

exabis teacher's manual
Competence grid 4.5
ePortfolio 4.5
Exabis Student Review 4.5
eLove & Dakora (exabis apps)
for Moodle

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1. exabis Competence Grid

exabis Competence Grid enables competency-based work within Moodle. The modules involved have been developed throughout the past years and address different issues in the learning process starting from ePortfolio work through the association of artefacts with competencies and self-reflection mechanisms to generating formative verbalized assessments of a student's learning progress. Two apps have been developed to simplify this process using web-services from Moodle: eLOVE and Dakora – both available in GooglePlay-store and iTunes.

Competence grids are a way of structuring topic- or subject-based content for learning processes. The matrix form allows working with a taxonomy structure that relates to a level of difficulty in competence fields given that therefore can be used as an instrument of individualization.

This allows for a structured visualization and guidance of development steps taken by a student during a learning process.

The exabis-series combines competence grid work individualization, ePortfolio-work and extensive reporting. This means that teachers can provide a competency-based structure with associated material and tasks but also allows students to add learning artefacts individually to this structure in a constructivistic learning setting. The progress of a student is displayed in the reports.

Together with the Institute of School Development in Baden Württemberg this series has been pulled together to one pedagogical idea focusing on autonomous learners and formative and permanent assessments with feedbacks.

The module exabis competence grid can be used within Moodle. It is an enhanced addendum to the new competence-based structure in Moodle with an interface to it.

For working with competence grids in an easier interface the app Dakora has been developed. If a Moodle-installation is pre-configured, teachers and students can work with the app on tablets using rubrics and saving the data to Moodle.

1.1 Settings for courses

Configuration on course level

Usually the assessment schemes are set by the administrator to configure the module to the educational institutions' needs.

However these values can be overridden on course level if an individual grading scheme wants to be used.

Configuration Subject selection Assign Moodle activities



The first step of course configuration is to adjust general settings for your course. [Click here to continue configuration.](#)

grading scheme:

- I work with Moodle activities
- Show all outcomes in overview
- Show external examples for students
- Use without students

The grading scheme can be adjusted by entering a number in the entry field. This value will be the maximum limit that will be displayed in a dropdown menu that is used for students' assessment. A value of 3 would produce the dropdown-values 1,2,3.

Changing assessment schemes

If assessments have been undertaken with a certain grading scheme and the scheme is changed course-wide existing assessments are adjusted automatically.

Example 1:

Original scheme: 5, assessment A = 1, assessment B = 4, C = 5

New scheme: 10, assessment A = 2, B = 8, C = 10

Example 2:

Original scheme: 10, assessment A = 2, B = 8, C = 10

New scheme: 1, assessment A = 0, B = 1, C = 1

Advanced settings for courses

In addition to working with competence grids settings can be adjusted. The concept of the module is to also provide external content and content uploaded to the competence grid individually rather than always having to work with Moodle activities. This especially relates to teachers that do not use Moodle regularly. Materials that are available within the Moodle installation do not have to be uploaded by each teacher individually but rather the competence grid is filled by more teachers in a team effort and can be used by all of them course-independently.

Working with Moodle activities

This function was established before Moodle had the competence association function available. External tasks as well as Moodle activities can be associated with competences. If this option is ticked an additional tab is displayed to associate activities with competences called "Assign Moodle activities".

This option has been implemented before competences were introduced to Moodle. At the moment functions are developed to exchange competence-related data between Moodle competences and exabis competences.

Using the workflow of adding activities and immediately associating them with competences is more comfortable and will be used by Moodle users more frequently in the long run. These associations will be available in exabis as well, which focuses on using simplified apps (eLOVE, Dakora) for competence documentation.

Show all outcomes in overview

This option is only available when "Working with Moodle activities" is selected. All competences that were imported to the course are shown in the overview for students, otherwise only competences that are associated with Moodle activities are shown.

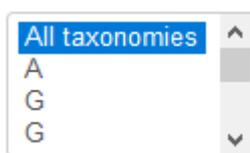
Show external examples for students

External resources that are linked to competences (connected within the XML database, which is created from edustandards.org) are shown to the student if this option is selected.

Working without students

If the competence grid is used for orientation purposes without the documentation function for students, this option can be checked.

Taxonomy filter



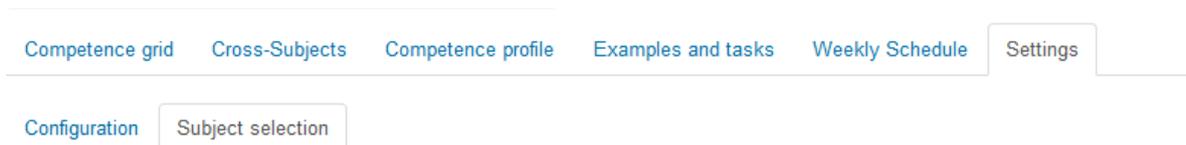
Learning materials that are associated within the same competence field but having different taxonomy levels can be filtered coursewise with this function. This means that only materials that match the taxonomy chose are made available to students by this.

Assigning Moodle activities

As explained above when choosing "I work with Moodle activities", Moodle activities can be associated with the competencies within this tab. Furthermore, the created tasks can be assigned to learning paths. If there is no Moodle activity created yet, a link leads to the main course.

Subject selection

After activating the block in a course, the competence fields (subjects, topics) have to be configured that want to be used. It is possible to work with different competence grids within one course. Also it is possible to collaborate on enhancing a competence grid with resources that are contributed from different courses.



2 In the second configuration step topics to work with in this course have to be selected.

1.2 Competence grid

Main view

All selected competence columns in the course are displayed in the grid-format within the tab "competence grid." The name of the grid and its columns are listed on the left side of page. The difficulty levels (taxonomies) are displayed at the horizontal line of the grid. New grids can be created as well. The main area shows an overview of competencies/child competencies and their associated tasks for the selected learning path.



Moodle activities - ePortfolio - No Moodle activities/quizzes have been submitted for this outcome -

This is an overview of all students and the course competencies.

To hide self-assessment click [here](#)

Communication	difficulty Level
Communication Basics	
Knowledge of principles of communication	
Principles of communication 	Verständnis

Using the dropdown menu the competence/child competence and level of difficulty can be chosen and the acquisition of competences can be assessed for each student individually.

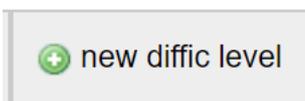
A link is available to switch to a two-column-view showing the self-assessments of students. These self-assessments cannot be changed by the trainer.

Edit-mode

To edit grids the edit-mode has to be activated by clicking on the right hand side labelled "Turn editing on".

The following options are available:

- Create a new grid 
- A name has to be added for the new grid. Then a new difficulty level can be added. Within the columns, new competences can be added to the grid.



- Add a competence



- Upload learning material 
For adding new learning materials the competencies/columns which are related to the material must be selected. Learning materials can be links or uploads, additional information can be provided for the resources added. If Moodle activities have been defined and associated, these can be linked using the drag & drop functionality. Material that has been added to the competence grid can also be deleted.
- Competencies/ child competencies, materials and additional resources can be disabled or enabled. 

If materials should be made available not to all but only a certain student, elements can be activated for each student individually. If all students are chosen, individually assigned elements are overwritten.

Elements that are located within the hierarchy are also disabled or enabled.

By activating and deactivating competence fields individually for each student an adaptive learning path can be created which is individualized. Students that should not see all competence fields are only provided with content and material that is needed during a particular learning phase.

Materials/competences and fields used

The locked-icon  next to an element means that it is locked.

Learning material is locked if:

- it has been placed on the weekly schedule of a student
- it has been put into the planning storage
- a submission of a student has already been uploaded

Competence/child competence are locked if:

- an assessment has been made for a student
- one of the partial(child)-competences is used
- one of the associated materials is in use

Competence fields are locked if:

- an assessment is in progress
- one of the competences/child competences/materials is being used

Release material for new submission

Once the teacher has assessed the submitted material, the student cannot work on it anymore. Even if exabis ePortfolio is used directly in addition students cannot modify or delete the submission in the ePortfolio block anymore. However, the teacher can unlock the submitted item for re-submission using this symbol .

Relocating materials from the competence grid in pre-planning/planning storage

The pre-planning storage is used to do preparatory work as a teacher. Preparation of material can be done at the beginning of a school-year or for a bigger topic to work on where a pre-selection of material is necessary.

At a given time material from the pre-planning storage can be released to the students. From this moment on material is available for the students and can be put on a weekly schedule by them.

In addition for individualization purposes additional material can be put on the planning storage of a student if additional tasks are needed.

If a teacher wants to put a task from the competence grid on the weekly schedule/planning storage for a certain student, the teacher can directly click on the weekly schedule symbol, which is next to the selected material    .

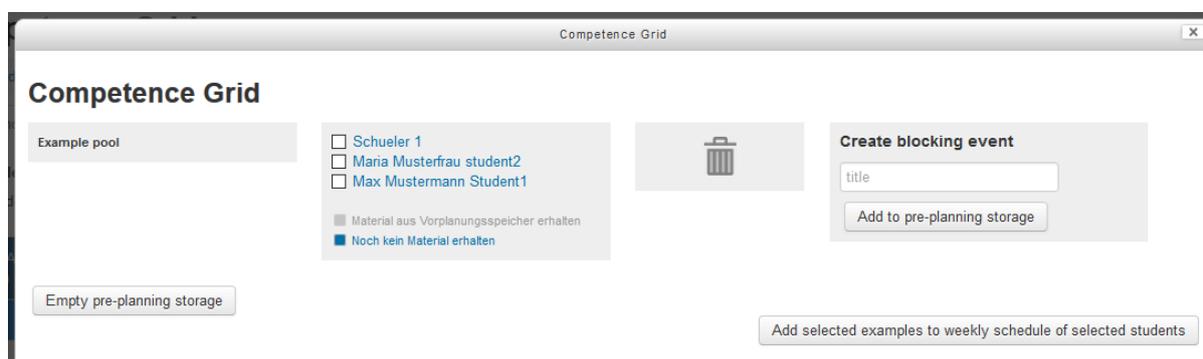
If the teacher wants to put a material on the weekly schedule for all students, it should first be put in the pre-planning storage  .

