

4. april 2016

Copenhagen Business  
School

Business Intelligence | CBS  
Evaluation Unit

Catherine Lind  
Academic officer  
Tlf.: 38 15 37 73  
Mail: cl.bid@cbs.dk  
www.cbs.dk

## Evaluation of Digital Exam Winter 2015/2016

In the fall of 2015 we implemented the CBS exam platform Digital Exam; a collaboration between Copenhagen University, Aarhus University, Aalborg University and CBS. The following is an evaluation of the first phase of the implementation period. This evaluation has been made by CBS Evaluation Unit and it deals with the experiences that our administrative employees, examiners and students have had in working and dealing with the platform.

The shared experience of all three groups is generally positive. There is room for improvement and further development in certain areas. The most critical group is the examiners who repeatedly note that the systems readability functions are inadequate when considering how many papers there are to assess. The students give an impression of a lack of information regarding the launch of the platform and an absence of live presentation of the system.

Overall it is clear that the projects help site, [info.cbs.dk/de](http://info.cbs.dk/de), is not well known to the three groups. One student has suggested linking the help site to the platforms main page. One might consider implementing this for the further exams.

The suggestions for site improvement are based on the comments that have come in along with the survey answers, and these can be found under each group: the administration, examiners and students.

Page 1 / 113

## Table of contents

List of tables.....	2
Method .....	3
The Administration .....	4
The Assessors.....	7
The Students:.....	10

## List of tables

TABLE 1: INFORMATION ABOUT DIGITAL EXAM	4
TABLE 2: CONTACT INFORMATION IF NEEDED	4
TABLE 3: USABILITY OF THE INDIVIDUAL TABS	5
TABLE 4: SUPPORT FUNCTIONS	5
TABLE 5: TIME USAGE ON THE EXAM	6
TABLE 6: TIME USAGE IN THE FUTURE	6
TABLE 7: GENERAL IMPRESSION	7
TABLE 8: THE SYSTEMS FUNCTIONALITY	8
TABLE 9: THE SYSTEMS USABILITY	9
TABLE 10: IMPRESSIONS OF DIGITAL EXAM	10
TABLE 11: TIME USAGE	10
FIGUR 12: THE SYSTEM'S USABILITY	10
TABLE 13: EASY TO USE	11
TABLE 13: SUPPORT	12
TABLE 14: IMPRESSIONS OF DIGITAL EXAM	12

## Method

The source text for our evaluation questions came from Aalborg University, but we modified the questions in order to fit into CBS. In the appendix you can read the individual questionnaires. The evaluations were sent to the students the week after their exam. Two reminders were sent and the evaluations closed three weeks after being sent out.

The assessors were invited to participate in the evaluation one month after the exam was held and after grades had been given. Also here two reminders were sent out and the evaluation ended February 8<sup>th</sup>.

Evaluations were sent to the administrative staff on January 14<sup>th</sup> after most exams had begun. Again two reminders were sent out and the evaluation ended February 17<sup>th</sup>.

The response rate varies quite a bit between the groups. Unfortunately the student group has a very low response rate which can affect the reliability of our questionnaire, yet not enough to change the overlying conclusion of the student's impression of Digital Exam as being is good.

The individual groups' answers will be treated separately in the following pages. It was possible to make additional comments in all questionnaires and all comments were read by the Evaluation Unit. For those comments that made up a theme, we included these in the relevant areas of this document.

## The Administration

Out of all the questionnaires sent to the administrative staff, 48, 8% answered.

In general the answers tell us that the administrative staff have felt well informed and well instructed in the use of the system (table 1), and also have known where to find assistance when needed (table 2). The workshops practice sessions and guides have been useful. Only 3 out of 20 had no knowledge of the help site, so making this more well-known is still recommendable.

TABLE 1: INFORMATION ABOUT DIGITAL EXAM

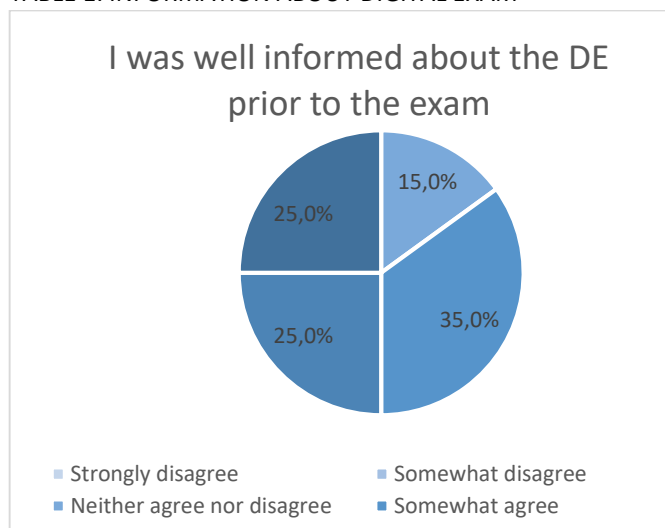
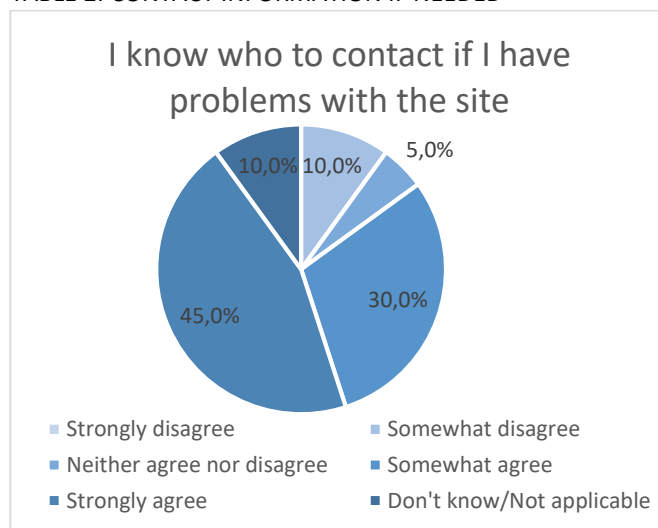


