# PUBLISHING EXAM RESULTS IN L²P (IMPORT CSV)

by CiL-Support-Team | March 2017

# Content

# 1. General

With the new module Exam Results L²P now offers you the opportunity to publish exam results compliant with data privacy regulations. Managers have access to all results while students only see their own results (grade and obtained marks). For tutors the module is not visible.
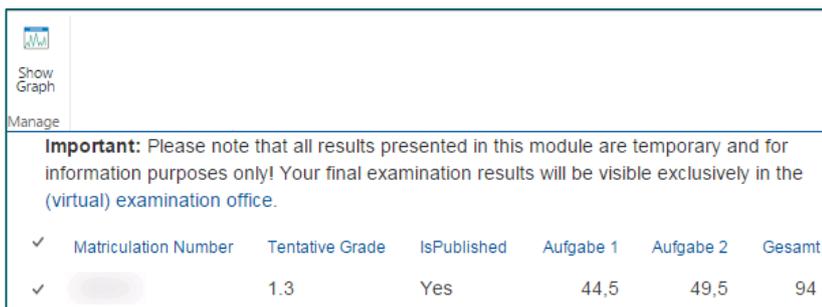


Fig. 1: Manager view



Fig. 2: Student view



Fig. 3: Grading scheme and distribution of grades

Additionally, you can provide the grading scheme and display automatically generated graphics showing the distribution of the grades (s. fig. 3). The grading scheme and the distribution of the grades are also visible for the students.

## 2. Options for publishing grades

The module offers you two options for managing and publishing exam results. In both cases the lists with the exam registrations that can be exported as CSV files from HISPOS form the basis. For technical reasons in both cases students can see neither the results nor the whole module itself until the results have been explicitly published.

a) You import the exam lists as CSV but yet without grades to L²P and then manage the tentative results online directly in L²P. Here you enter the grades and add the obtained marks. After updating the results during exam review you can export the data as CSV from L²P. With the CSV you can enter the final grades in HISPOS.

b) You first manage the results (grades and optionally obtained marks) in the CSV file from HISPOS and afterwards import the data to L²P to publish the tentative results. During the exam review you update the entries in the CSV file and finally import this file to HISPOS in order to report the final grades.

This manual describes version b). For version a) please read this tutorial.

## 3. Preparing exam lists

### 3.1.    Exporting exam lists from HISPOS

The basis for managing exam results is the CSV file with the exam registrations that you can export from HISPOS. Depending on the scenario you need to export several CSV files from HISPOS. This doesn't matter for the import to L²P. You can either merge the data of several files into one file and upload this or import all the necessary files one by one. The only thing that matters is that you maintain the structure of the files. With this you can use the same file(s) for publishing the tentative grades in L²P as well as reporting the final grades in HISPOS. To make things easier we assume working with only one file.

The CSV file from HISPOS contains 11 columns with the following information: matriculation number, first name, last name, grade, exam attempt, exam date, exam comment, free comment, LAB no., PORG no. and alteration date: You can find an example file here.

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | mtknr | vorname | nachname | bewertung | pversuch | pdatum | pvermerk | freiverm | labnr | porgnr | aenddat |
| 2 | 123456 | Britta | Beispiel | | 1 | 14.03.2016 | | | 4930216 | 470155 | 28.10.2015 |
| 3 | 234567 | Max | Mustermann | | 1 | 14.03.2016 | | | 4930218 | 470155 | 28.10.2015 |

Fig. 4: Structure of an example file with exam registrations exported from HISPOS

> For importing the file to L²P, please maintain the order of the columns, the column titles and the position of the title in line 1! After having finished the import Managers only see these columns: matriculation number, first name, last name, grade and – optionally – additional columns with the obtained marks. The columns remaining are ignored. Students only see their matriculation number, grade and – optionally – additional columns with the obtained marks.