Attention:

Always consider whether materials should be made available for all course attendants or for one specific student in advance. This can be done by the appropriate selection from the pulldown menu. The edit mode has to be switched off for this!

Using the pre-planning storage within the competence grid

With a click on the symbol  the pre-planning storage is opened. Materials which are stored in the pre-planning storage are listed. The students have the same view. These materials can be put on the weekly schedule in a second step. This can be done by the students or for the students by the teacher.



To put materials on the weekly schedule/planning storage for a certain student the teacher must select the material and the appropriate student and click on the button "Add selected examples to weekly schedule of selected students".

After distribution of materials the teacher planning storage is empty. If there are changes needed these can only be done on the individual weekly schedules of the particular student. If a material needs to be deleted, just drag that item on the trashcan icon. Additionally, the whole pre-planning storage can be deleted.

For a better understand of the concept of the pre-planning and planning-storage concept please refer to 2.5.2.

1.3 Interdisciplinary subject topics

Interdisciplinary subject topics are topics that pull together competences from different competence grids. For example an interdisciplinary subject topic called "statistics" could cover aspect from a mathematical competence grid as well as relate to a different subject like geography and competence grids used therein.

Using templates

A template can be used to create a new topic. To do this click on the symbol for templates next to the general interdisciplinary topic template . The interdisciplinary topic template selected is automatically copied into the existing course and can be used here. The template used can be adapted and saved to a new template again which can be made available throughout the Moodle installation for other teachers.

New interdisciplinary subjects

To create a new interdisciplinary subject, click on the button

 Create new Cross-Subject

and add the name, the competence field and the description. After this, available competences can be added to the interdisciplinary subject. To delete a topic, click on the button .

Adding competences to topics

Competences and their attached learning materials can be allocated to the cross-subjects.  Add descriptor to Cross-Subject

Notice:

- When a child competence of the interdisciplinary subject is added, the associated main competence and the competence fields will be added as well, including all related learning materials.
- When a competence is added, all child competencies and learning materials that are connected with this competence will also be attached.
- Learning materials cannot be explicitly added, only with their competencies/child competencies associated.

Publishing interdisciplinary subjects to students

An interdisciplinary subject can be published to one or all students . Existing shares for students are overwritten by this process.

Shares for students can be changed independently from competences/child competences/learning materials. This means that even if materials are used in another context the topic can be adjusted for other students as well.

Explanation: Interdisciplinary subject topics are a duplicate view of the competence grids. Therefore sharing is independent from using competences of a grid.

1.4 Competence profile

The competence profile is an overview for the student as to how many competences have been reached and an overview of the students' self-assessments.

The following elements are listed within the competence profile:

- competencies reached
- students' self-assessment
- overview of all competencies + learning assessment + summary
- individual competencies including levels, self-assessments and evaluation.

1.5 Learning materials

Teachers find an overview of all learning materials that are available in the competence grid under the tab "examples and tasks".

These can be sorted by competences or learning materials and opened and viewed directly including additional material if available.

1.6 Weekly schedule

View

Use the dropdown menu containing course participants to choose the individual competence grid. All students can be chosen from the dropdown as well to fill up the weekly plan for all students directly.

After filling the weekly schedule for students, changes can only be made on the individual plans of each student.

The weekly schedule can be changed to monthly, weekly and daily view.

Planning storage and pre-planning storage

Depending on the students chosen either the pre-planning storage or the individual planning storage is shown. It depends on whether all course attendants or only one student is selected. How the storages are filled is explained above.

Filling in the weekly schedule

Adding learning materials from the storage to the weekly schedule can be done by drag & drop. A learning material can be dragged back with same method as well with the trash bin function. The learning material in the trash bin is not completely deleted until the bin is emptied.

Using learning materials

Learning materials on the weekly schedule can be moved around and also shortened or enlarged through the drag & drop function. They can also be moved back to the pre-planning storage or into the trash bin. Materials are not deleted from the bin until the bin is emptied.

Click on the magnification symbol to get a preview of a learning material. By clicking on the chain symbol, you can also see the relation between the learning material and associated competences.

If the learning material is needed more often, it can be copied using the  symbol. The copy is located under the same name on the left in the pre-planning storage.

Additional information

If the learning material is on the weekly schedule and is already assigned, the evaluation from students/teacher will be shown.

If the learning material is located in the weekly schedule assessments of students and teachers are shown if data is available.

1.7 Assessing students

In the block exabis competence grid different evaluating schemes can be chosen. These settings have to be configured for the whole Moodle installation by the administrator. An exception are course-based assessment schemes which can be adjusted by a teacher and override the settings of the Moodle installation.

In case the standards assessment scheme has been configured, the level of the competence can be chosen individually for each student. Standards configuration is G=(ground)basic level, M=medium (interMediate) level, E= enhanced level.



Assessment can be done either by grade (in numbers) for competences or categories (competence not reached, partially reached, mostly reached, fully reached) for child competences.

Communication Basics		▼	▼	
Knowledge of principles of communication		▼	▼	partly ▼
Principles of communication   	Verständnis	:-) ▼	G ▼	completely ▼
Appropriate communication behavior with a communication partner		▼	▼	no information ▼
Adequate use of communication methods and strategies for problem solving		▼	▼	partly ▼

Save selection

To confirm the selection, click on

2. The app DAKORA

Working with competence grids in learning scenarios for purposes of individualization is a modern pedagogical issue. For this GTN has created an app that uses Moodle web-services and enables an easy interface for both trainers and students working with tablets and simplifying the use of Moodle.

2.1 Pedagogical concept of Dakora

Planning individual learning processes

Using DAKORA learning materials can be assigned to students (either individual or a group of learners). Students can choose learning materials by themselves in addition and take them from a planning storage to put on their weekly schedules.

For students the weekly schedule looks like a daily task-schedule. It can also be printed out.

Assisting with individual learning processes and documentation

By clicking on a competence field the associated learning material is opened. Students work on the tasks, self-assess themselves, give feedback to the teacher and upload their solutions as artefacts to the lms. This leads to a change in color from blue to grey in the weekly schedule. The color turns green as soon as the teacher has assessed the material as being solved. The color turns red if the learning goal has not been reached yet.

Automatically generated statistics and graphical overviews help during learn-coaching and parental talks.

Teachers also work with DAKORA during the teaching and learning phases. They can assign more tasks, have an overview of all students' work and can assess them.

2.2 Pedagogical instruments

The concept in general exists of corresponding pedagogical instruments that interact to create active and learner-driven individual learning processes:

Competence grids offer a condensed overview of the description of competences and educational standards. They are used to plan teaching and learning processes. They show reflection possibilities and individual learning paths but can be used as an assessment-tool as well. Competence grids are a structured base for individual learning development talks with teachers and parents.

The description of competences is differentiated at a second level (child competences). Using child competences the gain of competences can be tracked in such a detail that the targeted individualized learn-coaching and support can be deducted from this process (pedagogical diagnostic as principle of learn-coaching).

Learning materials are materials and tasks for students. They can be assigned to child competences if a certain child competence should be worked on and gained specifically (**learning paths**).

Working with competence grids is not generally connected to a small-paced process: using open and more complex tasks more child competences can be gained on-the-fly (**learning themes**). Using the concept of **learning projects** open tasks can also be assigned to several competence fields. The term learning materials subsumes different tasks and links (which can be motivational videos or quizzes for self-assessment. Learning materials can be worked on in different interaction forms (social learning).

Working with competence grids can be established in particular training hours or as part of a holistic school-concept with open and individual learning phases.

For planning, documentation and reflection of individual learning processes different instruments will be used referring to the concept used – from to homework to a **learning agenda/learning journal** and the corresponding digital support.

2.3 Supporting individual learning processes digitally

The amount of work involved to support students individually over a longer period of time can be quite high. Therefore, it is useful to use digital instruments to reduce working time.

The digital realization of the pedagogical instruments described includes:

- Database of competence grids and child competences
- Linking of competence description and materials
- Assigning of learning materials to a whole class or a particular learning group or an individual learner
- (Self-)selection of material by the learner in different difficulty levels

- Planning guide (for example weekly schedule and overviews of materials to be worked on (planning storage)
- Self-assessments of students at the level of tasks and competences
- Assessment by the teacher on competence level.
- Bidirectional feedback from student to teacher and vice-versa
- Upload of digital solution
- Acknowledging and using the principles of GDPR

The functions described above show a clear way that these pedagogical instruments are ready to use for digital learning scenarios in classes with tablets or where time and space-independent learning is needed.

Even if the whole infrastructure is not available at schools individual software elements can be used. Teachers can add learning materials collaboratively in schools: assignments, relations to school books and literature as well as web links.

Each teacher can add individual materials and enhance the competence grid for all. Digital competence grids can be part of a grading book by documenting for each learner when a child competence or competence has been reached. This way an overview as basis of learn coaching and individual support is created.

Many of the functions needed to work with digital competence grids are already part of the learning management system. This is enhanced by plugins of the EXABIS-series. To provide an easy-to-use intuitive interface the app DAKORA was developed which can be used by both teachers and students.

The modules are based on the GDPR guidelines of the Agency of Data Protection of Baden-Württemberg which is considered being one of the strictest and most sophisticated in Germany.

The modules have a two-factor-authentication implemented.

2.4 Digital learning development reports

Exabis student review being one block of the series can be used to collaboratively assess students by a teacher group. The block can be used without the other modules of the EXABIS-series. Learning development reports can be used autonomously without using competence grids.

