen god måte.	ståelige.	0000	0000	0000	0000	helt enig
Arbeidskrav  (29) Jeg har regelmessig forberedt meg til forelesningene (f.eks. ved å lese litteratu (30) Arbeidskravet til forelesningen var for hø (31) Jeg har pleid å gå gjennom forelesninger etterkant (f.eks. ved medstudent-diskusj eller å lese litteraturen).  (32) Foreleseren var tilgjengelig for spørsmål også utenom undervisningen.  (33) Arbeidskravet til forelesningen var for la	ne i coner co.l.		00000	00000	00000	helt enig
Samlet vurdering (34) Alt i alt har jeg hatt utbytte av å ta emne forelesningen(e).	ikk en et/å gå på	0	0	0	0	helt enig

	nde spørsmål ikte du spesielt godt ved emnet/forelesningen(e)?
(36) Hva l	ikte du minst, og hva kan forbedres?
	Takk for tilbakemeldingen!
	4(4)