TABLE 2: CONTACT INFORMATION IF NEEDED



In general the administrative staff is happy with the sites usability (see table 3). There are few comments containing suggestions of improvement. One of these is a need for the system to be able to handle individual exercise classes (XA, XB and so on) in relation to assigning assessors to these classes. Another wish is for the ability to extract data from the system to Excel in order to make an exam list with individual student times.

Other recommendations suggest making changes to the individual tabs:

*“Under the Exam data tab: it is necessary to be able to change the exam form from individual exam to free group exam after the exam has begun. Increased flexibility. Under the Overview tab: it would be nice to be able to make corrections in free form without having the redo everything” and “it would be nice to have some numbers available to us under the specific tabs, like the number of students who have handed in under the Hand-ins tab, and to under the Assessors tab have an option to see how many have accessed the page and handed in – this would make it easier to manually assign the students to the examiners”.*

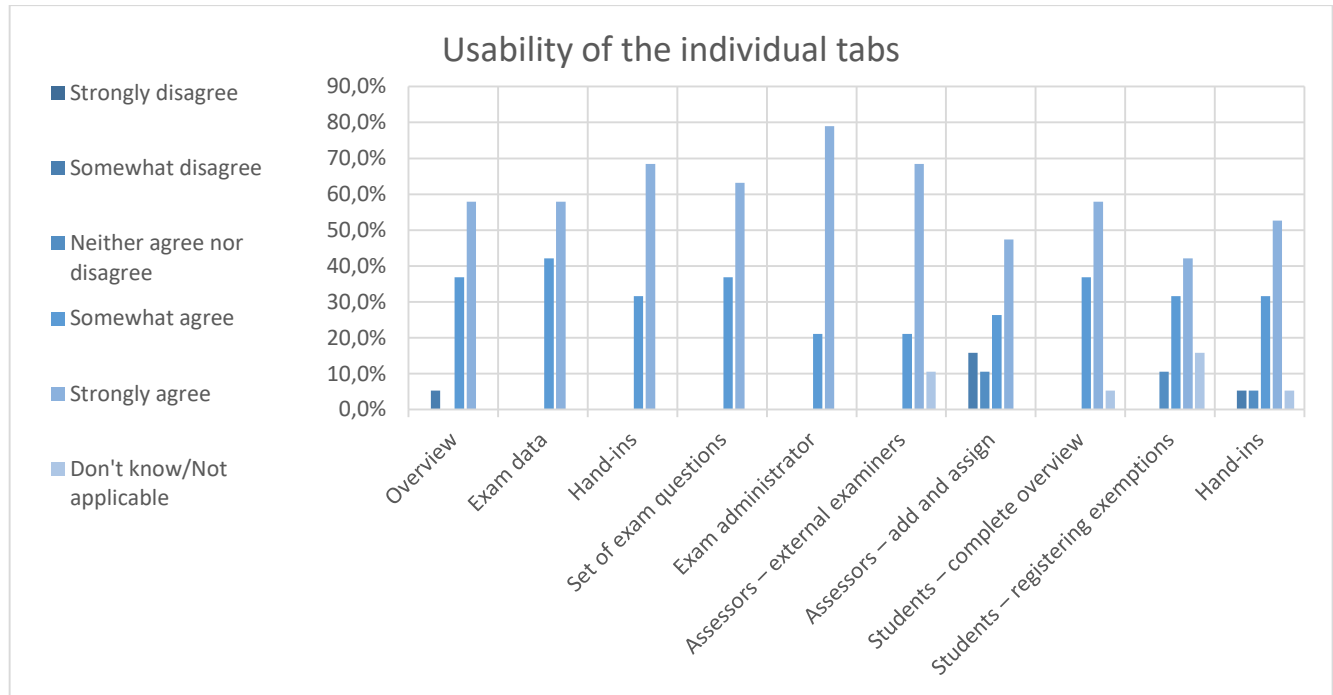
One final remark is made regarding the automatic functions and the DE systems tie in to other CBS systems:

*“More work has to be done on notifications that can send messages automatically instead of the secretary having to send e-mails. More work needs to be done in regard to on producing readable completion reports for using when handling registrations and payment through Prophix. The importance of the SUBMIT button has to be made more clear to the students and examiners”.*

Finally there are comments in regard to the platforms design:

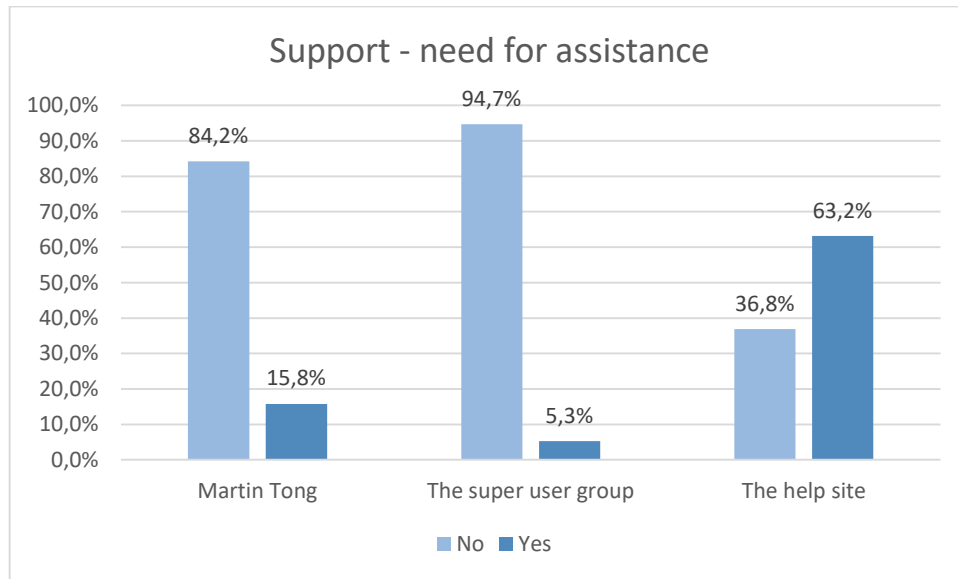
*“It would be nice if the student’s names appeared in a darker shade and the font size was bigger. Right now they are quite small and grey. It would also be nice if it could be made more visible to the user that they are in the RETAKE window, maybe in the heading?”*

TABLE 3<sup>1</sup>: USABILITY OF THE INDIVIDUAL TABS



The help site has been the least used method in finding help. Those that have sought help from Martin Tong and the super user group have been very happy with the reply time and with the assistance received.

TABLE 4: SUPPORT FUNCTIONS



<sup>1</sup> The questions given were as so:

- 1) Overview: I have a good overview of the exam information
- 2) Exam data: It is easy to set up the exam data (times, anonymity, file formats and conditions of submission)
- 3) Hand-ins: It is easy for me to see the students grades
- 4) Set of exam questions: It is easy to upload the exam text and to attach information about it
- 5) Exam administrator: It is easy to assign exam administrators
- 6) Assessors: It is easy to assign assessors
- 7) Assessors: It is easy to add and assign assessors
- 8) Students: I have a good overview of the students, their exam questions and any exemptions/dispensations
- 9) Students: I can easily register exemptions for one or more students
- 10) Hand-ins: In the activity log it is easy for me to see what the students have done

The amount of time spent on these exams has for the administrative staff been less than the time spent on previous exams and it is estimated that less time will be spent on handling the exams in the future (see table 5 and table 6 for an estimate of time usage).

TABLE 5: TIME USAGE ON THE EXAM

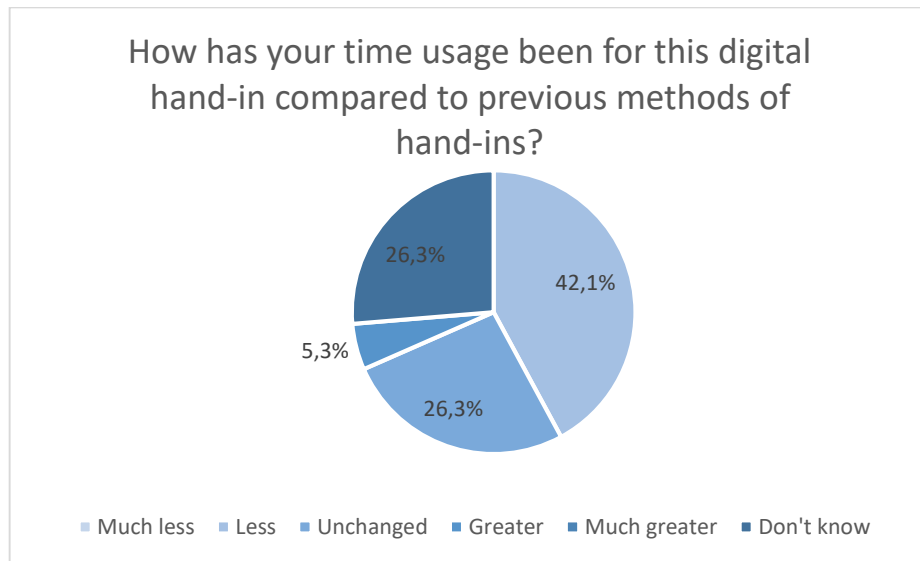
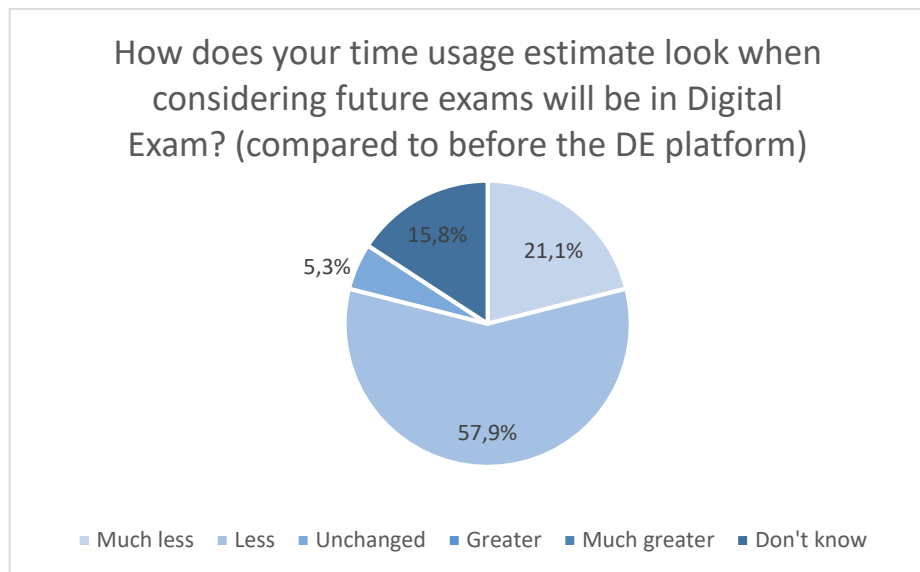