If used with the Exabis Competencies Block however recommendations/suggestions of grades related to the competences documented can be given in the reports.

Advantages of generating learning development reports digitally are clear: entries to the report can be made from anywhere. Head teachers of a class always have the overview and entries of their teacher colleagues – this relates to both assessments on subject level as well as working motivational and social aspects. All entries of teachers related to soft skills are automatically aggregated and a point-average is calculated.

Dakora was developed together with the Ministry of Education in Baden-Württemberg and is an acronym for “Working with competence grids - **Das Arbeiten mit KompetenzRAstern**).

The software is a webapp that can be used with a browser or as an app downloaded from the app-stores.

Currently the app can only be used on tablets for usability-reasons.

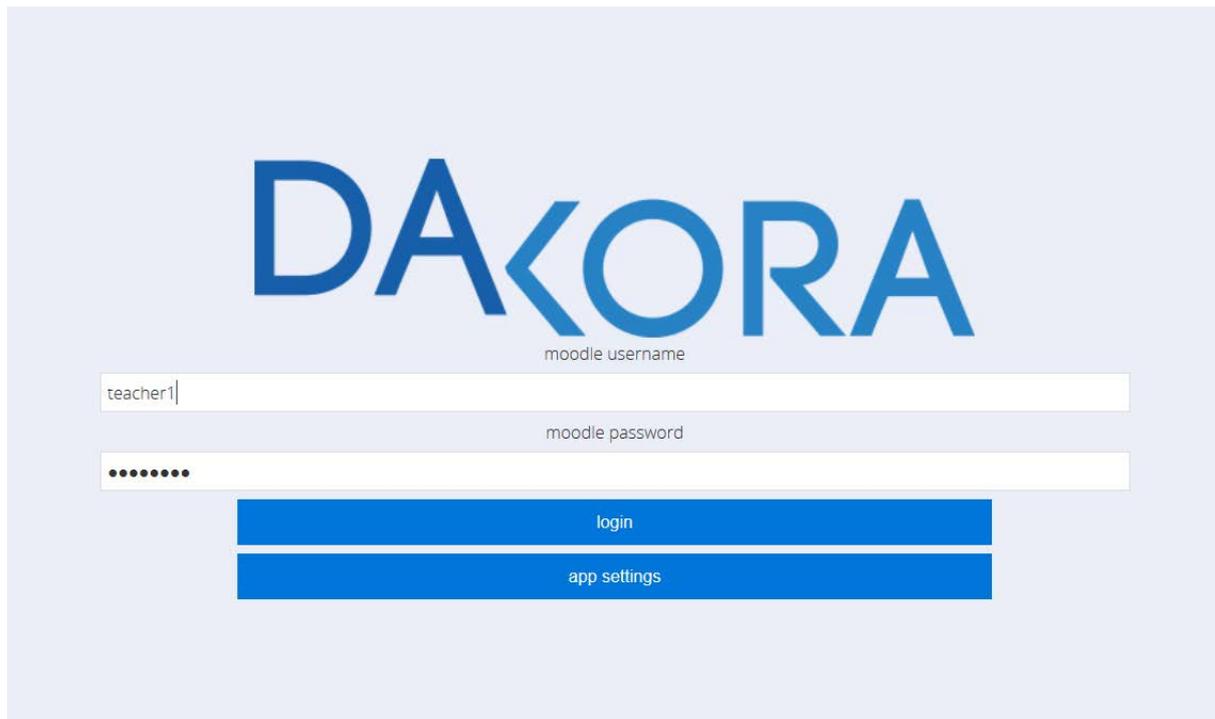
2.5 Working with Dakora as a teacher

Dakora can be used by both teacher and student during classroom-work. For the teacher the app is used to do preparatory work before distributing materials to students but also to individualize learning processes by assigning suitable materials and task to all students or to individuals. After students have turned in solutions teachers can assess them on pre-configured scales and give feedback. All data is stored in Moodle and can be accessed from there as well.

2.5.1 Logging in to the app

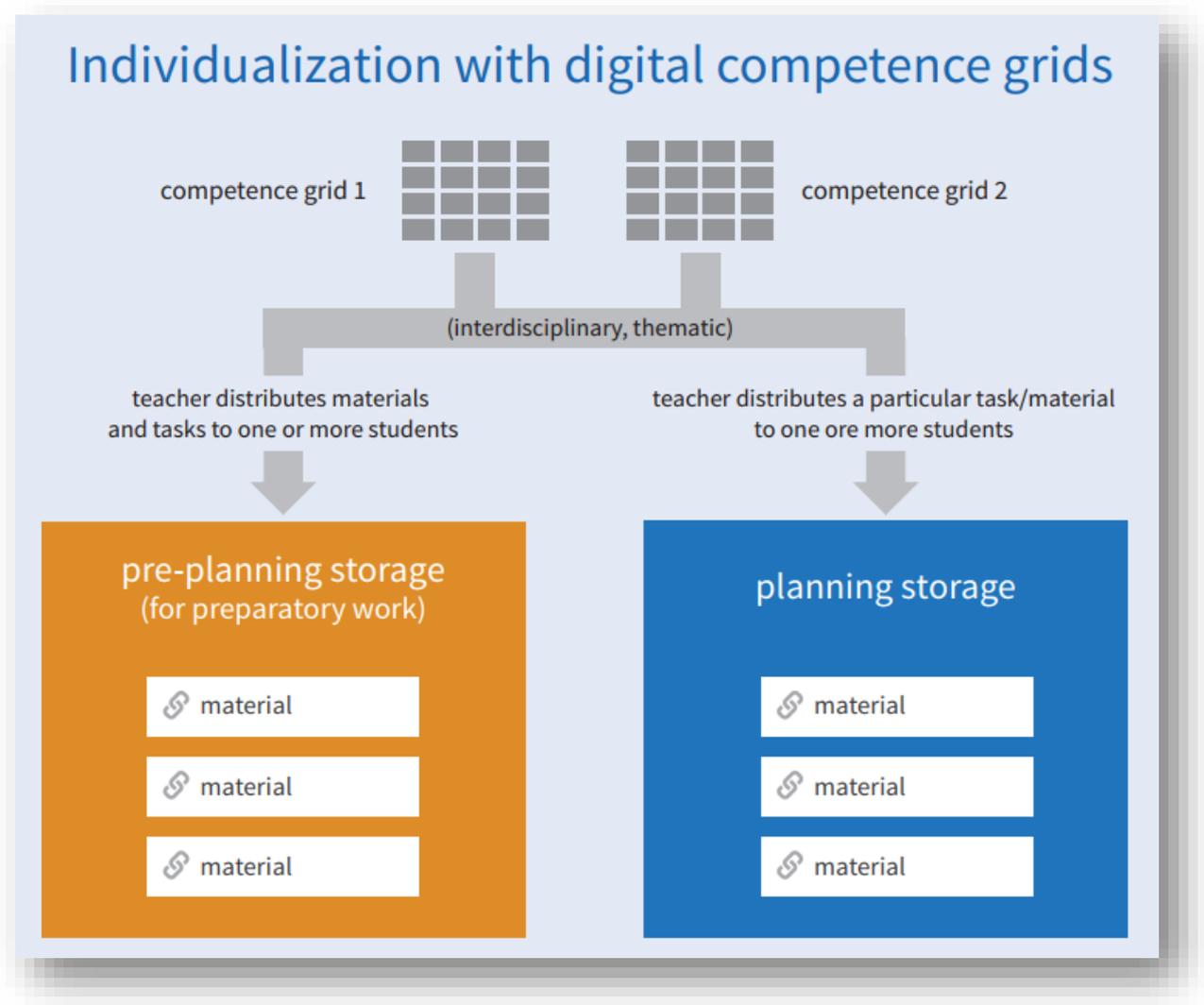
Dakora has one source code and can be compiled as a web-version, for Android-based devices, Windows devices and iOS devices.