## 3.2    Adding additional exam participants

It might happen that students who are **not** registered via HISPOS attend the exam, for example exchange students or students that take the exam as an addition to their curriculum. Add the data of these students at the end of the CSV file. Add the **matriculation number** in particular as it serves as unique identifier during the import! Columns for which you have no information can be left blank:

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | mtknr | vorname | nachname | bewertung | pversuch | pdatum | pvermerk | freiverm | labnr | porgnr | aenddat |
| 2 | 123456 | Britta | Beispiel | | 1 | | | | 4930216 | 470155 | 28.10.2015 |
| 3 | 234567 | Max | Mustermann | | 1 | | | | 4930218 | 470155 | 28.10.2015 |
| 4 | 345678 | Edeltraud | Erasmus | | 1 | | | | | | |

Fig. 5: Adding additional participants to the exam list

⚠ When uploading the data to HISPOS in order to report the final grades the additional data sets will be ignored by HISPOS as the LAB no. is missing. The final grades of these students have to be reported to the central examination office in a separate procedure! For more information please contact the central examination office.

Instead of adding the additional students at the end of the CSV file you can also create a separate file containing just these students. In this case please use the same order of columns and the same column titles as in the file exported from HISPOS in order to correctly import this file to L²P! Columns for which you have no information can be left blank. The field matriculation number must be filled as this is used as unique identifier.

For guest students and visiting students with a five-figure matriculation number please add a zero at the start and format the field as text so that your spreadsheet program doesn't cut it out again.

## 3.3.    Entering grades

After having finished correction, enter the tentative grades in the column BEWERTUNG (grade) of the CSV file (s. fig. 6). To guarantee that you can use one and the same file for publishing the tentative grades in L²P and for reporting the final results to HISPOS please enter the grades in the way it is required in HISPOS, i.e. do **not** use a comma as decimal separator but use three-figure values ending with a zero instead.

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | mtknr | vorname | nachname | bewertung | pversuch | pdatum | pvermerk | freiverm | labnr | porgnr | aenddat |
| 2 | 123456 | Britta | Beispiel | 130 | 1 | 14.03.2016 | | | 4930216 | 470155 | 28.10.2015 |
| 3 | 234567 | Max | Mustermann | 270 | 1 | 14.03.2016 | | | 4930218 | 470155 | 28.10.2015 |

Fig. 6: Entering grades in the exam list

| Grade | Entry in CSV file | L²P |
|---|---|---|
| 1,0 | 100 | 1.0 |
| 1,3 | 130 | 1.3 |
| 1,7 | 170 | 1.7 |
| 2,0 | 200 | 2.0 |
| 2,3 | 230 | 2.3 |
| 2,7 | 270 | 2.7 |
| 3,0 | 300 | 3.0 |
| 3,3 | 330 | 3.3 |
| 3,7 | 370 | 3.7 |
| 4,0 | 400 | 4.0 |
| 5,0 | 500 | 5.0 |
| Ungraded | ++ | ++ |
| Ungraded | -- | -- |
| No permission | NZ | NZ |
| Not attended | NE | NE |
| Cancelled | PRA | PRA |
| Withdrawed | RT | RT |
| No grade | empty field | empty field |

Table 1: Possible grades

On import L²P automatically interprets the three-figure value „130" as grade „1.3". In L²P, the grade will be displayed with a dot as decimal separator.

The options listed on the left are the official grades as defined in the examination regulations. They are supplemented by further possible entries which are displayed in L²P like this:

- „++" or „--": ungraded performance (passed and failed respectively)
- „NZ": No permission to take exam due to missing prerequisites
- „NE": Did not appear for the exam.
- „PRA": Cancelled the exam.
- „RT": Withdrawed from the exam.

**Note:** The information RT for withdrawal is already in the CSV file from HISPOS. It is added by ZPA in the field PVERMERK. This field is now shown in L²P

**Please don't use entries other than the ones listed in the table!** When imported to L²P incorrect entries like 430, 470 or 2700 will be accepted but will only be displayed as 430, 470 or 2700 respectively (and not as the grade 4.3). You can correct these entries online in L²P using EDIT MODE. Empty fields will be displayed as empty fields.