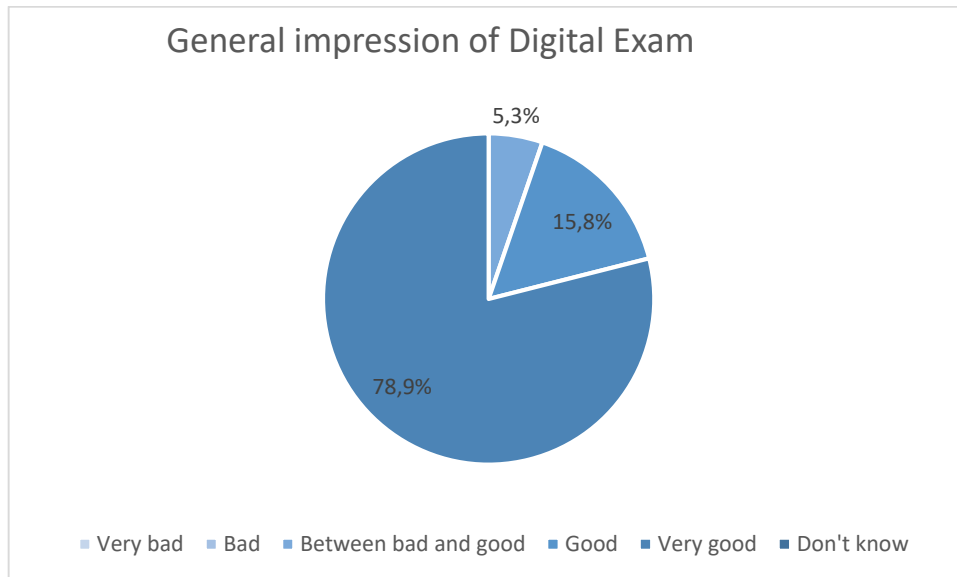
TABLE 6: TIME USAGE IN THE FUTURE



When going through the answers to the individual questions it becomes very clear that the general attitude towards Digital Exam is positive.

This is confirmed by the responses to the final question regarding ones overall impression of the platform. 94, 7 % of the respondents have a good or very good impression of the Digital Exam platform (Table 7).

TABLE 7: GENERAL IMPRESSION



### The Assessors

60,2% of the assessors have answered the questionnaire about the Digital Exam platform.

72% of the assessors knew where and how to log in to the Digital Exam platform. Contrary to this, only 16 % knew of the projects help site. Just a few assessors experienced problems (9 % had trouble with the log in and 16 % had trouble with accessing the exam). About a third needed support assistance but generally they have been happy with the response time and with the answers given to them by the support.

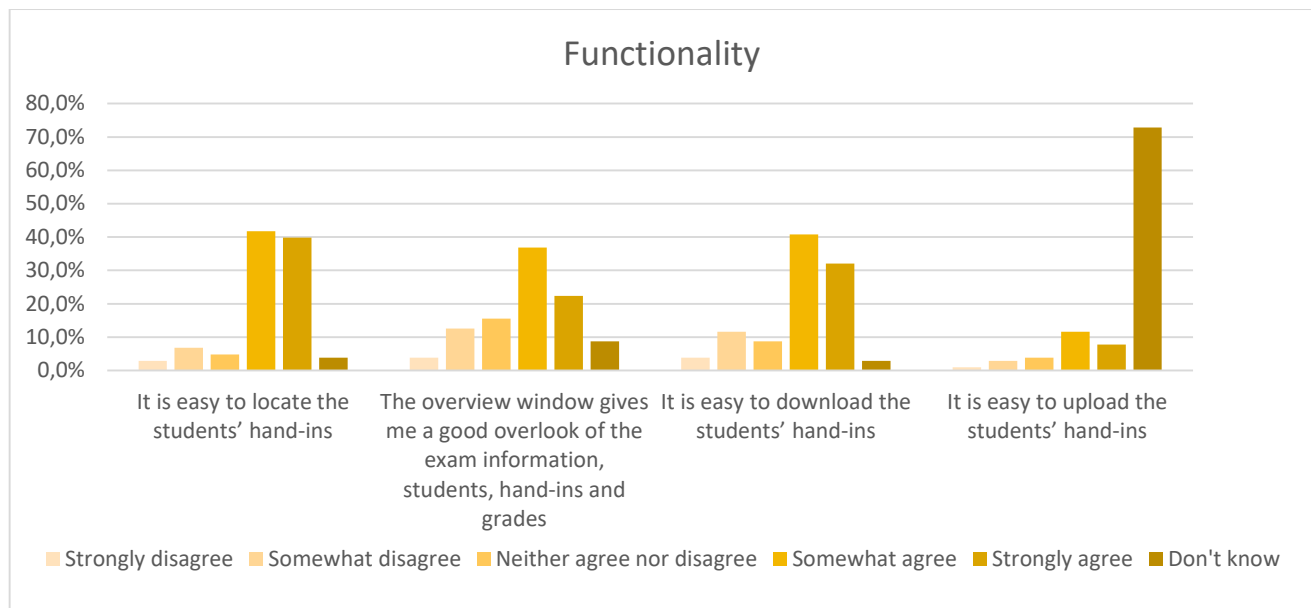
Something does seem to point to the assessors having the experience of not receiving enough information about the platform. Here you can read what one teacher has written:

*“I generally think that digitalizing the exams is a positive thing. However, as a teacher, the implementation of this gives rise to criticism. Communications have been next to null. The system seems to work, but it would have been nice to see it and maybe have had a trial run of it before having to take 100 students to their exams ...Conclusion: solution is ok, but the process and implementation of it hasn't been satisfactory”.*

One might consider using more resources on the communication to the assessors especially when considering how many of them receive questions from the students. On top of that one could, before the next round of exams, draw more attention to the help site and also hold some workshops where the systems use is showcased.

Overall the assessors are happy with the systems functionality. We can see that 55 % agree or wholly agree with first three situations listed in table 8. As for the final situation 73 % replied “Don't know” which leads us to believe that they did not make use of that function in the system.

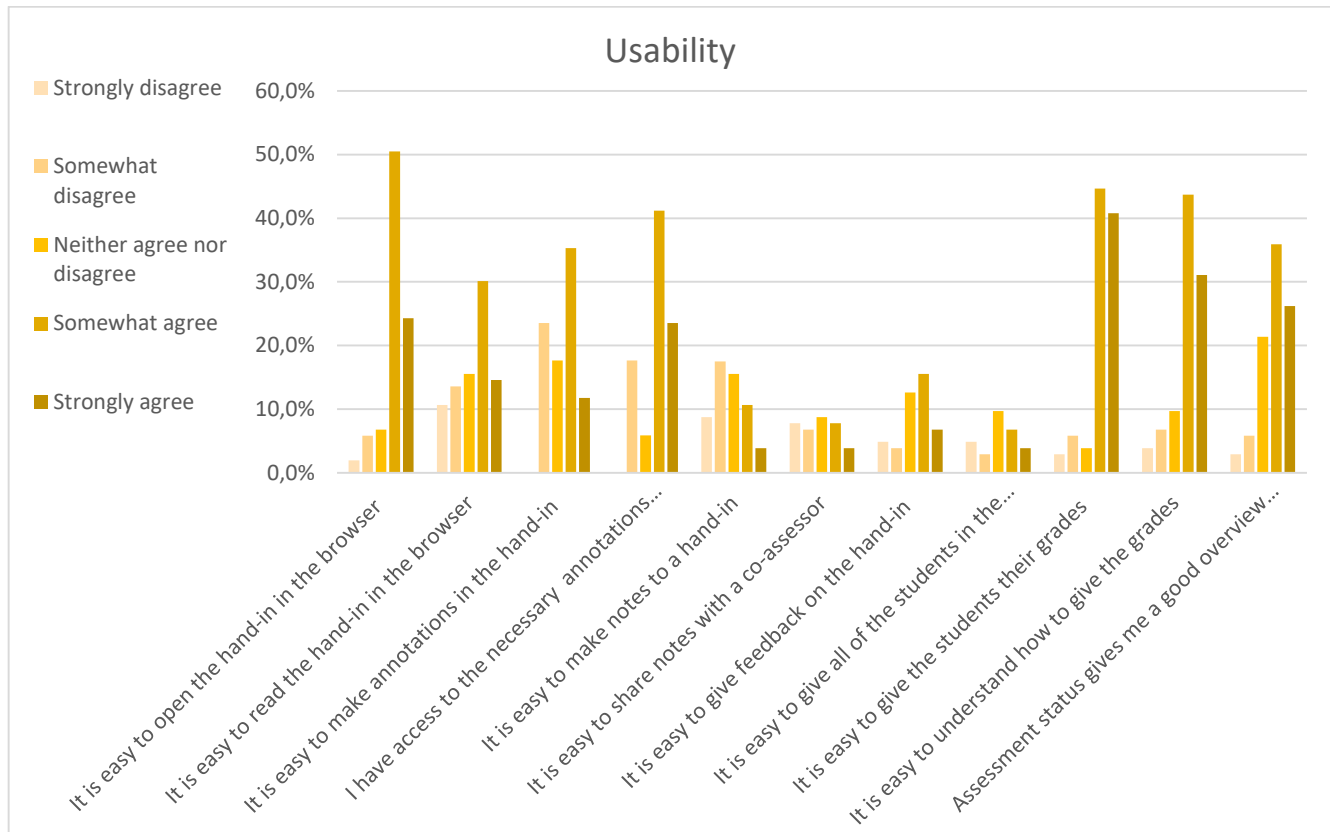
TABLE 8: THE SYSTEMS FUNCTIONALITY



There are mixed experiences with the systems usability (see table 9 for the complete dispersion of replies regarding usability). A recurrent criticism seen in the comments is that the screen isn't good for reading and you can't enlarge the window that opens with the hand-ins. Also the assessors find it impractical to be sitting with a digital copy of a written text under the oral examination. Because of this 41,7 % of the assessors ended up printing the exam papers. In the comments requests are made for there to be taken more consideration to the user's needs.