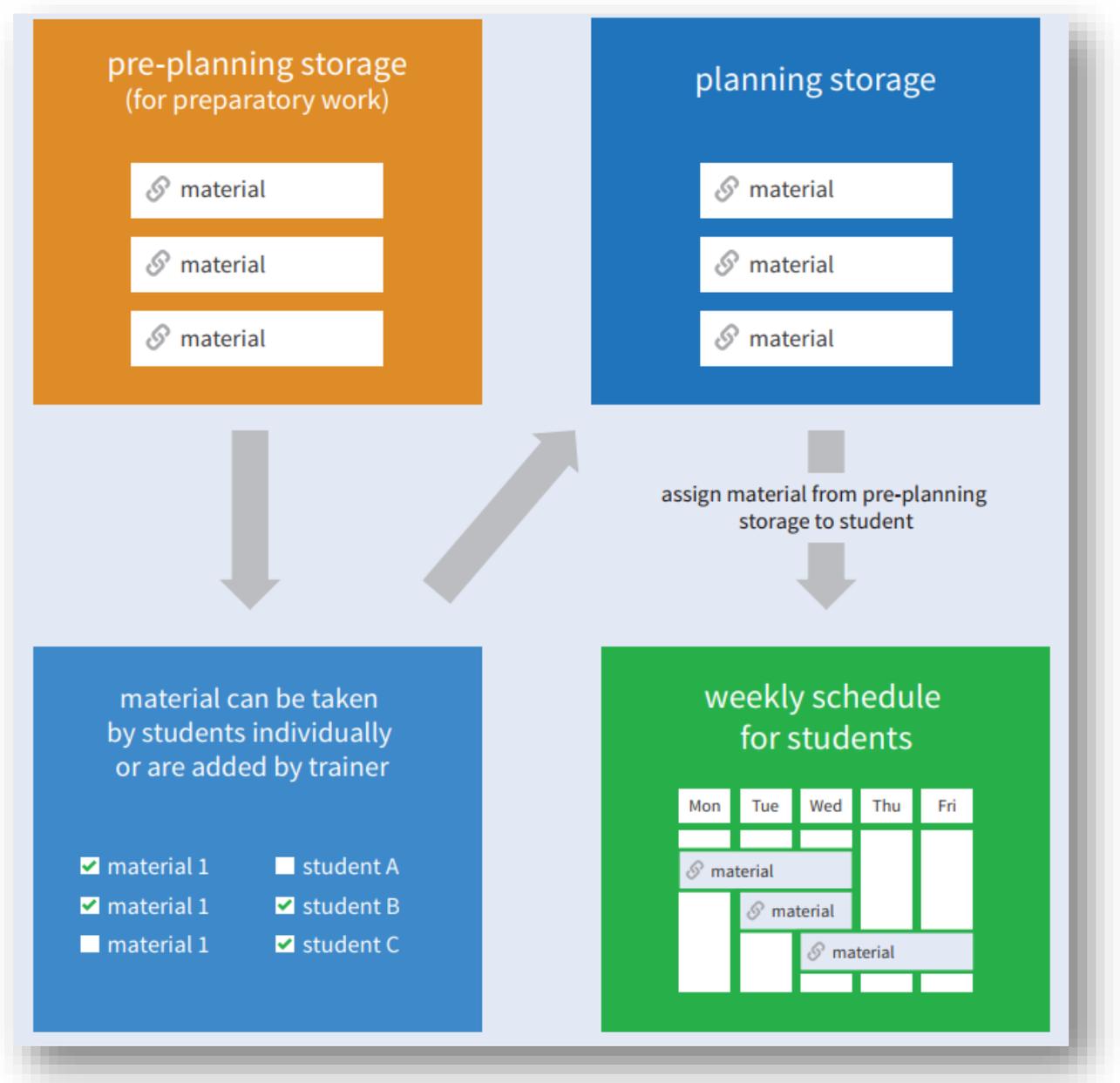
When used as a web-version server settings can be configured in a configuration-file. Otherwise the Moodle-server that stores the data has to be entered, as well as the login-information. Dakora uses the same authentication method as is configured within the Moodle installation. After initial configuration changes can be made using the button “app settings”.



2.5.2 Planning and pre-planning storage

To better understand the concept of pre-planning and planning storage take a look at the following two figures.





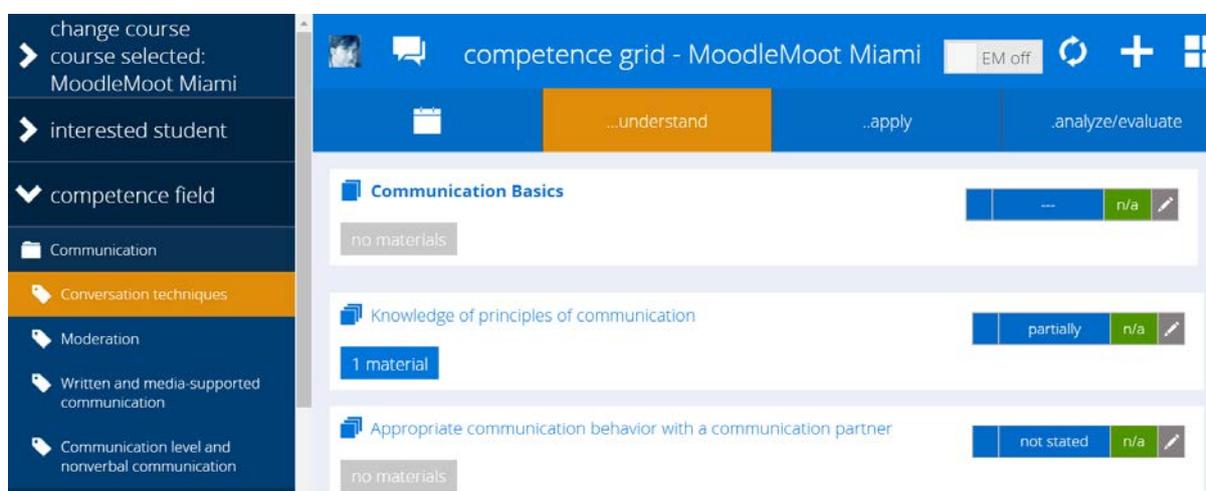
2.5.3 Adding material to the competence grid and pre-planning storage

This is the first step a teacher undertakes for preparatory work. A typical scenario would be that a teacher would compile different material and tasks before starting a new topic within a subject. These materials can be uploaded into the competence grid and the pre-planning storage.

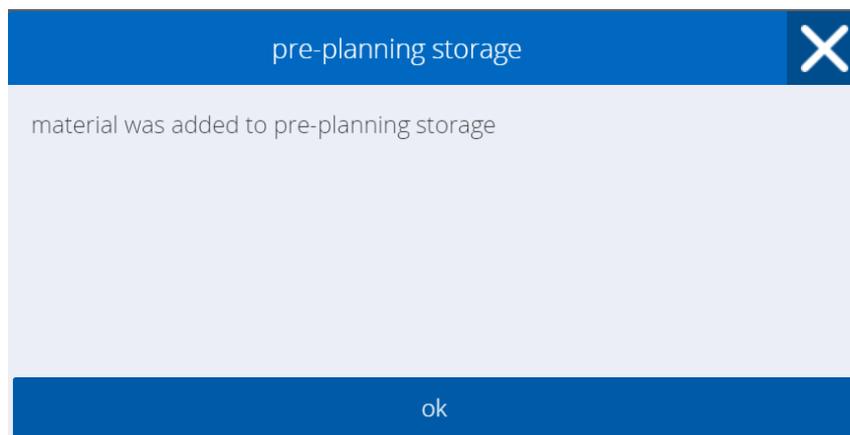
Login to the app and choose competence grid from the main page:



1. Select the desired Moodle-course in the left column. For the pre-planning storage it is useful to select „all students”. During the individualized assigning of materials to students from the pre-planning storage to the planning storage you can choose explicit students that you want to assign materials to.
2. In the left column select the competence field.
3. On the right area the child competences are shown.



4. Select the desired child competence and click on the button „material“. Put a checkmark next to the desired material and choose „put selection to the pre-planning storage.“
5. The selected material is transferred to the pre-planning storage.



5.1.1 Edit mode

Using the edit mode which can be found in the upper righthand corner teachers are able to upload additional material and tasks to the competence grid. This data will then be connected to the competence grid focusing on teacher cooperation. All other teachers using the competence grid in different courses will also be able to access these tasks.

If the edit mode is turned on teachers cannot assess competences of students. For this edit mode must be deactivated again.

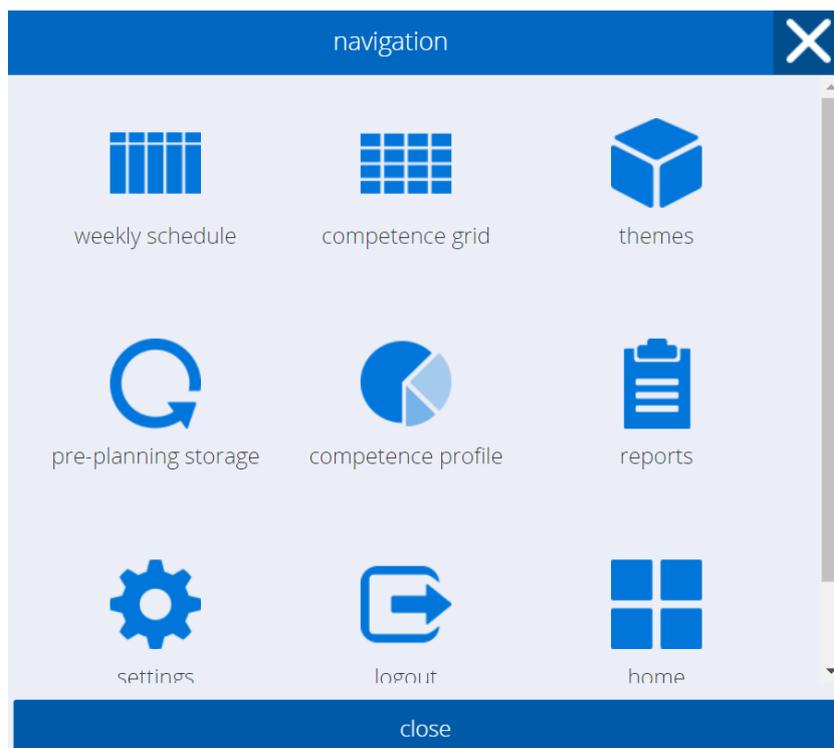
In edit mode it is possible to:

- add new material
- add new child competences
- add, delete, hide new themes (interdisciplinary topics)
- hide material
- hide child competences

5.1.2 Transfer material from pre-planning to planning storage

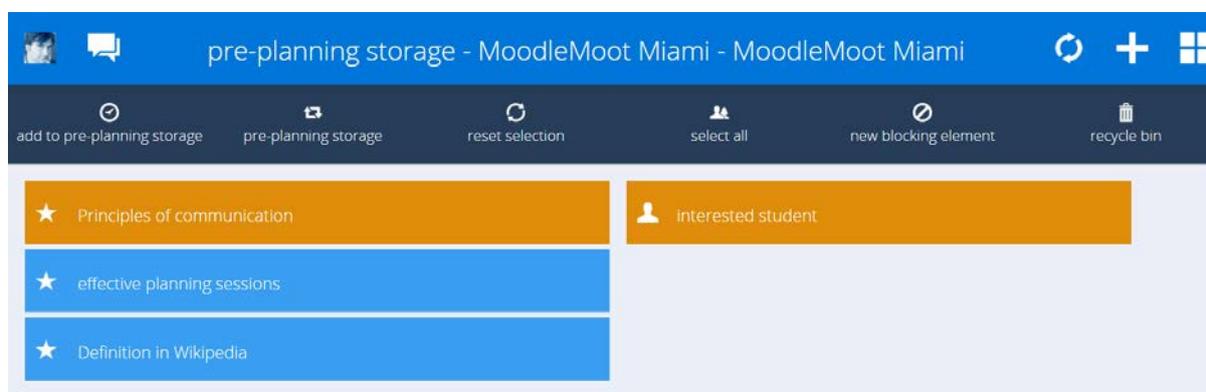
1. Login to the app and choose competence grid from the main page:
2. Select the desired Moodle-course in the left column.
3. Then click on the navigation button in the upper righthand corner to access the pre-planning storage.

