

# Blackboard tests in the course "Human Resources Policy"

## Summary

Bachelor students studying business studies have the possibility of independently reviewing the contents of the course "Human Resources Policy" using Blackboard tests. With this they can evaluate their individual level of knowledge.

The Blackboard homework for "Human resources policy" were developed and implemented in the winter semester of 2017/18. During the semester the participants were provided with self-tests in Blackboard on certain topic areas. Here question types were used that could be automatically evaluated in Blackboard (closed questions). Thereby it was possible for the course participants to receive a comprehensive as well as individual feedback right after they had submitted their answers. Working on the tests is voluntary. The solutions to the questions are discussed in the tutorial.

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## Course

Course title	"Human Resources Policy"
Course type	Lecture and tutorial
Department/Institute	Business Studies, Management
Degree program	Business Studies, Bachelor, (plus elective module for various other subjects)
Lecturer	Prof. Dr. Markus Helfen
No. of participants	approx. 540
Phase	During the entire semester
Duration	One semester
SWS/CP	4 SWS / 6 CP

## Tools

- Blackboard tests

## Realization

**The aim of the project** was the consequent **introduction of online-supported self-learning formats** that backed-up the tutorials and seminars (focus was on: self-learning competencies).

**Background:** In order to support the students with a **changed tutorial and study concept for their independent learning activities**, the lecturers looked for possibilities regarding online-supported practice formats. The cause was the unexpected and short-term increase in the number of participants taking the course (from about 180 registrations in the WS 2016/17 to **over 540 registrations** in WS 2017/18) with at the same time limited human resources (1 part-time professor, 1 part-time academic staff member, 1 student assistant) and funds (for external teaching assignments to accompany the tutored groups).

The new strategy envisaged the following changes:

- The **tutorial** (in the past: a lecture, individual group work during the face-to-face session) has been changed to a **worksheet concept** in which the students individually work on tasks between the actual tutored sessions. Their solutions are documented in Blackboard on solution sheets. The tutorial itself then served the purpose of presenting the solutions and discussing all questions that cropped up here (approx. 60-80 participants). This means that there were several tutored groups.
- The second step was to **set up online test modules** with which the students are able to check their knowledge with questions of various different formats (multiple choice, true-false, matching). Every test sequence contains direct feedback on the individual questions, including the result as well as a short explanation of the right answer (see Illustrations 6 and 7).
- The test series and the worksheets were then incorporated into Blackboard as a self-learning unit that included individual **tasks focusing on open question formats (transfer tasks) in a web training session**. This is made up of the combination worksheet-test-solution sheet for every single lecture unit ("a clear structure").
- The whole thing is complemented by a **discussion forum** in which the students can post open questions on the contents of the course which are then answered in a timely manner. All in all, the online course offers the test module, the worksheets as well as solutions in addition to the traditional provision of the lecture slides.

**Preparation:** The lecturers took part in, amongst others, the CeDiS training course "Blackboard for experts: Tests and surveys". Afterwards they mutually selected fitting question types that could be used and developed individual homework tasks on certain set topic areas.

**Activating the tests:** The homework tasks developed were provided to the course participants on a successive basis. The activation of each individual unit that had to be worked on orientated itself on the contents taught in the tutorials. It always occurred after the same content-related course of a certain week had taken place. If there are any technical or content-related problems, questions or criticism then the students could at any time contact the supervising teaching assistant via e-mail.



Currently there are 8 self-learning tests available that all contain between **10 and 15** questions. Thereby various different types of questions are used (Illustrations 1 - 5).

The screenshot shows a Blackboard course interface. On the left is a navigation menu with links like 'Ankündigungen', 'Syllabus und Literaturhinweise', 'Material Vorlesung', 'Material Übung', 'WebTraining', 'Diskussionsforum', 'Umfrage Klausur', 'Dozent/Dozentin', 'E-Mail-Verteiler', 'Blog', 'Neues im Kurs', 'Wiki', 'Arbeitsgruppen', and 'Kurs-Kalender'. The main content area has a top bar with 'Build Content', 'Assessments', and 'Tools' tabs. Below this, there are three content items:

