

# Erfaringer ved bruk av PeerWise

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# PeerWise

PeerWise

Ask | Share | Learn

JOIN  
NOW

Get started!

Follow @peerwise

## Welcome to PeerWise

To log in, select your school / institution from the list below:

Sorry, I don't know about that place. Please type a few characters in the box below and then **select** your institution from the list.

Go »

Just type the first few characters...

PeerWise supports students in the creation, sharing, evaluation and discussion of assessment questions.



### What is PeerWise?

Students use PeerWise to create and to explain their understanding of course related assessment questions, and to answer and discuss questions created by their peers.



### Any subject

PeerWise is used in a wide range of subjects, including Anthropology, Biology, Chemistry, Computer Science, Physics, Population Health, Pharmacology, Medicine, and many more...



### Free and easy to use

PeerWise is free and very easy to use. Students are presented with a simple, intuitive interface and instructors can easily view student content and monitor participation.



### Find out more

Want to get started? View student and instructor guides, watch screencasts of PeerWise in action, and hear what students and instructors think in the [Information about PeerWise](#) section.

# PeerWise



## What is PeerWise?

Students use PeerWise to create and to explain their understanding of course related assessment questions, and to answer and discuss questions created by their peers.





# Emner IVB våren 2017

## Your courses



You are currently a member of the following courses. Simply click on the course name to begin.

### Byggteknikk

 [Manage access](#) |  [Administration](#)



Course ID	Identifiers active	Questions	Answers	Comments	Last correct answer
14173	6 / 6	4	10	0	2:22pm, 06 Jan

### Byggeprosjektet

 [Manage access](#) |  [Administration](#)



Course ID	Identifiers active	Questions	Answers	Comments	Last correct answer
14364	16 / 19	42	417	9	9:19pm, 12 Mar

### Byggesaken

 [Manage access](#) |  [Administration](#)



Course ID	Identifiers active	Questions	Answers	Comments	Last correct answer
14400	21 / 22	62	1117	18	1:07am, 27 Feb

### VA teknikk for ingeniører

 [Manage access](#) |  [Administration](#)



Course ID	Identifiers active	Questions	Answers	Comments	Last correct answer
14430	0 / 1	0	0	0	---

### Geo3141-2017

 [Manage access](#) |  [Administration](#)



Course ID	Identifiers active	Questions	Answers	Comments	Last correct answer
14434	19 / 30	19	247	5	12:12pm, 25 Jan

### Entrepriserett

 [Manage access](#) |  [Administration](#)

Course ID	Identifiers active	Questions	Answers	Comments	Last correct answer
14991	9 / 11	30	106	3	8:08pm, 29 Apr

### GEO1271 Geografisk datafangst 1

 [Manage access](#) |  [Administration](#)

Course ID	Identifiers active	Questions	Answers	Comments	Last correct answer
15032	0 / 1	1	0	0	---

### Write question

Write the main text of the question below. Make sure the question is clear and unambiguous, and use language which is professional. Feel free to format the text of your question using the formatting options.

*Her skriver studentene inn sitt spørsmål*

### Alternatives

Write up to five alternative answers for the question you have written above. Make sure each alternative is distinct, and of course, you must ensure that exactly one of the alternatives is the correct answer to your question. You may choose to define fewer than five alternatives (by simply leaving

You must indicate which of the alternatives is the correct answer to your question by selecting the letter to the left of the alternative.

A  
Select

B  
Select

C  
Select

D  
Select

E  
Select

*Her angir studentene svaralternativene, og  
hvilket som er rett*

### Explanation

You should provide an explanation for your answer. This explanation will only be shown to people after they have selected what they think is the answer to your question, and may help to explain to them why the alternative you have suggested is indeed the correct answer.

*Her skriver studentene begrunnelse på rett svar*

# Eksempel på spørsmål

This question has been answered by 4 people and has an average rating of 3.67 (based on 3 ratings)

Etter at Byggholddommen var oppe i høyesterett ble det dannet ett prinsipp som heter klarhetsregelen. hva går dette prinsippet ut på?