4.  and pre-planning storage



Steps to take:

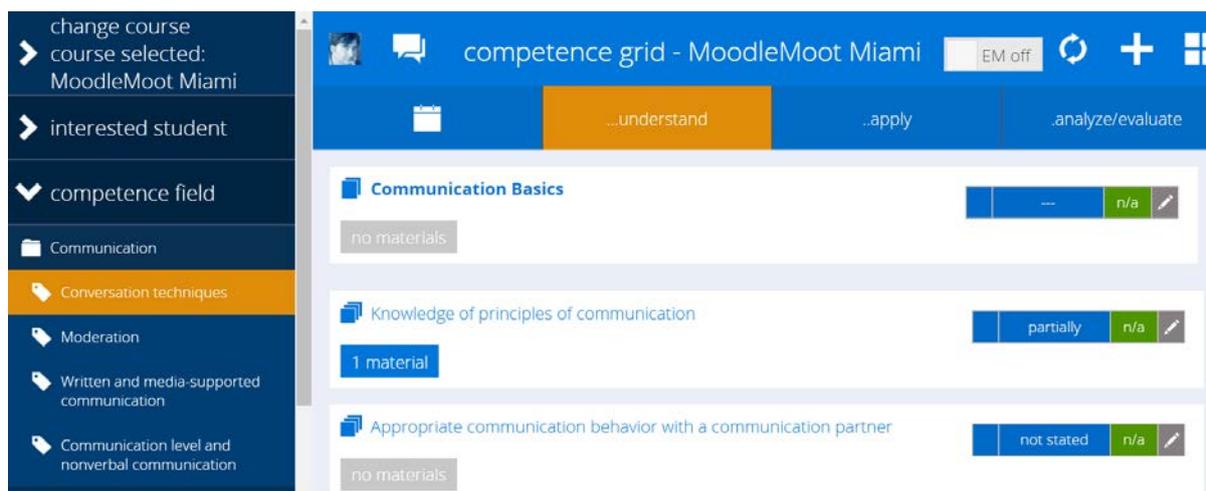
1. Select the desired material
2. Select student
3. Or distribute to all using the button „choose all students“.
4. Using the button „planning storage“ assign materials to the desired students.



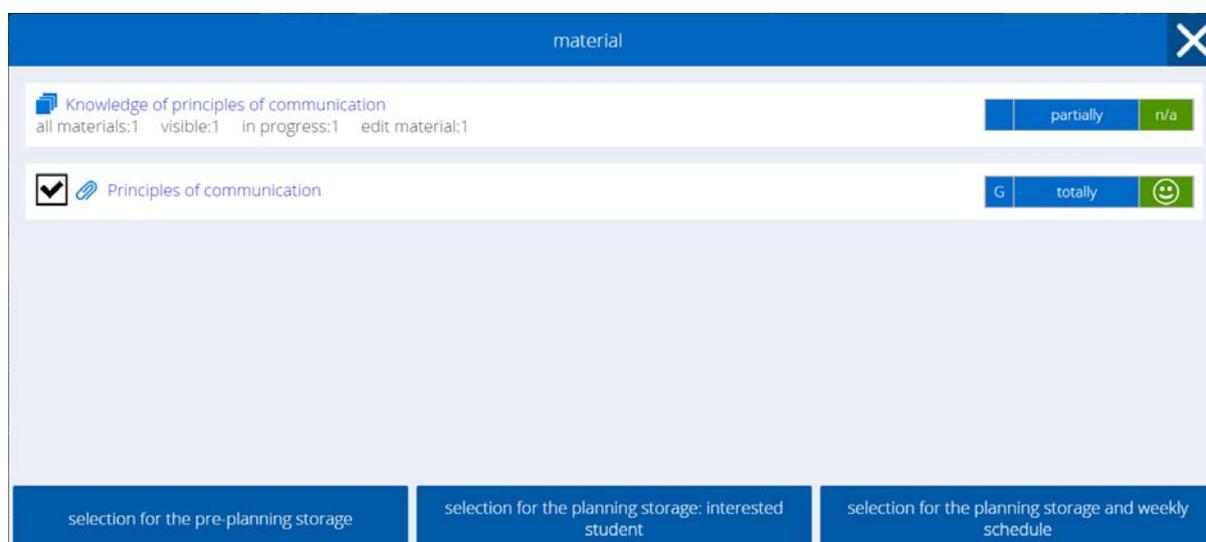
4.1.1 Allocating material from the competence grid to the planning storage

1. Login to the app and choose competence grid from the main page.
2. Select the students you want to assign the materials to.

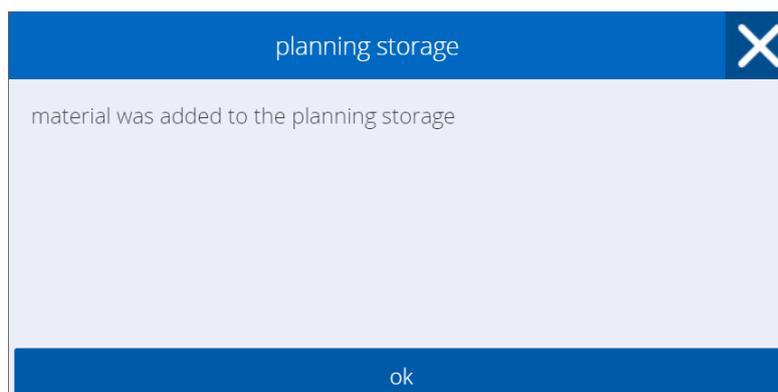
3. Select the desired competence field.
4. Select the desired child competence and click on the button material.



5. Put a checkmark next to the material and click the button „transfer selection to the planning storage: all students.

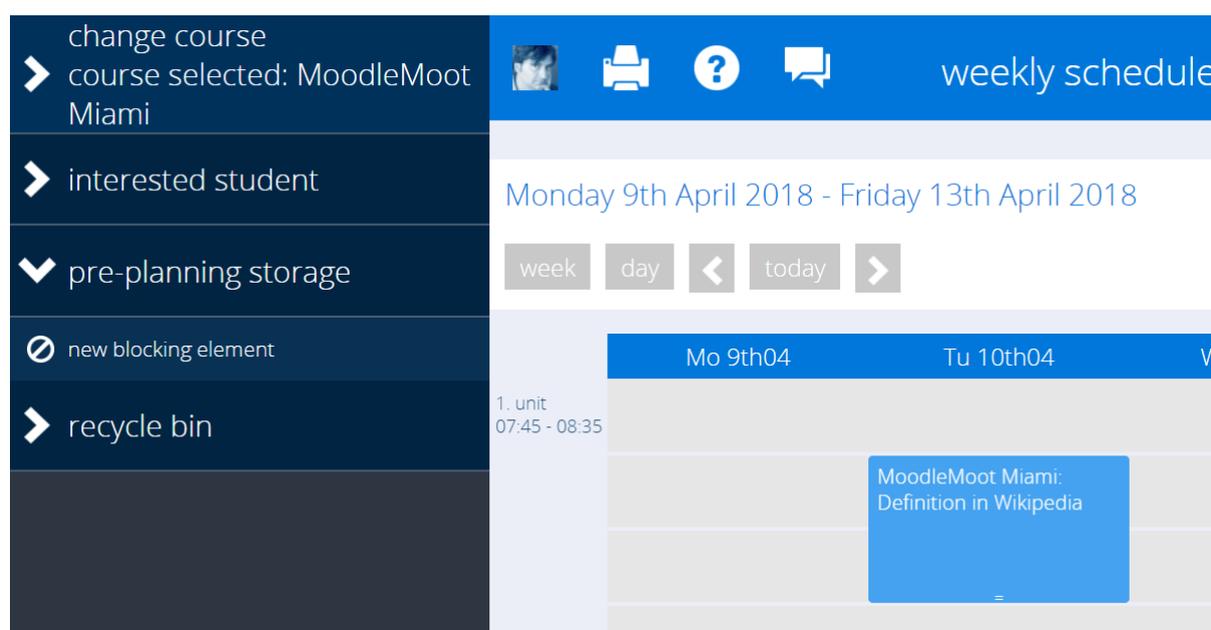


The material is then added to the individual planning storage of the student.



5.1.1 Transfer material from planning storage to weekly schedule

1. Login to the app and choose weekly schedule from the main page:
2. Select the desired Moodle-course in the left column.
3. Select the desired competence field.
4. Select the students you want to assign the materials to.
5. Activate the material by clicking (or tapping using tablets) on it once and then move it to the weekly schedule by drag&drop.