TABLE 9<sup>2</sup>: THE SYSTEMS USABILITY



In the comments we can see that grading has caused problems. For example, it is noted that it isn't entirely clear to see when the system has accepted the grade as registered. Some also request that there be a "submit" button for each individual grade, just as there is a "submit all" button for the grades.

Just as we heard from the administrative staff, an expressed wish is made in regard to exam lists and that these show the students in the same order as they appear under in the system. The biggest point of criticism that has to do with usability and functionality is that the assessors feel like they have taken over some of the administrative work but that they are not being compensated for it.

The general impression of Digital Exam is positive. More than 60 % say that the system is good or very good. However an estimate shows that the assessor's time usage will be the present amount of time or more than the present amount of time. (See tables 10 and 11 below for a specification of the percentages of answers).

<sup>2</sup> The questions read as so: 1) It is easy to open the hand-in in the browser 2) It is easy to read the hand-in in the browser 3) It is easy to make annotations in the hand-in 4) I have access to the necessary annotations tools 5) It is easy to make notes to a hand-in 6) It is easy to share notes with a co-assessor 7) It is easy to give feedback on the hand-in 8) It is easy to give all of the students in the exam joint feedback 9) It is easy to give the students their grades 10) It is easy to understand how to give the grades 11) Assessment status gives me a good overview of the assessments

TABLE 10: IMPRESSIONS OF DIGITAL EXAM

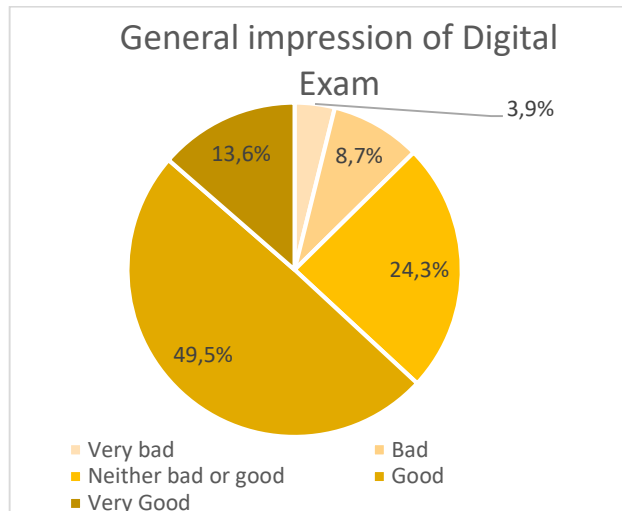
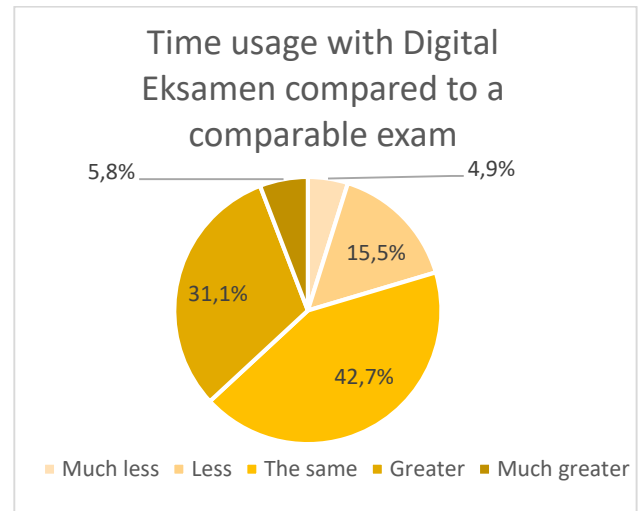


TABLE 11: TIME USAGE



### The Students:

The students response rate is very low as only 16,7 % have answered the questionnaire. This makes it difficult to make a final conclusion of the replies as there can be a considerable margin of error with respect to the entire student population. Yet we can still see some common tendencies in the replies.

About a fifth of the respondents didn't know where to log on to the Digital Exam. In the comments you can see that they used a link that was sent to them in an e-mail and that some of them found their way to the platform by way of Facebook or Learn. On the other hand very few had difficulties with logging on to the platform and accessing the exam.

Contrary to knowledge of the Digital Exam site, only a sixth of the students knew of the projects help site, [info.cbs.dk/de](http://info.cbs.dk/de).

Again one could make a point of making that page well known to all in the future. Comments show that most students did not take part in the Digital Exam and that very few had any knowledge of it.

Of those who did not take part in the information meeting only 11 % felt the need for such a meeting. 50 % of those who did partake in the meeting felt that it was worth the time spent.

When it comes to the sites overall usability the students are generally very happy, as one can see in table 12. Furthermore, 91 % agree or highly agree that the system is easy to use (table 13).