## 3.4. Adding columns for obtained marks

⚠️ For the following steps we recommend working with Microsoft Excel or LibreOffice Calc. Google Docs is **not** allowed for reasons of data privacy. Additionally, when formatting the file there might occur errors that prevent you from using it in HISPOS!

In addition to the existing columns you may add further columns to the CSV file containing the obtained marks for each item and/or the total marks. Add these columns to the right of the existing ones (= columns L, M, N …).

| I | J | K | L | M | N |
|---|---|---|---|---|---|
| labnr | porgnr | aenddat | Aufgabe 1 | Aufgabe 2 | Gesamt |
| 4930216 | 470155 | 28.10.2015 | | | |
| 4930218 | 470155 | 28.10.2015 | | | |

**Don't** use mutated vowels (umlauts) or special characters in column titles!

Fig. 7: Example file with additional columns for obtained marks

Even with additional columns you can use the file for reporting the final grades as HISPOS ignores these. If you are working with several CSV files keep in mind that all additional columns need to be entitled identically and keep the same order.

## 3.5. Entering obtained marks

Now enter the obtained marks. Use a **dot as decimal separator**.

| K | L | M | N |
|---|---|---|---|
| aenddat | Aufgabe 1 | Aufgabe 2 | Gesamt |
| 28.10.2015 | 44.5 | 50.5 | 95 |
| 28.10.2015 | 40.5 | 41 | 81.5 |

You cannot use a comma as the CSV format will interpret it as a new column when saving the file. This would lead to wrong values in L²P when importing the file!

Fig. 8: Using dots as decimal separators

How to set a dot as decimal separator depends on the spreadsheet program you are using to edit the file as well as on the language settings of your operating system. The following instructions show how to do it for Excel and Calc.

### 3.5.1. Microsoft Excel (version 2007 and later)

Excel uses the decimal separators determined by the regional settings of your operating system. If your operating system is installed in English (regional scheme: English (USA)) it will automatically use a dot. If it is installed in German it will use a comma instead. In order to replace a comma with a dot you need to temporarily change the language settings in Excel. To do so, execute the following steps.

These changes will affect **all** files opened and edited in Excel! Thus, before changing any settings save all files opened in Excel. After having saved the CSV file, undo all changes in settings. Otherwise Excel might change values in other files.
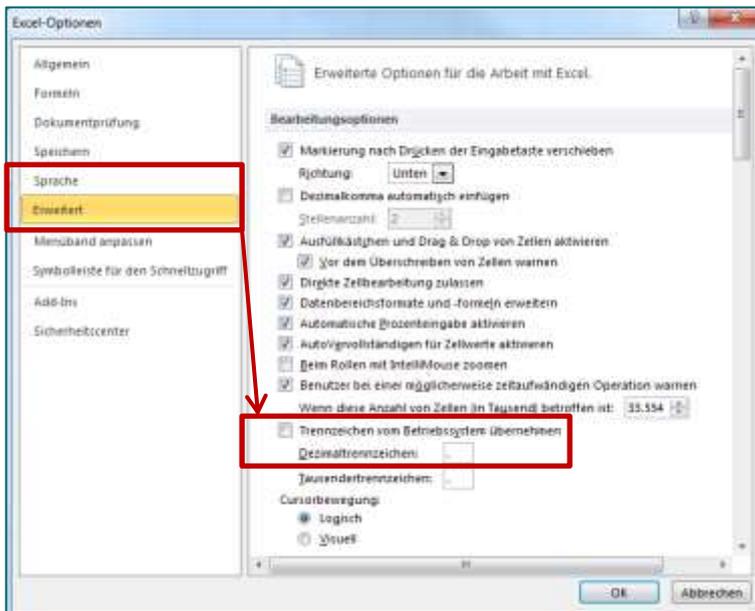


1. Click on the Microsoft Office button in the upper left corner (version 2007) or on the slider DATEI (since version 2010). In both cases click on OPTIONEN then.
2. Choose ERWEITERT and unmark the checkbox TRENNZEICHEN VOM BETRIEBSSYSTEM ÜBERNEHMEN. In the row below change the DEZIMALTRENNZEICHEN to a dot („.") (s. Fig. 9).