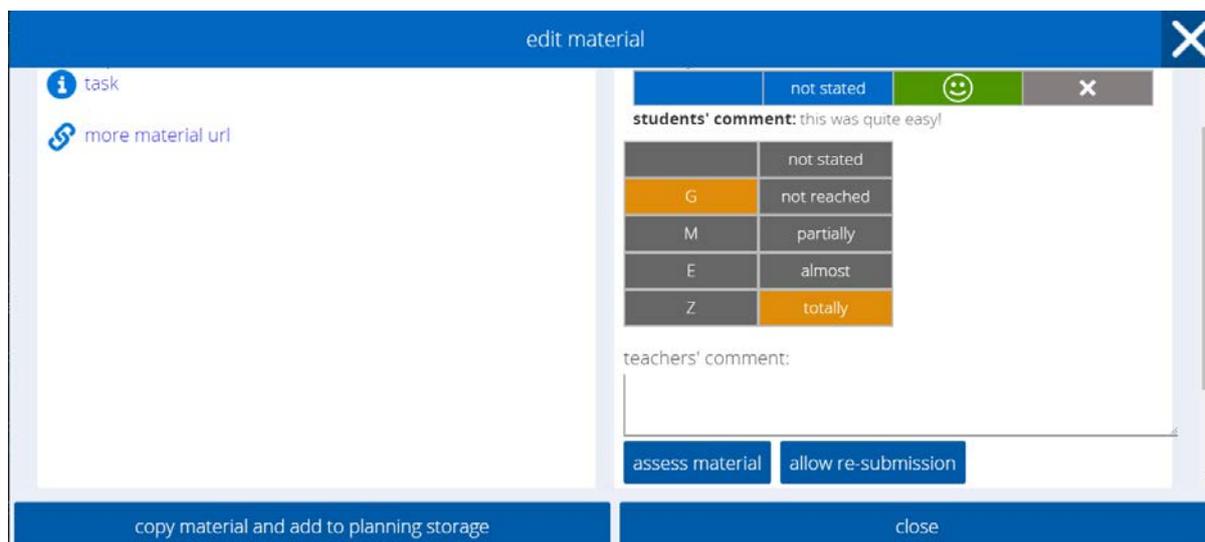


By clicking on the bottom of the material box in the weekly schedule the duration-time for working on the assignment can be adjusted.

5.1.1 Assessing uploaded solutions

Currently all solutions that are turned in by students are saved to the export module.

1. Login to the app and check using the notification icon if students have turned in assignments.
2. Navigate to the weekly schedule and select the desired course and student.
3. By double-clicking on the material (grey) a detailed view is displayed.



On the left side the original assignments are accessible via link. In the right column the turned in solutions (or weblink) of the student can be accessed via link. If the app-version of Dakora is being used, a link is called up with the standard browser. Solutions can be assessed according to the scales that were defined in the module Exabis Competence grid (exacomp) for the Moodle installation by the administrator.

If self-assessment of students has been configured smileys indicating their overall feedback for the material are displayed.

Comments can be given back to the student. These comments are connected to the upload (artefacts) of the student and are therefore part of their individual portfolio. This chronology can be accessed using our module Exabis ePortfolio (exaport).

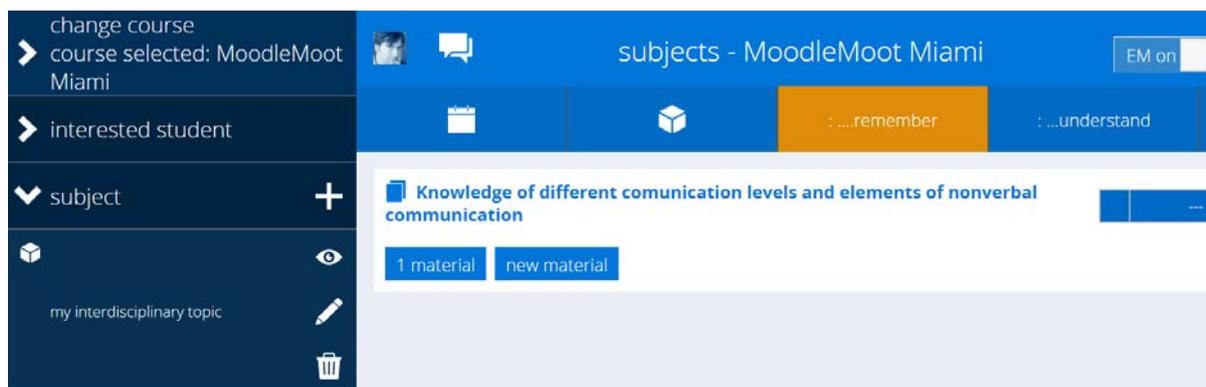
At the bottom of the detailed view the linked competences are displayed.

3.1.1 Themes

Themes are considered interdisciplinary combinations of more than one competence grid. Tasks and materials can be assigned to interdisciplinary themes as well.

This could be considered as the opposite option for individualization compared to the granularity of materials that are connected to child competences.

If students to be assessed prove to turn in a correct solution based upon an interdisciplinary theme they prove their competence for all competence grids that were linked to the theme provided that the assignment linked to the theme considers all competences in the competence grids involved.



In edit mode competences of different grids can be combined. In addition, templates that have been prepared and published in a Moodle course can be selected as well.

3.1.2 Competence profile

In the competence profile teachers can access an overview of how competences have been gained by students at which level within competence field, topic or subject.



3.1.3 Reports

In the reports section different reports related to the educational standards, competences, child competences, materials and time-frames can be generated.

4. The app eLOVE (electronic Lifelong Outcomeoriented Vocational Education)

Background of the app

The app itself was developed during a three years' project with a EU-grant for the Erasmus+ program focusing on strategic partnerships. Organizations from Finland, Holland, Germany and Austria cooperated to develop a pedagogical concept for vocational schools.

The app can be considered to be an innovative approach towards guidance of open learning processes focusing on eportfolio-work and competence-documentation. More information can be obtained at: www.lovevet.eu

The basic idea of the app is to deliver tasks (which are created using the SAMR-concept) to students within competence fields. Students then produce artefacts (i.e. video-recording certain work-processes during welding in a company) that are uploaded into Moodle and are associated with competences. By this, assessments can be done by teachers as well as external trainers and after successfully solving tasks (more uploads are possible referring to a process oriented portfolio concept), competences can be acknowledged.

During this project a third target group was considered as well: trainers for students participating in apprenticeship programs. These trainers work in companies together with students and guide them during their learning process.

For students, the development of competence profiles can be seen in graphical charts that are generated dynamically in the app.

To make the app usable by „external trainers“ in companies which might not use Moodle, the function „external trainer“ was added to exabis competencies. External trainers have to be configured within the block and can be directly associated with students (due to the fact that trainers can be in charge of more than one student and trainers from more than one company can be within one Moodle-course).

If the app is only used in a school-context course-trainers also have to be defined as external trainers within the exabis compencies block.

For a better understanding of the workflow, take a look at this figure:



There is a basic workflow to guiding any online learning process: within a pre-defined structure (competence fields) tasks are delivered to a target group of learners. Learners upload their solutions to the platform. Trainers give feedback by commenting, grading, reflecting.

The app eLOVE focuses on a simplification of this process using the mechanisms of Moodle. Tasks that are solved ultimately lead to a gain of competence and a development of a competence profile.

Login and settings

Before trainers can login with the app, the administrator needs to assign the external trainers in the exabis competence block.

Data needed for a trainer-login:

- Server-URL
- Moodle User
- Moodle Password
- Definition of Moodle-trainers using the app as external trainers

Moodle and eLOVE

eLOVE uses all data from Moodle with web-services. Therefore, all changes apply to both interfaces.

Navigation

To navigate from the login page to the main page use the arrow on the upper left side of the page.  At the right side of the page you can find a button  for navigation and help.

After a student is selected, a navigation bar opens on the bottom.



Trainers get an overview of all students that are associated. If solved tasks are contained within a competence field the field is highlighted in orange color.

The symbols right next to the task show the number of task submitted/assessed or waiting for assessment.

Operating instructions

After login, a list of all associated students is displayed to the teacher. It is now possible to either select a specific student, or switch to the competence fields. Once a student is selected, a list of the subjects/topics shared for this student is displayed.

Learning materials

Learning materials that have been added in the course competence grid are shown. Also, individual tasks can be uploaded via app.

Assessment

If a student has submitted a solution the trainer can assess it right away. New uploads from students change the colour of the competence field. By clicking on the sub competence, the upload can be accessed and assessed.

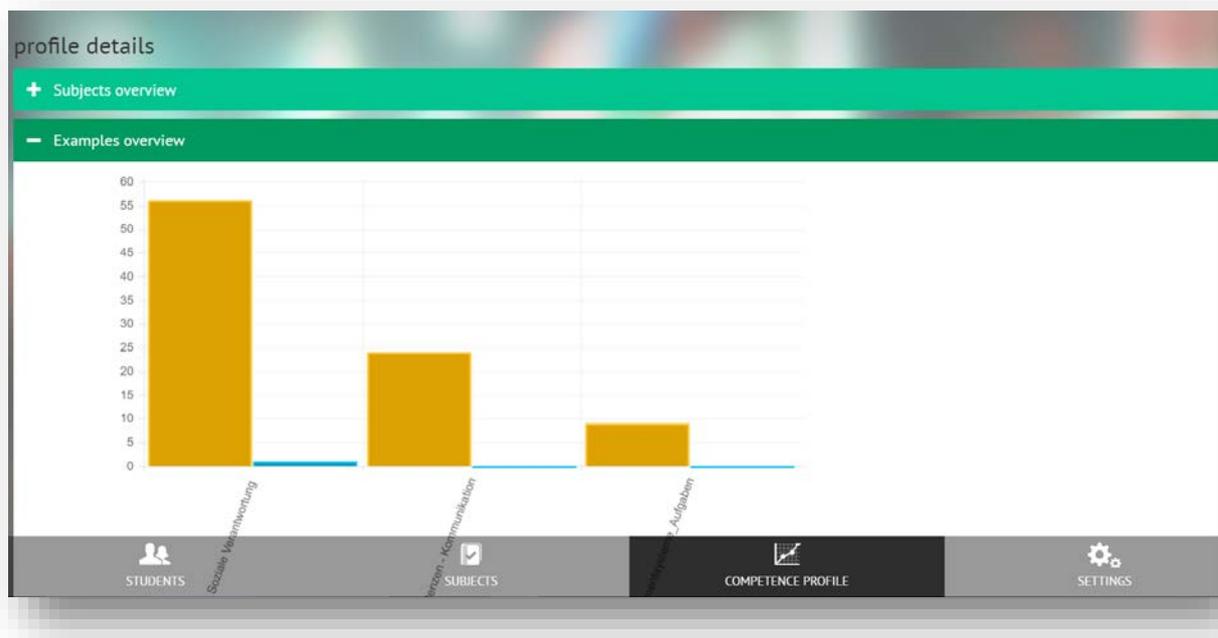
Students that have successfully solved a task can be ticked off. Also, if a competence has been reached, it can be granted by the teacher (tick). Verbalized feedback can be given as well. The trainer can leave a more detailed feedback for a particular student. Whether the

task has been solved or, a comment and the percentage of the task's achievement can be given.