## Alternatives

The contributor suggests C is the correct option

OPTION	ALTERNATIVE	FIRST ANSWERS	CONFIRMED ANSWERS
A	Uklarheter i konkurransegrunnlaget skal tolkes på en så objektiv måte som mulig. Hvis dette fører til uklarheter i konkurransegrunnlaget skal tilbyder gi ett så konkret tilbud som de klarer.	<div><div></div></div> 1 (25.00%)	<div><div></div></div> 0
B	Ufullstendigheter og feil i tilbudet kan entreprenøren få rette opp, hvis byggherre tillater dette. I slike situasjoner må byggherre sende ut informasjon til alle tilbydere om at en konkurrent har levert ufullstendig eller feil i sitt tilbud. oppklarende fakta må fremlegges og alle entreprenører får muligheten til å endre sitt tilbud på lik linje som tilbyderen som fikk muligheten til å rette opp sin feil.	<div><div></div></div> 0 (0.00%)	<div><div></div></div> 0
C	Feil, ufullstendigheter eller uklarheter i konkurransegrunnlaget skal tolkes mot oppdragsgiver. Tilsvarende tilbudene skal tolkes mot tilbyder.	<div><div></div></div> 3 (75.00%)	<div><div></div></div> 0

## Explanation

The following explanation has been provided relating to this question:

Klarhetsregelen går ut på at feil, ufullstendigheter eller uklarheter i konkurransegrunnlaget skal tolkes mot oppdragsgiver. Feil, ufullstendigheter og uklarheter i tilbudene skal tolkes mot tilbyder. Denne regelen ble nok i en periode brukt litt bevist av tilbydere, som påberopte seg selv den minste uklarhet i tilbudene som grunnlag for tillegg. Høyesterett klargjorde i Mikadommen regelen noe. Høyesterett presiserte regelen og sa at det kun er de uklarheter som ikke lar seg avklare gjennom en objektiv fortolkning av bestemmelsene i konkurransegrunnlaget som kan danne grunnlag for slike krav. Det at bestemmelsene må tolkes objektivt, innebærer imidlertid ikke at de utelukkende skal tolkes ut fra hva en naturlig språklig forståelse av bestemmelsen tilsier. Bestemmelsens ordlyd må blant annet leses i lys av de formål de skal ivareta, og andre reelle hensyn. I tillegg skal det tas hensyn til systembetraktninger, så som systemet i konkurransegrunnlaget og NS 3420 ol. Til sist skal samtlige kontraktsdokumenter sees i sammenheng. Høyesterett strekker med det uttrykket "objektivt" langt. Etter dette er det uberettiget å anføre uklarheter i konkurransegrunnlaget som grunnlag for tillegg, dersom det ut fra en bred totalvurdering likevel er klart hvordan konkurransegrunnlaget skal forstås.

# Bruksområder

Til å

- **teste** kunnskap og kompetanse (summativ)
- **læringsprosess** (formativ)



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## Select order

The questions are currently being shown **in order of quality rating**. Select one of the following to sort the questions differently.

[Chronological](#) [Quality rating](#) [Most responded](#) [Most commented](#) [Reported as inappropriate](#)

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## 6 students active in this time period

Summary includes: **All questions**

Activity between **Thursday 6th of April 2017 08:36:37 PM** and **Sunday 7th of May 2017 08:09:06 AM**

Display in order of: [Username](#) [Identifier](#) [Questions](#) [Answers](#) [Comments](#) (Currently showing only active students. Instead, [show all students](#))



[Download table to disk](#)

Username (if active)	Identifier	Questions (non-deleted)	Answers (all)	Comments written	View contributions
gunnar	sef05	5	20	1	<a href="#">view</a>
naa72	sef04	5	20	0	<a href="#">view</a>
sef01	sef01	5	19	0	<a href="#">view</a>
sef02	sef02	5	25	0	<a href="#">view</a>
sef07	sef07	5	20	2	<a href="#">view</a>
sef08	sef08	5	2	0	<a href="#">view</a>

### List of publications relating to PeerWise

The list below represents the most recent publications of articles, books, etc relating to PeerWise and its academic use.