Fig. 9: Changing the language settings in Excel

3. Confirm the settings with OK. Now the file uses a dot as decimal separator.
4. Save the file in CSV format.
5. Finish the process by changing the settings back to their original state so Excel will use a comma as decimal separator again.

If you later want to edit the CSV file in Excel you have to change the language settings again as described and before opening the file so that Excel correctly interprets the dot as decimal separator and not as a date.

### 3.5.2. Microsoft Excel for Mac

As with Windows Excel in OS-X uses the decimal separators that are set in the regional settings of the operating system. If this is installed in English it will automatically use a dot as decimal separator. If it is installed in German it will use a comma. To replace the comma with a dot please temporarily change the language settings of the operating system.



These changes will affect **all** files opened and edited in Excel! Thus, before changing any settings save all files opened in Excel. After having saved the CSV file, undo all changes in settings. Otherwise Excel might change values in other files.

Fig. 10: Changing the decimal separator for Mac
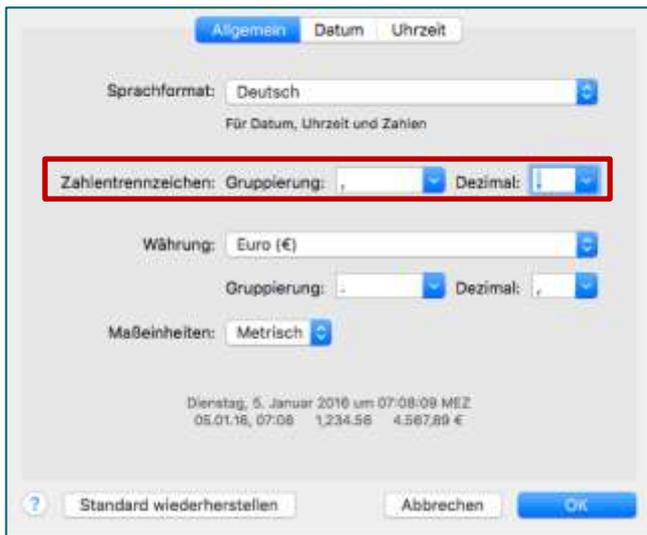
1. Open SYSTEMEINSTELLUNGEN by clicking the cogwheel symbol.
2. Here, choose SPRACHE & REGION and click WEITERE OPTIONEN then.
3. In the line ZAHLENTRENNZEICHEN open the dropdown menu for DEZIMAL and choose a dot as decimal separator (s. fig. 10).
4. Confirm the changes with OK.

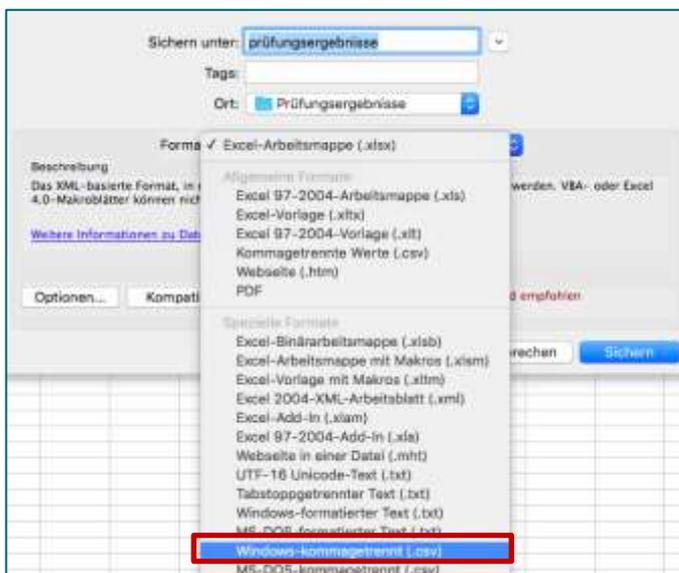Please note that the standard Mac format KOMMAGETRENNT (.CSV) adds things in the background that let the import in L²P fail. Therefore, save your file as WINDOWS-KOMMAGETRENNT(.CSV):