FIGUR 12<sup>3</sup>: THE SYSTEM'S USABILITY

<sup>3</sup> The questions read as so: 1) It is easy to find and download the exam text (if your exam did not include an exam text, please mark "Don't know") 2) Under my exams I can easily find all the necessary information about the exam in the exam

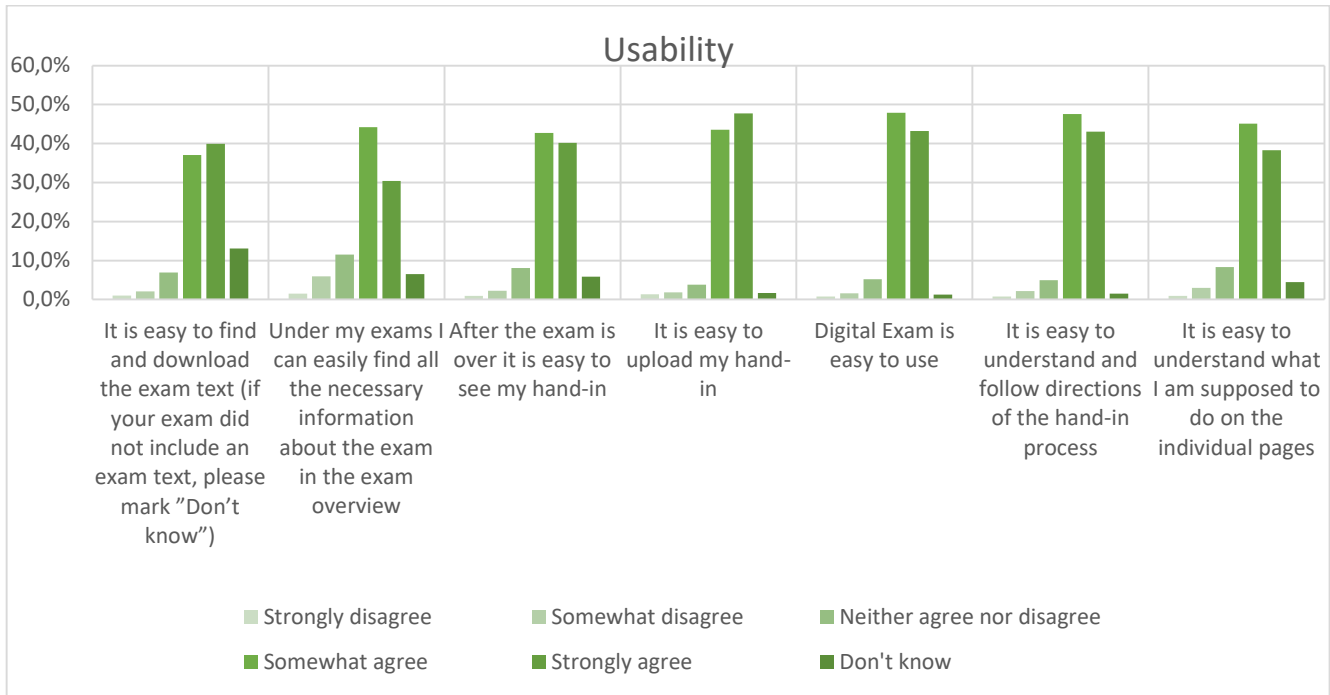
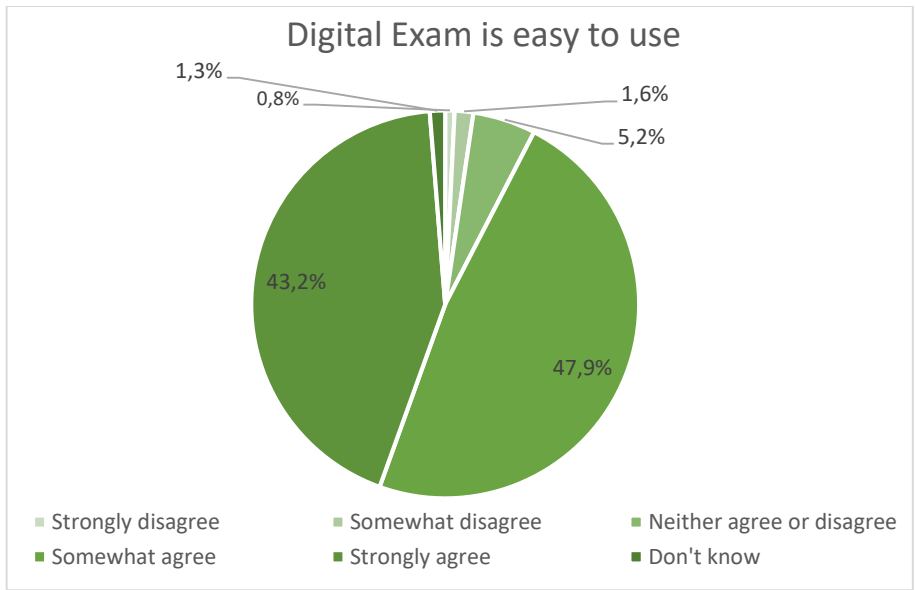