#### Refereed Articles and Book Chapters

- [1] [PeerWise: Flexible learning and the contributing student pedagogy](#) (Lenandlar Singh), *In Journal of Innovation in Psychology, Education and Didactics*, volume 19, 2015.
- [2] [Using PeerWise in nursing education - a replicated quantitative descriptive research study](#) (Johanna Rhodes), *In Kai Tiaki Nursing Research*, volume 6, 2015.
- [3] [Implementing PeerWise to engage students in collaborative learning](#) (Stephen McClean), *In Perspectives on Pedagogy and Practice*, 2015.
- [4] [The Impact of Peerwise Approach on the Academic Performance of Medical Students](#) (Farkaad A. Kadir, Reshma M. Ansari, Norhafizah Ab Manan, Mohd Hafiz Ngoo Abdullah, Hamdan Mohd Nor), *In Malaysian Online Journal of Educational Technology*, volume 2, 2015.
- [5] [Enhancing University Student Engagement Using Online Multiple Choice Questions and Answers](#) (D. Biggins, E. Crowley, E. Bolat, M. Dupac, H. Dogan), *In Open Journal of Social Sciences*, volume 3, 2015.
- [6] [Technology enhanced peer learning with PeerWise: Experiences and perceptions from a developing country](#) (Lenandlar Singh), *In Caribbean Teaching Scholar*, volume 4, 2014.
- [7] [An interactive digital platform for preservice secondary English teachers' reading: First iteration findings](#) (Judine Ladbrook), *In Australasian Journal of Educational Technology*, 2014.
- [8] [Student-Generated Content: Enhancing learning through sharing multiple-choice questions](#) (Judy Hardy, Simon P. Bates, Morag M. Casey, Kyle W. Galloway, Ross K. Galloway, Alison E. Kay, Peter Kirsop, Heather A. McQueen), *In International Journal of Science Education*, volume 0, 2014.
- [9] [Doing it for themselves: students creating a high quality peer-learning environment](#) (Kyle W. Galloway, Simon Burns), *In Chem. Educ. Res. Pract.*, 2014.
- [10] [Scaffolding student engagement via online peer learning](#) (M M Casey, S P Bates, K W Galloway, R K Galloway, J A Hardy, A E Kay, P Kirsop, H A McQueen), *In European Journal of Physics*, volume 35, 2014.
- [11] [Assessing the quality of a student-generated question repository](#) (Simon P. Bates, Ross K. Galloway, Jonathan Riise, Danny Homer), *In Phys. Rev. ST Phys. Educ. Res.*, volume 10, 2014.
- [12] [Peerwise provides significant academic benefits to biological science students across diverse learning tasks, but with minimal instructor intervention](#) (H. A. McQueen, C. Shields, D. J. Finnegan, J. Higham, M. W. Simmen), *In Biochemistry and Molecular Biology Education*, 2014.
- [13] [Using PeerWise to Knowledge Build and Consolidate Knowledge in Nursing Education](#) (Johanna Rhodes), *In Southern Institute of Technology Journal of Applied Research*, 2013.
- [14] [Line up, line up: using technology to align and enhance peer learning and assessment in a student centred foundation organic chemistry module](#) (Barry J. Ryan), *In Chem. Educ. Res. Pract.*, 2013. (Reproduced by permission of The Royal Society of Chemistry)
- [15] [Peer Instruction: A Teaching Method to Foster Deep Understanding](#) (Beth Simon, Quintin Cutts), *In Communications of the ACM, ASSOC Computing Machinery*, volume 55, 2012.
- [16] [Uses of Peer Assessment in Database Teaching and Learning](#) (James Paterson, John Wilson, Petra Leimich), *Chapter in Data Security and Security Data 2* (Lachlan MacKinnon, ed.), Springer Berlin / Heidelberg, volume 6121, 2012.