Fig. 11: Saving file as Windows-kommagetrennt (.csv)

1. Click on DATEI and choose SPEICHERN UNTER.
2. Choose a name for the file and determine where to save it.
3. Choose WINDOWS-KOMMAGETRENNT (.CSV) (s. fig. 11) as format.
4. End with SICHERN. Confirm the warning message with WEITER. The file will now be saved.

### 3.5.3. LibreOffice Calc

In LibreOffice you can always use a comma or a dot as decimal separator if you have a German installation. If you are using LibreOffice in German and you want to calculate the total marks by formula you have to use a comma, otherwise the formula would not work. Only in this case change the language settings just like in Excel so that a dot is used as decimal separator.

> These changes will affect **all** files opened and edited in Calc! Thus, before changing any settings save all files opened in Calc. After having saved the CSV file, undo all changes in settings.
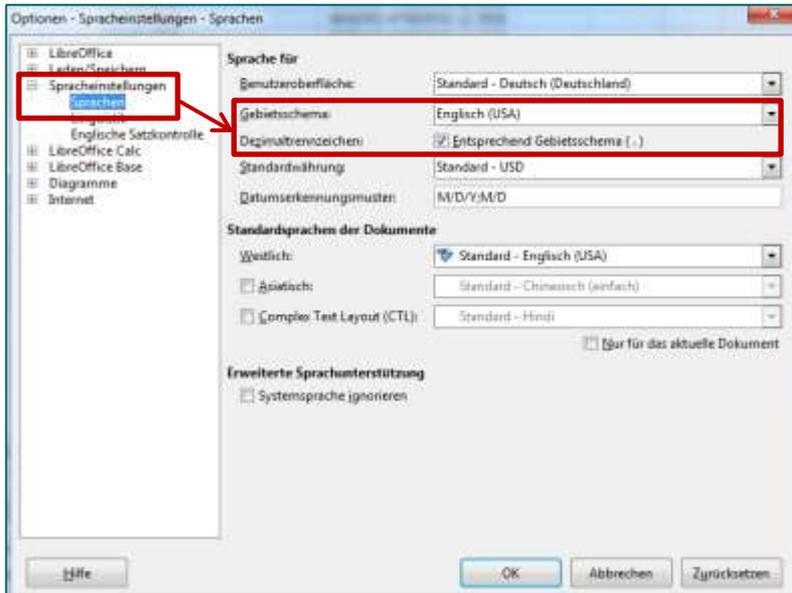


1. Click on EXTRAS and then on OPTIONEN.
2. At SPRACHEINSTELLUNGEN choose the option SPRACHEN.
3. Change the GEBIETSSCHEMA to ENGLISH (USA) (s. fig. 12).
4. Save all changes by clicking on OK. The file will now use a dot as decimal separator.
5. Save the file in CSV format.

Fig. 12: Changing the language settings in LibreOffice Calc

Finish the process by changing the settings back to their original state so Calc will use a comma as decimal separator again.

## 3.6. Typical errors

These lines have to be removed. The first line has to be the one with „mtknr".

| mtknr | vorname | nachname | bewertung | pversuch | pdatum | pvermerk | freiverm | labnr | porgnr | aenddat |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| | | Master Allg. Maschinenbau 11 431 Montagesystemtechnik MulR00 | | | | | | | | |
| | | | | | | | | | | |
| startHISsheet | | | | | | | | | | endHISsheet |
| mtknr | vorname | nachname | bewertung | pversuch | pdatum | pvermerk | freiverm | labnr | porgnr | aenddat |
| 300100 | Janina | Kaiser | 4.3 | 1 | | | | | | |
| 302123 | Swen | Propst | 400 | 1 | | | | | | |
| | Jennifer | Waechter | 330 | 1 | | | | | | |
| 308856 | Klaudia | Hueber | 100 | 1 | | | | | | |
| 310869 | Anne | Krueger | 330 | 1 | | | | | | |
| 363930 | Doreen | Hertz | | | | RT | | | | |

This Grade has to be entered as 430.