The assessment function is not active if no upload has been made by the student.

Competence profile

There is no function for the trainer to edit or assess in this part. The competence profile is only used as an overview for all competencies gained by a student.



For more information related to eLOVE please check the documentation on:
<http://www.lovevet.eu/outcomes/app-elove.html>

5. exabis ePortfolio

exabis ePortfolio ist a portfolio-module for Moodle. Key functions are:

- upload of artefacts in a course-independent structure
- organizing of documents in a directory structure
- selective publishing of eportfolio-content within views
- interface to the Europass-system
- association of portfolio artefacts with competences
- interaction (contains data from) with eLOVE-app
- interaction with Dakora-app

For more information please refer to the documentation related to exabis ePortfolio.

My CV

Under the first tab, My CV, the user will find his/her informational page. This can also be seen as a basic introductory page for the personal cv. Data contained within this page can be exported to the Europass (for more information related to the Europass, please visit www.europass.eu).

Via the Edit button the Moodle editor can be accessed with which personal information can be added.

The tabular layout below is used to get a structured overview of the cv. By means of the buttons Edit or Add, desired data from the educational career and the employment history as well as goals and competencies can be added.

This information can be added to views and published via link to the web. Also it is possible to export the content to the Europass-format. This is done via the tab “Export to Europass”.

My CV

Expand all

• Cover letter

Mein Lebenslauf

Edit

• Education history

Qualification	Attachments
gtn solutions 2011	0

Add

• Employment history

Add

My portfolio artefacts

Portfolio users can directly upload their own data via file-upload, add links to other external websites (i.e. social media resources such as YouTube etc.) or add some notes in their portfolios.

The Portfolio may be used to store web addresses, files, as well as enter notes that may contain insights or little notes the user may wish to write down.

Categories:



Current Category: **Root Category**

Artefacts can be added within categories, new categories can be created.

The exabis ePortfolio module can be associated with the module exabis competence grid (see Admins Settings). This module is used for adaptive learning scenarios and enables competence association with portfolios.

Competencies can be added by clicking "choose competences associated with your upload".

In addition, an icon can be uploaded and keywords can be created to search for artefacts more easily.

It is also possible to have access a shared folder. This shared folder can contain data from other users that have uploaded artefacts that were created in group learning processes.

My views

Views allow the publication of different artefacts that can be published to any target group. If a new view is created, it can be shared immediately with all course instructors. Drag & Drop allows you to add entries to the view from the list of previously created artefacts. Additional fields can be added.

Beside the administration of views the layout can also be changed. Via sharing you can select who is able to see the view.

For the external access to the ePortfolio, an automatically created link option is available. You can also enter one or more addresses in the given text field. A link to this view will be sent to every email address added.

Published/shared views or categories can be found under the tabs "shared views" and "shared categories." After publishing a view, other Moodle-users can comment on the artefacts. If views are exported to the SCORM-format, comments can also be exported.

Exabis competence grid, ePortfolios and eLOVE

For a learner to prove an advance during a learning process within a competence field, it is possible to upload eportfolio artefacts within competence fields that are then displayed within this structure.

Especially the app eLOVE focuses on this aspect. Tasks that are rolled out to the app within competence fields can be solved and the results are uploaded within a student's portfolio and connected to the competences that are provided. If the solutions turned in are appropriate a trainer (or external trainer) can assess the results ultimately granting the competence gain.

Import/Export

The data, external links, notes and comments linked within the ePortfolio and its categories can be exported to the SCORM-zip-format.

For this a view has to be selected, then the export can be done. The file can be adjusted offline with every SCORM-Editor. With the same function, certain SCORM-packages can be imported as well.

The option "import from Moodle-assignments" lists submitted Moodle-assignments to import. Assignments can be selected and added to the portfolio-structure which is course-independent.

6. Student review

Student review is used to aggregate data from all three Exabis modules and give extensive reporting. The module can be used as a permanent documentation of a learning advance of a student. Teachers are able to give feedback to students course-independently.

There are three tabs available to teachers.

Class Configuration

This tab is available if the administrator has configured the teacher for this class (head teacher) Using the global groups classes can be added. Also a time-period has to have been defined by the administrator beforehand.

Reports

All classes from one particular teacher are shown here. By choosing a certain subject, the teacher can type in the evaluation for each student. The teacher can also add some additional feedback to their students learning and social behaviour.

The student review can be exported and printed here.

Export report

This tab is available to teachers only. Learning reports can be generated for each class and printed.

7. edustandards.org

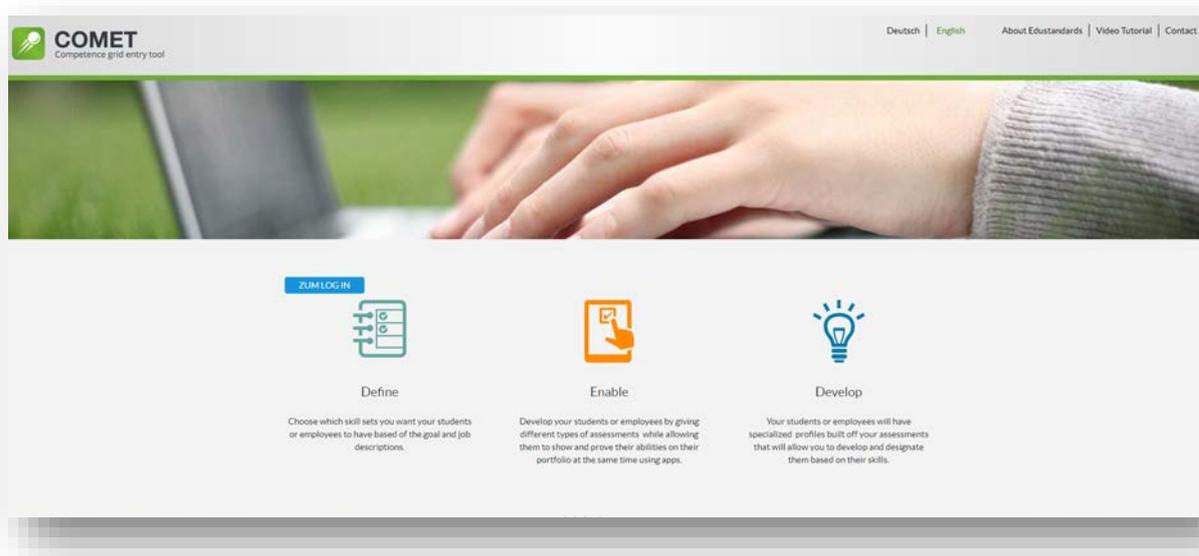
Edustandards.org is the platform for creating, organizing and enriching competence grids with metadata. The platform was created for the lovevet.eu-Erasmus+ project and helps structure competencies for different subjects.

The tool that is hosted by edustandards.org is called COMET (competence grid entry tool) and is based upon the Open Source Framework Typo3.

Edustandards.org manages educational and company standards for institutions and organizations under the Creative Commons principle. The basic intention is to develop a transparent overview of standards in educational institutions as well as organizations and their distribution as an orientation for others.

Competence grids are therefore useful for individual purposes to structure competences within a grid format but also adding materials (i.e. weblinks) that are associated with competence-fields. On the other hand, the platform makes it possible to collaborate during this process. Competence grids can be published for others to use and collaboratively work on different competence fields.

The results can be exported to different formats (pdf, xml,...). Competences that are exported from the tool into an xml-file can be imported in Moodle-installations to use competence grids within all courses.



An example of a competence grid is published to show how to structure competences. The competence grid used is related to the soft skill social competences – communication.