# En erfaring

- *The feedback from students on the use of Peerwise was positive. For most students, it was the first time they had used Peerwise and they reported it was easy to use, beneficial to their learning and that Peerwise had increased their engagement with the unit.*
- *While the majority of students fulfilled the assignment brief to gain the 10 marks possible, some students went much further. In the under-graduate unit, four students answered over 100 questions, one student more than 200 and a single student answered 385 questions during the semester.*
- *The potential concern about poor quality questions was only marginally experienced. If students created poor questions, they were rated as such by fellow students and these questions were then bypassed by students looking for better quality questions.*
- *This supports the view that students are effective judges of question quality and that there is a willingness to accept the judgements of other students on what is a quality question [16]. Where students indicated the wrong answer to a question, feedback from other students encouraged the question creator to revise and correct the question and once led to a very lively seminar debate.*

# Fordeler for ansatte

- Peerwise medfører at studentene i større grad involveres i undervisningen
- Kan brukes til både formativ og summative læring
- Gir mulighet for mindre kontakttid lærer student og medfører større grad av refleksjon uten mer bruk av læretid.
- Setter raskt fokus på områder studentene sliter med faglig
- Lager læringsobjekter som kan gjenbrukes, og eksporteres samt importeres
- Kan brukes i eksamenssammenheng



# Kategorisering av spørsmål

BATES *et al.*

PHYS. REV. ST PHYS. EDUC. RES **10**, 020105 (2014)

TABLE I. Categorization levels and explanations for the cognitive domain of Bloom's taxonomy.

Level	Identifier	Explanation and interpretation
1	Remember	Factual recall, knowledge, trivial "plugging in" of numbers.
2	Understand	Basic understanding, no calculation necessary.
3	Apply	Implement, calculate, or determine. Single topic calculation or exercise involving application of knowledge.
4	Analyze	Typically multistep problem; requires identification of problem-solving strategy before executing.
5	Evaluate	Compare and assess various option possibilities; often qualitative and conceptual questions.
6	Create	Synthesis of ideas and topics from multiple course topics to create significantly challenging problem.

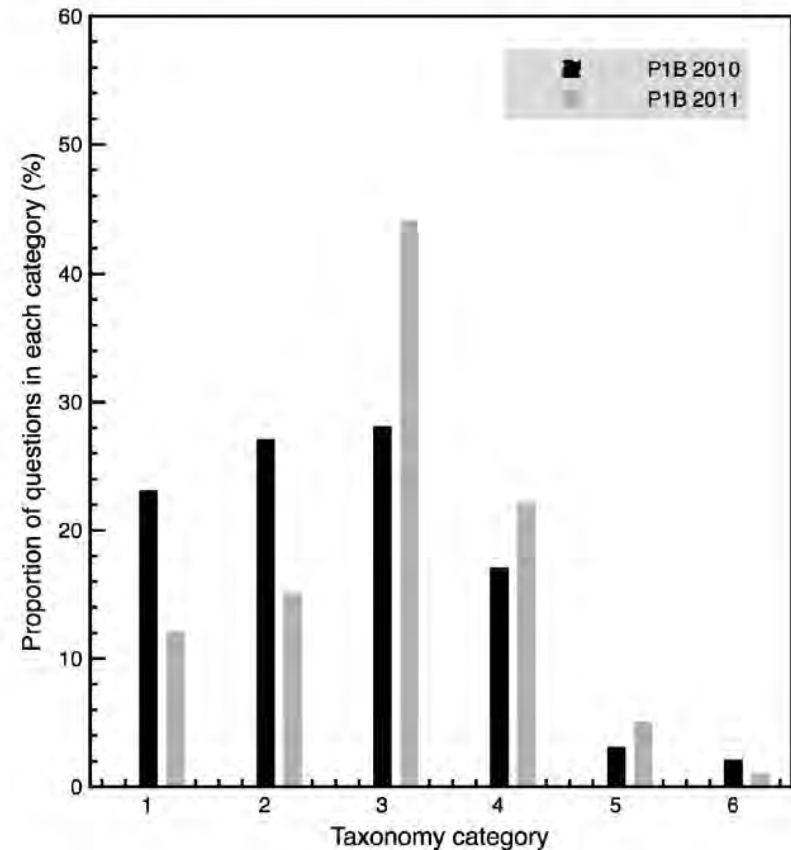
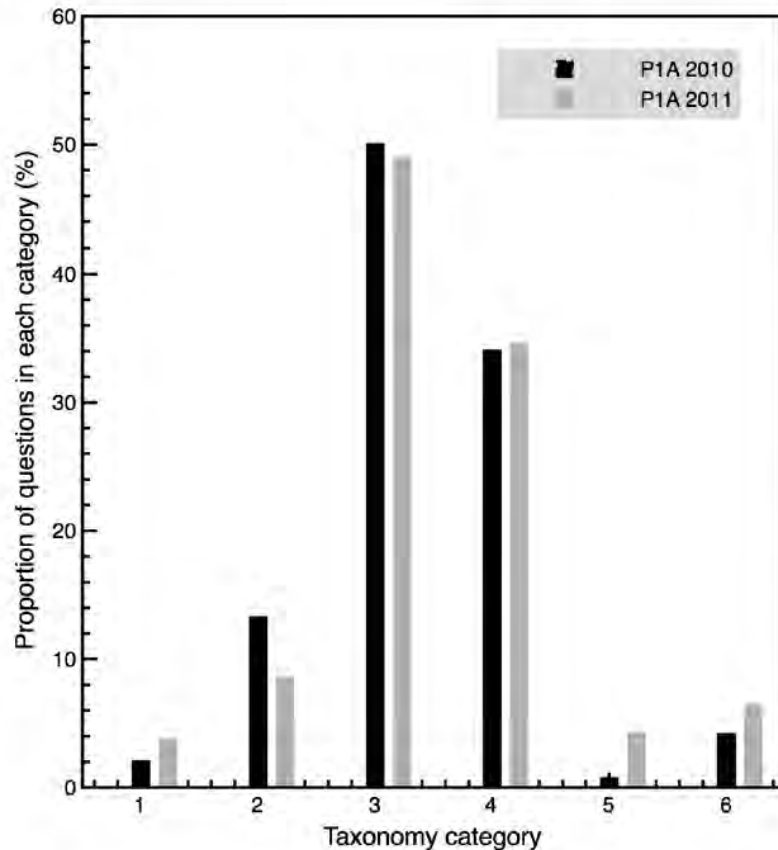
TABLE II. Categorization levels for explanation of solution to questions.