A line without a matriculation number is not imported.

## 3.7.    Displaying obtained marks in L²P

How L²P displays marks with a decimal separator depends on the course room language. Course rooms in German will use a comma course rooms in English will use a dot. The date format used in CALENDAR shows you the course room language. The navigation language doesn't matter as it depends on the browser settings of each user.

| Marks | Entry in CSV file | L²P (Ger.) | L²P (Engl.) |
|---|---|---|---|
| 0 | 0 | 0 | 0 |
| 5 | 5 | 5 | 5 |
| 7,5 | 7.5 | 7,5 | 7.5 |
| 16 | 16 | 16 | 16 |
| 21,5 | 21.5 | 21,5 | 21.5 |

Table 2: Entering marks in exam list and how they are displayed

⚠️

The additional columns only accept **numerical values**! For items without marks enter a zero or just leave the field empty. A dash (minus) or other signs are **not** possible!

# 4. Publishing exam results in L²P

## 4.1. Importing exam list

As soon as the CSV file has been prepared you can import it to L²P. With this you make sure that all exam participants are booked to the course room and have access to their results.

1. Click the button IMPORT EXAM LIST in the module EXAM RESULTS.
2. Navigate to the CSV file on your computer via CHOOSE FILE and confirm your choice by clicking OPEN or double-clicking the file.
3. Initiate the upload process by clicking UPLOAD FILE.
4. If you have defined additional columns for the obtained marks L²P will display them now. In the dropdown menus you can determine what to do with each column. L²P can either ignore the column or create a new one displaying the data from the file. The column title will be taken from the file. If you have already imported a CSV file with additional columns just match them accordingly. By clicking IMPORT you start the import process.
5. The file will now be uploaded. **This will take some minutes, in particular in large course rooms!** Students that attended the exam but hadn't been booked in the course room before will be booked automatically as extra participants so that they have access to their results. These students will be informed automatically via email.
6. After having successfully imported the file, a confirmation will be sent to you via E-Mail. Only upload one file at a time, otherwise duplicate entries can occur.

Imported data is not directly visible for the students as it has to published first (s. 4.6. PUBLISH RESULTS). This way you can correct possible mistakes.
If you want to publish results of a second exam, you can reset the module!

## 4.2. Solving errors during import

If an error occurs during import you will see an error message. Use the error message to check the data in the file and import the file again if necessary or correct it directly in L²P using the EDIT MODE.

It might happen that the import runs into a time-out and not all entries are getting imported (error message: „Something went wrong"). Generally this should only happen in large course rooms (>1300 participants). In this case please import the CSV file in several steps.

## 4.3. Editing data in L²P

If you find incorrect data on import either re-import the file or correct the mistakes directly in L²P using the EDIT MODE. You can only change data in TENTATIVE GRADE and in additional columns. Entries in other columns than these cannot be changed in L²P.

If you change data in L²P always remember to also change it in the CSV file to keep the data consistent!

To correct data go to EDIT MODE. Enter the new value (s. fig. 13) and press ENTER. The new value will now be shown.

| ✓ | Student | Matriculation Number | First Name | Last Name | Tentative Grade | IsPublished | Aufgabe 1 | Aufgabe 2 | Gesamt |
|---|---------|---------------------|-----------|-----------|-----------------|-------------|-----------|-----------|--------|
| 🖉 | ☐ Tobias Hänel | | Tobias David | Hänel | 2.7 | Yes | 35,5 | 37 | 72,5 |
| | ☐ Yannic Hoffmann | | Yannic | Hoffmann | 1.7 | Yes | 44,5 | 42,5 | 87 |
| | ☐ Harald Jakobs | | Harald | Jakobs | 1.3 | Yes | 44,5 | 49,5 | 94 |

Fig. 13: Editing data in Edit Mode

If you change the grade please use a **dot as decimal separator.** Otherwise the automatically generated graphs for the distribution of grades will not be created correctly!