- Vergütung und Entgeltfindung**: A test unit with a description: 'Herzlich willkommen zur ersten Woche des Webtrainings, das von nun an wöchentlich Ihren Lernfortschritt unterstützen soll. Dieser Test soll Ihnen beim Einüben und Reflektieren der Inhalte zum Thema "Vergütung und Entgeltfindung" dienen. Ihr Ergebnis in diesen Tests spielt keinerlei Rolle für Ihre Modulnote, und dient nur dafür, dass Sie selbst einschätzen können wie gut Sie die Inhalte jedes Themenblocks verstanden haben. Sie können das Training so oft wiederholen wie Sie wollen! Viel Spaß!'. It includes a smiley face icon.
- Essay: Vergütung und Entgeltfindung**: An essay task with a description: 'Hier können Sie das Essayformat für die Klausur üben - inklusive Zeitlimit. Ihre Eingabe wird dabei nicht von uns benotet. Wenn Sie ein Feedback auf Ihr Essay erhalten möchten, können Sie sich aber gerne für die Sprechstunde (Do. 14-15 Uhr bei Philipp Thompson) anmelden. Viel Erfolg!'. It includes a pencil icon.
- Musterlösung Vergütung und Entgeltfindung**: A solution document with a description: 'Enabled: Adaptive Release. Attached Files: Lösungsblatt 5 (329.895 KB)'. It includes a document icon.

Illustration 1: Test unit and exercise in Blackboard


Illustration 2: Testpool WS 2017/18

Build Test		Import Test
Name 	Deployed	Date Last Edited
Diversity Management	WebTraining	January 18, 2018 5:53 PM
Essay: Diversity Management 	WebTraining	January 18, 2018 5:53 PM
Essay: Führung und Partizipation	WebTraining	November 30, 2017 3:45 PM
Essay: Internationale Personalpolitik	WebTraining	February 9, 2018 2:07 PM
Essay: Mitbestimmung und industrielle Beziehungen	WebTraining	January 11, 2018 11:28 AM
Essay: Netzwerke und Mehr-Arbeitgeber-Beschäftigung	WebTraining	February 2, 2018 1:41 PM
Essay: Qualifizierung und Entwicklung	WebTraining	December 19, 2017 10:44 AM
Essay: Reorganisation und Personalanpassung	WebTraining	January 25, 2018 4:44 PM
Essay: Vergütung und Entgeltfindung	WebTraining	November 24, 2017 8:19 PM
Führung und Partizipation	WebTraining	February 5, 2018 10:38 AM
Internationale Personalpolitik	WebTraining	February 13, 2018 6:16 PM
Mitbestimmung und industrielle Beziehungen	WebTraining	February 5, 2018 10:38 AM
Netzwerke und Mehr-Arbeitgeber-Beschäftigung	WebTraining	February 2, 2018 1:34 PM
Qualifizierung und Entwicklung	WebTraining	February 5, 2018 10:38 AM
Reorganisation und Personalanpassung	WebTraining	January 25, 2018 4:38 PM
verguetung test	No	November 24, 2017 10:45 AM
Vergütung und Entgeltfindung	WebTraining	November 24, 2017 8:25 PM

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## QUESTION 10

1 points

 Saved

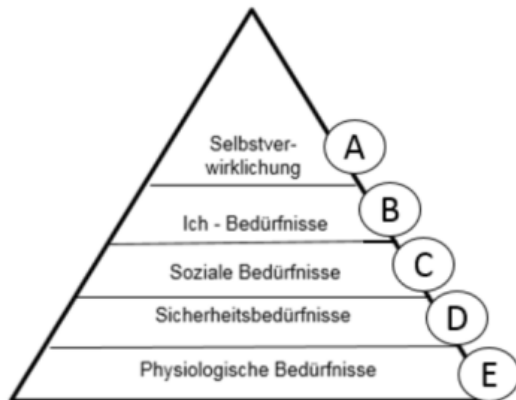
Bei einer geplanten Personalreduzierung sind auch Gerechtigkeitsaspekte zu berücksichtigen. Die Frage danach, welche Arbeitnehmer entlassen werden sollen, ist Teil der \_\_\_\_a)\_\_\_\_, während die Frage danach, wie transparent die Reduzierungspläne und Alternativen hierzu kommuniziert werden, Teil der \_\_\_\_b)\_\_\_\_ ist.