Level	Identifier	Description
0	Missing	No explanation provided or explanation incoherent.
1	Inadequate	Wrong reasoning and/or answer. Solution may be trivial, flippant, or unhelpful.
2	Minimal	Correct answer but with insufficient explanation or justification. Some aspects may be unclear or incorrect.
3	Good	Clear and sufficiently detailed exposition of both correct method and answer.
4	Excellent	Thorough description of relevant physics and solution strategy. Contains remarks on plausibility of answer and/or other distractors. Beyond normal expectations for a correct solution.

# Kategorisering av spørsmål

BATES *et al.*

PHYS. REV. ST PHYS. EDUC. RES **10**, 020105 (2014)



Takk for meg!

## Student badges

As students participate and contribute to PeerWise, they can earn certain badges. This page summarises the number of badges that each students badge types.

Basic	Standard	Elite
A = "Question author"	I = "Helper"	Q = "Good question author"
B = "Question answerer"	J = "Popular question author"	R = "Super scholar"
C = "Star-crossed"	K = "Discussed question author"	S = "Insight"
D = "Comment"	L = "Commentator"	T = "Conversation"
E = "Author-reply"	M = "Critique"	U = "Genius"
F = "Follower"	N = "Rater"	V = "Leader"
G = "Verifier"	O = "Scholar"	W = "Einstein"
H = "I'll be back"	P = "Commitment"	X = "Obsessed"
		Y = "Legend"

The table below summarises the total number of distinct badges each student has earned, the total number of badges (including badges that have

Note, students who have not logged in to this course are **NOT** shown in this table.