## 4.4.    Providing the grading scheme

Managers can provide the grading scheme that shows the mark limits for the grades. Click on EDIT GRADING SCHEME and enter the grades and the mark limits in the text box. To offer a better overview you can put the scheme into a table (s. fig. 14).

| Note | Punktegrenze |
|------|--------------|
| 1,0 | 100-95 |
| 1,3 | 94-90 |
| 1,7 | 89-85 |
| 2,0 | 84-80 |
| 2,3 | 79-75 |
| 2,7 | 74-70 |
| 3,0 | 69-65 |
| 3,3 | 64-60 |
| 3,7 | 59-55 |
| 4,0 | 54-50 |
| 5,0 | 49-0 |

Created at 10.02.2016 09:48 by ☐ L2P2013 Administrator
Last modified at 10.02.2016 17:41 by ☐ Harald Jakobs

1. Click into the text field of the editor and then click the tab INSERT.
2. Choose TABLE and determine the number of columns and rows.
3. After that enter the grades and the according mark limits. With the tabs TABLE LAYOUT and DESIGN you can customize the design of the table.
4. By clicking SAVE you save your entries. The students can now see the grading scheme via SHOW GRAPH.

Fig. 14: Providing the grading scheme as table

## 4.5 Displaying the distribution of grades



Based on the grades and the other entries that are possible for the field "grade" (see table in 4.3. ENTERING GRADES), L²P automatically creates various graphs showing the distribution of the grades. Both managers and students can display them. If you provided this information this page also displays the grading scheme and its mark limits. Click SHOW GRAPH to see the graph and the grading scheme.

Fig. 15: Grading scheme and distribution of grades

## 4.6 Publishing results

Initially, imported data and manually added results are visible for managers only. This gives you time to check all information. To make the results visible for the students click PUBLISH GRADES in the menu. The results are published in the background.

> ⚠️ This will require some time as the permissions for the module have to be re-set. The results are published in an asynchronous process. As soon as the results are published, you will receive an e-mail. If you do not receive an e-mail after one hour, please contact the L2P-Support. (elearning@rwth-aachen.de)
>
> The results and the whole module itself will be visible for the students **only after the permissions for all students have been set!** With this you avoid unnecessary queries from students who cannot see their results while others already can. The status column IS PUBLISHED tells you for whom the permissions have already been re-set.

If you add additional students to the course room after having published the results you need to publish the results again so that the new students can see them. If you only edit existing results the changes are visible immediately.

## 4.7. Informing students

After having published the results, L²P sends a message to the STUDENTS and EXTRA PARTICIPANTS informing them that the exam results are now accessible in L²P.

# 5. Correcting data

## 5.1. Overwriting data

You may update the contained data by re-importing the CSV-file again. The existing data will be replaced. If the amount of students has not changed and the results have already been published, you do not have to publish the results again. If there are additional students included in the new file you have to publish the results for these students again.
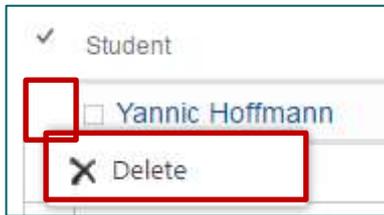
### 5.2. Deleting single entries



Fig. 16: Delete a single entry.

To delete single persons and their results from the module please go to EDIT MODE. Then right-click into the box right in front of the name (column: STUDENT) of the person you would like to delete. Click the offered option DELETE. After confirming the security warning the chosen entry will be deleted.