TABLE 13: EASY TO USE



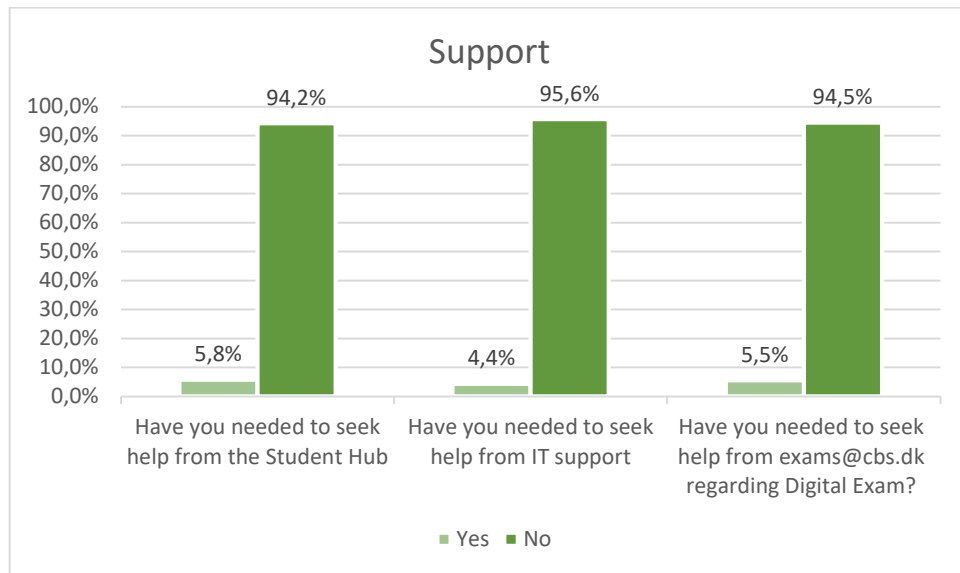
Even though the system has been easy to use, there are still many comments in the qualitative part of the questionnaire. Many of the comments have to do with questions regarding whether or not one still needs to fill out the declaration of authorship and if you are supposed to fill it out and upload it along with your hand-in or if you are supposed to tick off a box somewhere. It is also a wish for the exam’s deadline to appear on the exam page and that formal guidelines regarding number of pages, attachments are also made visible and that it be made clear how these items should be uploaded. These comments suggest that the students need more communication regarding the exams guidelines. Additionally there are these comments: *“it’s really annoying that we have to deal with yet another homepage”*. Hopefully this problem will be solved by the new my.cbs.dk.

overview 3) After the exam is over it is easy to see my hand-in 4) It is easy to upload my hand-in 5) Digital Exam is easy to use 6) It is easy to understand and follow directions of the hand-in process 7) It is easy to understand what I am supposed to do on the individual pages

In general the students haven't needed much support and those who have needed assistance have been happy with the replies and reply times from the IT support and through contacting [exams@cbs.dk](mailto:exams@cbs.dk).

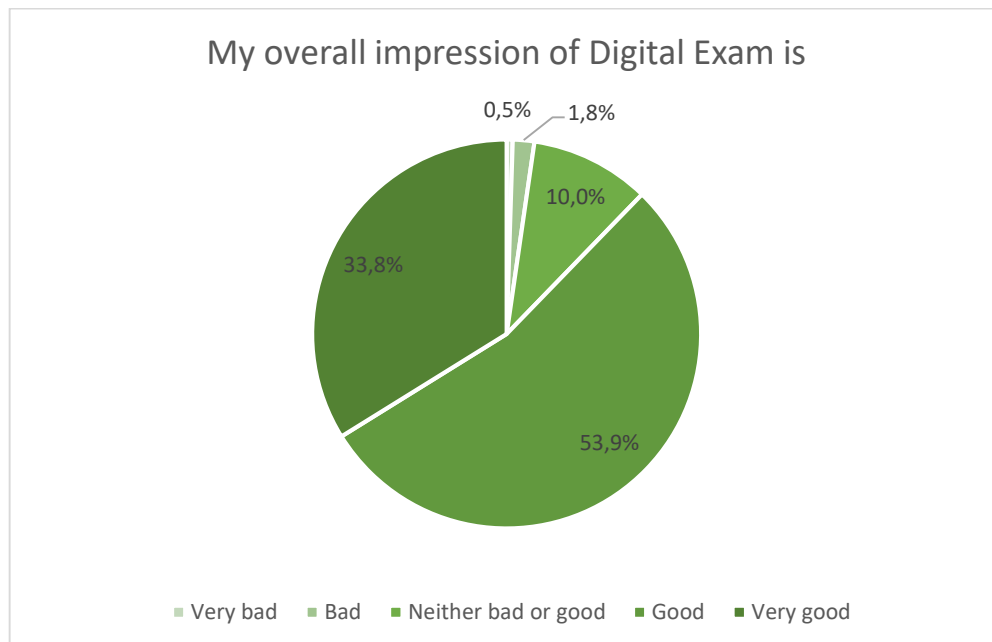
Unfortunately the students have not been equally satisfied with the answers coming from the Student Hub. About one fifth indicate that they disagree or highly disagree when asked if they receive quick and useful answers, and if the general knowledge of the system was acceptable.

TABLE 13: SUPPORT



The students overall impressions are as those of the administrative staff good or very good, with 88% of the student having a good impression of Digital Exam (see table 14).

TABLE 14: IMPRESSIONS OF DIGITAL EXAM



The overall impression of Digital Exam among the three groups is good, but there is still room for improvement, as can be seen under the individual groups' evaluations.