## Badges earned in decreasing order of distinct badges



[Download table to disk](#)

Rank	Student	Identifier	Badges earned		
			Distinct badges	Total (includes repetition)	Which badges
1	jan	Jan	6	6	AB---G-----NO---U---
2	stein	Stein	6	6	AB-D--G-----NO-----
3	larspetter	Lars	3	3	AB-----G-----
4	joran	Joran	3	3	AB-----G-----
5	kaare	Kaare	3	3	AB---G-----
6	martin	Martin	2	2	-B---G-----
7	raymond	Raymond	2	2	AB-----
8	haavard	Haavard	2	2	AB-----
9	bjorn	Bjoern	1	1	-B-----
10	fredj	fredj	0	0	-----
11	roger	Roger	0	0	-----
12	kristoffer	Kristoffer	0	0	-----

## Leaderboards

The leaderboard tables seen on the "Course statistics" page

### Highest Reputation scores

Highest Reputation scores of all students in this course

Rank	User	Total Reputation score (components)
1	stein	224 (7q, 35a, 2r)
2	kaare	120 (3q, 12a, 2r)
3	jan	90 (3q, 13a, 1r)
4	joran	66 (8q, 43a, 0r)
5	larspetter	55 (6q, 30a, 0r)

### Highest Answer scores

Highest Answer scores of all students in this course

Rank	User	Total Answering score
1	jan	166
2	joran	141
3	larspetter	124
4	stein	75
5	martin	57

### Top rated questions

Top 5 rated questions for this course  
(rated by at least 5 users)

Rank	User	Question rating
------	------	-----------------

### Most questions answered

Most questions answered  
by a single user

Rank	User	Questions answered
1	stein	18
2	jan	18

# Fordeler for studenter

- Peerwise promotes a self-directed, independent approach to learning where the student takes the initiative to formulate and achieve goals they set for themselves, determine the quality of their own work and the work of others and successfully filter information to satisfy their needs [4].
- Creating and answering questions develops creativity, independence, knowledge and understanding. Question creation forces students to reflect on the unit's learning outcomes.
- Access to a repository of pertinent questions, organised by category, difficulty and quality.
- Empirical testing of students' knowledge [3]. Receive immediate feedback on questions answered. In viewing the responses of their peers, students can self-assess their knowledge level.
- Utilise current technology to access Peerwise (smart phone, tablet or computer). Use Peerwise wherever they are and whenever suits them best (24 hour access).
- Work individually or in groups to create or answer questions.
- Use Peerwise confidentially because their real identity is not displayed. This creates a climate where students can be comfortable and confident in using Peerwise.
- Students with different learning styles, for examples activists, reflectors, theorists and pragmatists [17] will each be able to benefit from the use of Peerwise. Activists are likely to find Peerwise challenging, reflectors have time to consider questions, theorists will enjoy the structure and methodology of Peerwise and pragmatists will perceive how using Peerwise will enable the achievement of their goals.
- Encourages participation through gamification. There are 25 trophies available in Peerwise.
- The evidence presented has been supportive of Peerwise. However there are potential issues:
- While studies have demonstrated the benefits of peer instruction, improving learning twofold when compared to the lecture format [6], some researchers have identified issues of trust. While students have implicit trust in tutors, they are less trusting in the knowledge of their peers. However, students' trust in tutors can lead to acceptance of what is said without any critical assessment, behaviour which acts to suppress deep learning in students [15].
- Peerwise is a standalone application and is not yet integrated with other applications. This means that students have to follow links and log into Peerwise separately from their virtual learning environment (VLE). When new questions are raised, there is no mechanism to alert students.
- Concerns can be raised about the quality of questions created in Peerwise. With no tutor to oversee the questions, will students create simple, poor or incorrect questions?



# Fordeler for ansatte

- Peerwise involves students more in teaching and learning. Peerwise supports student-led learning based on socio-constructivism and co-creation of material where students can either work individually or in groups to create questions.
- Can provide the tutor with both formative and summative assessment feedback.
- Potentially reduced contact time. One of the purposes of test questions is to foster deep learning without incurring additional tutor time [[15](#)].
- Quickly highlight topics or concepts that are troubling students.
- Create reusable learning objects (RLOs) as the questions can be exported and imported.
- Can be used for crowd-sourced exam questions.
- While a small number of unit marks are usually allocated for the use of Peerwise to ensure participation, studies have found that students often exceed the minimum requirement [[3](#)].
- Tutors control access to the repository and the user's roll (supervisor or student).
- No cost implications.
- In many implementations of Peerwise, the responsibility for creating questions rests with students with little tutor involvement after the initial introduction. This means that Peerwise can be highly efficient.