- ☐ a) Verfahrensgerechtigkeit
- ☒ a) Verteilungsgerechtigkeit
- ☒ b) Verfahrensgerechtigkeit
- ☐ b) Verteilungsgerechtigkeit

**Question 4****3 points**

Save Answer

Ordnen Sie die Beispiele der richtigen Stufe der maslowschen Bedürfnispyramide zu:



- ▾ Entfristung der eigenen Stelle

- ▾ Schließen von Freundschaften

- ▾ Persönliches Wachstum durch Weiterbildungen

- ▾ Ausreichend Erholungspausen

- ▾ Lob durch den Vorgesetzten

A. Selbstverwirklichung

B. Ich/Individualbedürfnisse

C. Soziale Bedürfnisse

D. Sicherheitsbedürfnisse

E. Physiologische Bedürfnisse

Illustration 5: Question formats (matching)

Illustration 6: Example feedback test (test question)

# Review Test Submission: Reorganisation und Personalanpassung

User	Prof. Dr. Markus Helfen
Course	Grundlagen der Personalpolitik (V)
Test	Reorganisation und Personalanpassung
Started	2/21/18 12:05 PM
Submitted	2/21/18 12:09 PM
Status	Completed
Attempt Score	8 out of 10 points
Time Elapsed	3 minutes
Results Displayed	All Answers, Submitted Answers, Correct Answers, Feedback, Incorrectly Answered Questions

## Question 1

1 out of 1 points



„Die Personalanpassung bezeichnet die Variation des Arbeits(zeit)volumens.“

Selected Answer: ☒ True

Answers: ☒ True

☐ False

Response *Richtig. Dabei ist die Personalanpassung nicht mit der Personalreduzierung zu verwechseln. Personalanpassung kann sowohl die Reduzierung als auch die Vergrößerung der Belegschaft bedeuten. Reorganisation wiederum bedeutet die strukturelle Umgestaltung eines Unternehmens. In der Praxis gehen Reorganisationen zwar oft mit Personalreduzierungen einher, dies ist aber keine notwendige Folge. (Vgl. Präsentation Folie 4)*

Feedback:

▼ Available Analysis  
Vergütung und Entgeltfindung - February 21, 2018 11:22 AM

### Vergütung und Entgeltfindung

Analysis Last Run February 21, 2018 11:22 AM. Run Item Analysis again to display the latest question data

[Edit Test](#)

Test Summary						Discrimination	Difficulty
15.0	9	53	141	10.67	22 hr 57 min	9 Good Questions 0 Fair Questions 0 Poor Questions 0 Cannot Calculate	3 Easy Questions 6 Medium Questions 0 Hard Questions
Possible Points	Possible Questions	In Progress Attempts	Completed Attempts	Average Score	Average Time		

**Filter Questions**

Select Question Type: All Question Types | Select Discrimination: All Discrimination | Select Difficulty: All Difficulty | [Go](#) [Reset Filter](#)

Question	Question Type	Discrimination	Difficulty	Graded Attempts	Average Score	Std Dev	Std Error
• Wahr/Falsch: „Die Schere zwischen der Vorstandsvergütung und der Vergütung „normaler“ Arbe...	True/False	0.31	91.49%	141	0.92	0.29	0.03
Führungskräftevergütung: Die Agency-Theorie empfiehlt zur Vermeidung von opportunistischem Verhalten d...	True/False	0.31	56.03%	141	0.57	0.5	0.05
Wahr/Falsch: "Anforderungsorientierte Vergütung ist eine Form variabler Vergütung"	True/False	0.38	60.29%	141	0.61	0.5	0.05
Wahr/Falsch: „Die erfolgsorientierte Vergütung ist in Deutschland im Vergleich zu den USA ...	True/False	0.43	74.47%	141	0.75	0.44	0.04
Wahr oder Falsch: „Die anforderungsabhängige Vergütung eignet sich besonders für Arbeit, bei de...	True/False	0.5	56.74%	141	0.57	0.5	0.05
• Wahr/Falsch: „Hohe Gehaltsunterschiede zwischen den Mitarbeitern eines Unternehmens versto...	True/False	0.5	87.24%	141	0.88	0.34	0.03
Ziele der Personalentlohnung: Was sind nach Holtbrügge (2015) die Ziele, die man in der Personalentlohnung ...	Multiple Answer	0.6	59.58%	141	1.79	1.48	0.13

Illustration 8: Blackboard grade center. Evaluation of the individual tests

### Essay: Mitbestimmung und industrielle Beziehungen

Analysis Last Run February 21, 2018 11:26 AM. Run Item Analysis again to display the latest question data

[Edit Test](#)

Test Summary						Discrimination	Difficulty
10.0	1	8	5	Cannot Calculate	00 hr 09 min	0 Good Questions 0 Fair Questions 0 Poor Questions 1 Cannot Calculate	0 Easy Questions 0 Medium Questions 1 Hard Questions
Possible Points	Possible Questions	In Progress Attempts	Completed Attempts	Average Score	Average Time		