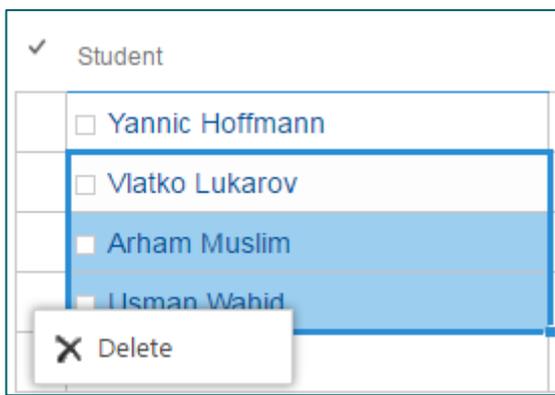### 5.3. Deleting several entries



Fig. 17: Delete several entries.

To delete several entries from the module, go to EDIT MODE and in the column STUDENT left-click into the field of the first entry you would like to delete. Then, while pressing and holding the left mouse button, pull the marked area down over the following entries you would like to delete. It is sufficient to mark the entries in the column STUDENTS. When deleting, all data from the other columns connected with these entries will also be deleted. After having marked the entries right-click into one of the boxes right in front of one of the entries and click the option DELETE. After confirming

the security warning the chosen entries will be deleted.

### 5.4. Resetting the module

Via the Reset-Button in the menu bar you may delete all data and set the module back to its initial state. All permissions will be restored, too, so that the module is no longer visible to students. By doing so, you can publish results of a second exam in the same semester.

## 6. Exam review and reporting the final grades

During exam review you update the results in the CSV file. If necessary you can also update the results in L²P. Use the EDIT MODE for this. In this case please remember to change the data in L²P and the CSV file to keep the data consistent.

Before reporting the final grades to HISPOS please check the Informationen zur Noteneingabe über die VZPA-Prüferfunktion or the Kurzanleitung: Notenverbuchung über die VZPA-Prüferfunktion respectively.

## 7. Support

If you are having trouble managing the results please contact the L²P Support. We will be pleased to assist you!

Email: elearning@rwth-aachen.de
Phone: +49 (0)241 80-21953 (Dr. Harald Jakobs)

## 8. Feedback and future development of the module

The CiL strives to simplify the process for publishing exam results in the upcoming versions of the module. Currently, data must be transferred back and forth between various systems using export and import. Additionally, the CSV files containing the data must be formatted correctly so that the data can be read correctly in the various programs and systems. This elaborate process could be made easier and faster with interfaces between HISPOS and L²P replacing the CSV files. Keeping the data consistent would also be easier this way. In order to simplify the process and improve the usability we aim at using such interfaces and will discuss this with the parties involved at RWTH Aachen.

Beyond that we're always working on improving the functionality and usability of the module based on the experience and the wishes of the users. We appreciate your feedback! Please send it to: jakobs@cil.rwth-aachen.de

## 9. Short summary

The figure on the next page sums up all necessary steps and key points in a schematic overview. The boxes should be interpreted in this way:

| System/Program | | |
|---|---|---|
| Action during the process | Used file/data base | Specifics |

| HISPOS | | |
|---|---|---|
| Prepare exam list(s) | Export CSV | Use multiple files or merge data in one file |

| Microsoft Excel, Calc (LibreOffice/OpenOffice) | | |
|---|---|---|
| Add students not registered in HISPOS and enter tentative grades | Edit CSV | Keep column structure and titles // Enter grades as three-digit numbers ending with zero (1.3 = 130) |

| Microsoft Excel, Calc (LibreOffice/OpenOffice) | | |
|---|---|---|
| Add additional columns and enter obtained marks | Edit CSV | Add columns on the right // Use a dot as decimal separator: 21.5 => edit language settings if necessary |

| L²P | | |
|---|---|---|
| Publish tentative grades in accordance with data privacy | Import CSV | Match additional columns // Extra-participants are automatically booked and get confirmation email // Provide grading scheme // Publish results // Inform students via email |

| Microsoft Excel, Calc (LibreOffice/OpenOffice) | | |
|---|---|---|
| Update results in exam review | Edit CSV | Optional: Update results also in L²P (edit online or re-import data) => Remember data consistency! |

| HISPOS | | |
|---|---|---|
| Report final grades | Import CSV data | Copy data to clipboard |