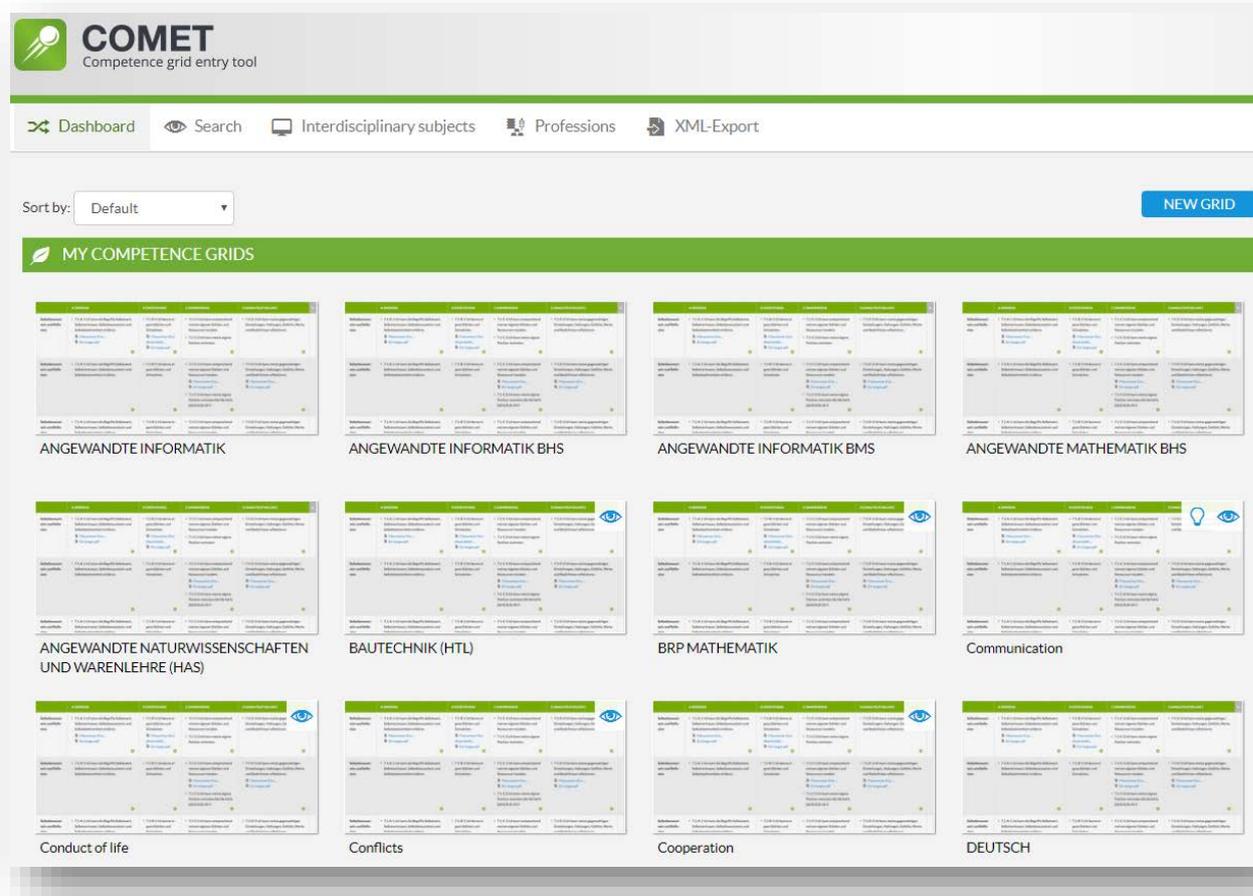
	E (ANALYSIS/EVALUATION)	1	2
Conversation techniques			<ul style="list-style-type: none"> > Knowledge of principles of communication Principles of communication > Appropriate communication behavior with a communication partner > Adequate use of communication methods and strategies for problem solving
Moderation		<ul style="list-style-type: none"> > Knowledge of principles of planning of working sessions > Knowledge of methods of efficient moderation 	
Written and media-supported communication	<ul style="list-style-type: none"> > Analysis and evaluation 	<ul style="list-style-type: none"> > Knowledge of possibilities of different communication media 	<ul style="list-style-type: none"> > Ability to choose communication media target-oriented

Competences are structured within subjects. The subject “Communication” contains different topics (i.e. “Conversation techniques”).

The difficulty level of a competence is displayed in the different columns. Different difficulty levels can be created (i.e. using Bloom’s taxonomy).

Competences can consist of main competences and partial competences. These can be added in the appropriate cells.

Attached to the competences are different resources that relate to the competence. These can be web-resources or direct uploads in the platform. Resources can be connected to more than one competence.

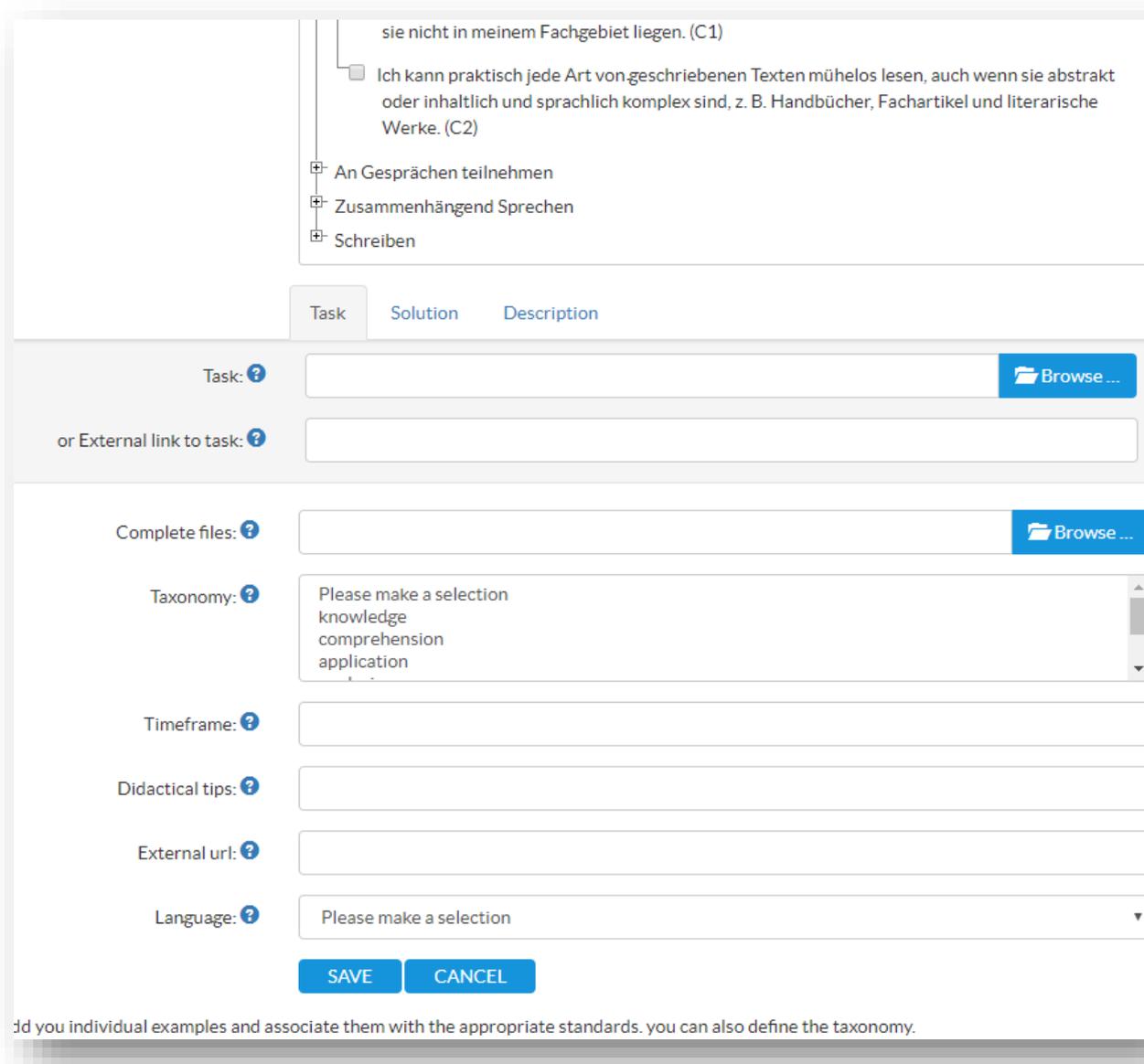


Accessing the dashboard after login and using the search function results in a list of published competence grids. Published competence grids can then be copied to the individual account and edited to individual needs.

New competence grids can be created as well using the blue button “New Grid”.

The screenshot displays the COMET interface for managing a competence grid. At the top, the logo and name 'COMET Competence grid entry tool' are visible, along with language selection ('Deutsch', 'English') and utility links ('Kompetenz Tool', 'About Edustandards', 'Video Tutorial', 'Contact'). Below this is a navigation menu with 'Dashboard', 'Search', 'Interdisciplinary subjects', 'Professions', 'XML-Export', 'Komet System', and 'Logout'. The main section is titled 'GERS' and contains a grid of competencies. The grid has columns labeled A1, A2, B1, B2, C1, and C2. The B1 column is currently selected and highlighted in blue. Below the grid, there are three buttons: 'TO MY FAVORITES', 'COPY TO MY COMPETENCIES', and 'COPY FOR EDITING MATERIALS ONLY'. The grid itself lists five competencies: 'Hören', 'Lesen', 'An Gesprächen teilnehmen', 'Zusammenhängend Sprechen', and 'Schreiben'. Each row contains a description of the competency and a green plus icon in the C2 column, indicating that resources can be added to that specific cell.

Competence grids can be added to ones' favorites or copied to edit. If a competence grid is accessed in edit-mode competences, sub-competences, meta-information and resources can be added to each cell.



sie nicht in meinem Fachgebiet liegen. (C1)
 Ich kann praktisch jede Art von geschriebenen Texten mühelos lesen, auch wenn sie abstrakt oder inhaltlich und sprachlich komplex sind, z. B. Handbücher, Fachartikel und literarische Werke. (C2)

- An Gesprächen teilnehmen
- Zusammenhängend Sprechen
- Schreiben

Task Solution Description

Task: Browse ...

or External link to task:

Complete files: Browse ...

Taxonomy:

- knowledge
- comprehension
- application

Timeframe:

Didactical tips:

External url:

Language:

SAVE CANCEL

If you have individual examples and associate them with the appropriate standards, you can also define the taxonomy.

Materials can be associated with more competences. The taxonomy level can be chosen and didactical information can be provided. For different educational settings solutions for tasks can be provided. This is helpful when working with self-organized learning scenarios.

It is also possible to combine several competence grids together to an interdisciplinary subject/topic. Doing this, tasks and resources that are related to different competence grids can be combined.

In addition the platform allows to create job-profiles that are associated with different competence grids. This way, a transparent and structured description of jobs that can be attained during educational processes can be compiled.