**Filter Questions**

Select Question Type: All Question Types | Select Discrimination: All Discrimination | Select Difficulty: All Difficulty | [Go](#) [Reset Filter](#)

Question	Question Type	Discrimination	Difficulty	Graded Attempts	Average Score	Std Dev	Std Error
★ • Schreiben Sie ein kurzes Essay zu folgender Fragestellung: Beschreiben Sie di...	Essay	Cannot Calculate	0.0%	0	0.0	0.0	0.0

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**Legend**

• Review recommended ▲ Questions might have changed after deployment ★ Not all submissions have been graded (QS) Question Set (RB) Random Block

Illustration 9: Blackboard grade center. Evaluation of the individual tests (essay questions)

The **exam** takes place at the **e-examination center** and contains a high percentage of multiple choice questions so that there is no difference (format-wise) between the tests on Blackboard and the actual final exam.

## Experiences made by the lecturer

All in all, the lecturers have had positive experiences with the suitability and usability with the instruments that were implemented. This allows for working directly with the test module in the next upcoming course. On the one hand, the existing test questions can be used again and, on the other hand, further improvements and tweaks can be undertaken. These modifications are easily done as there are extensive evaluation possibilities when it comes to the quality of the questions.

In the current course the online assignments are an "emergency solution" as there is only a limited number of staff resources that can cater for the course. The concept was therefore introduced during the ongoing course. 8 out of 12 units were able to be produced and therefore not all of the content of the lecture is available yet (the focus of the course - human resources policy and fields of activity - has, though, been produced). During the trial phase a lot of advantages were shown that can be used for the improvement of the basic course on a long-term basis. If enough staff and preparation time is available the concept can easily be extended and can, for example, be directly intertwined with the contents of the lecture. The binding character of the test completion can be increased which was voluntary during the test phase. Due to this resources for high-maintenance learning support (question time, group work) and other teaching formats are set free.

From a lecturers' point of view, **the basic concept has become well-established with regard to the content-related structure, didactic realization and with a view to the format**. The concept was, after a very hesitant starting period (the first evaluation of the lecture if such an offer was preferred to the traditional tutorial resulted in only a dozen students selecting the new model over the old), accepted on a very positive note. What helped here was that the web training was promoted during the lecture by regularly placing questions in the format of a direct survey (<http://invote.de/>) in order to introduce the students to the online format. What was also important was that the test units were closely oriented to the lectures taking place. At the same time, the online tests allowed the students to test their knowledge during the preparatory phase for the exam. Also, during the teaching phases there is more flexibility when it comes to working on the test units than in the limited time and space of the tutorial.

The pivotal learning points for the lecturers were the selection of **suitable question formats** that are fitting for an online test (true-false questions, simple selection of the right answer) and the usability of the direct feedback that is immediately posted to the participants. In addition, the **quality of the questions** being posed (simple, medium level, expert) and the suitability of these was also evaluated which was of a big help for setting the questions for the final exam.

A positive side effect was also the fact that the quite deserted **discussion forum** of past days was reactivated (altogether 21 posts in comparison to 0 beforehand!). A negative point: the possibility of working on the essay tasks in an open format for everyone to see was only used on a limited basis (5-8 tasks) even though there was a solution sheet provided here as well. In the future we will have to consider other formats for the tutorial (i.e. mid-term exams) or if the correct answer is only displayed if the test has actually been completed. Here we have to see how this can be stemmed and worked out (it is a comparative high level of work being undertaken, if there is an evaluation or feedback given or none at all).

## Further information

- [Blackboard tests and surveys](#)

## Support offered by CeDiS

- [Consulting services for the implementation of digital solutions in teaching](#): The Center for Digital Systems (CeDiS) has extensive experience of many years when it comes to the implementation of digital media and systems within the fields of teaching, learning and research. We offer a wide variety of consulting services on the implementation of these tools and systems within the entire academic scope and especially at Freie Universität Berlin.
- [Training courses and workshops](#): For lecturers at Freie Universität Berlin (professors, employees, tutors) as well as lecturers of other universities CeDiS offers training courses and workshops on the topic of teaching and learning with digital media. These courses enable participants to implement online elements within their own sphere of teaching.
- The Executive Board of the Freie Universität supports e-learning initiatives: With the [e-learning funding program](#) financial resources are provided to lecturers that enrich and improve their courses quality-wise by implementing technological and media-related support. All of the academic staff teaching, the lecturers or even the institutions of the Freie Universität - without the Charité-Universitätsmedizin - can be supported within this program.