



MANUAL FOR TRAINING MENTORS

Seven Smart Steps

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1. INTRODUCTION

The Handbook for mentor training is a stand-alone compilation using a practice-oriented approach, providing a methodology for the whole adaptation process, advice and suggestions for improvement for teachers. The manual can be used as a stand-alone tool, but it can also be used as a supplement to the Methodological Adaptation Guide, as the latter provides a more detailed description of the e-learning pedagogical methodology used. The present paper is too technical to describe the application and it is therefore recommended to use it in parallel with the Teacher and Student User Guides.

The Handbook for mentors presents the experience and principles gathered in the Seven Smart Steps project and provides methodological suggestions for users. It aims to support teachers and institutions who want to use the methodology and the app. It takes a practice-oriented approach to the design and implementation of the development process, providing a general introduction to the methodology, advice and subject-specific development suggestions for the production of educational content.

The Tanlet digital teaching tool supports learning and teaching processes through interactive, playful exercises. Users can create their own learning materials and share them with others. Our aim is to create a user-driven database in parallel with professionally developed curricula, and to make the resulting content freely available to the professional community and other interested parties.

About the e-learning methodology in brief

The method can be used to provide personalised instruction to target students' skills, with differentiation that is in fact automatic and does not require any extra time on the part of the teacher. The essence of the Tanlet application and methodology is that it enables differentiated, adaptive learning along individual pathways for students. The curriculum consists of tasks of different levels of difficulty. At each level there are several main tasks, called superunits, consisting of a basic task, help question(s) and explanation(s). The student moves up and down the task system between the different levels of difficulty, depending on

whether he or she manages to solve the task. If he/she gives a wrong solution, a help task is given to try to unblock the problem, and finally, if necessary, an explanation is given.

2. What educational objectives can be achieved with the Tanlet app?

- **new knowledge transfer**

When delivering new learning material, it is a good idea to upload the learning content in text or video format. Once the students have become familiar with the new knowledge, they are asked questions/tasks related to its content which they have to solve (deductive). However, the acquisition of new knowledge can also be inductive, the student is first presented with the concrete problem, if he/she cannot solve it, a help task is used to guide him/her to the solution, and finally an explanation explains the solution and provides all the necessary background knowledge and background.

- **repeat:** recall what you have already learned at the beginning or end of the lesson
- Both the app and the ready-made learning materials are great for reviewing what you have already learned. It can be used at the beginning of a lesson, at the start of a new topic, to mobilise and recall what has already been learnt, but it can also be used in a summary lesson.
- **practice**
- The application can be used appropriately for training purposes. The more complex, multi-topic blocks of learning material are designed to facilitate a quick review of the entire primary school curriculum, whether in preparation for a final exam or an entrance examination.
- **monitoring:** level assessment
- **evaluation:** e.g. test-writing, writing a final exam

3. Teaching formats and the Tanlet app

The Tanlet application can be used in all forms of education, either on its own or in addition to other methods. The platform is suitable for both classroom and online learning, for independent or home learning (e.g. homework) and for blended learning, i.e. a combination of traditional and online forms. The design of the learning process can be based entirely on the use of the learning tool, but can also be complemented by other methods and tools.

4. Key features of the Tanlet application

Teachers' interface

The Teachers' Interface is the web interface for managing and creating learning materials and groups, and for monitoring (reporting) student performance. The Teachers' Interface is available on a desktop computer. Access to the Teachers' Interface:

<https://tanlet.classyedu.eu>

Learning interface

The **learning** interface is the interface for solving tasks, and students use this interface. The learning interface is available on computers, tablets and smartphones. The app can be downloaded:

Webapp link: <https://tanlet.classyedu.eu/app/>

Android app: <https://play.google.com/store/apps/details?id=com.tanlet.classy>

Reporting data

In the app, the Results menu allows you to track individual or group learning activity, view learning time, percentage results, identify content that is causing difficulties and thus identify stuck learning.

Operation types - task types

One of the main strengths of the Tanlet application is that, unlike other digital applications, it contains a wide variety of task types, with more than 10 different game engines available to users, allowing for a variety of actions to be used during the learning process.

- ✓ Pairing task engine: No P
- ✓ Grouping task type: sets
- ✓ Answer-choice game engines: question-answer, bubble monster, true-false
- ✓ Complementary game engine: word comprehension game engine, fish in water, hangman, word problem
- ✓ Text creation game engine: Individual text task (requires teacher assessment)
- ✓ Pdf tasks: suitable for uploading text content, presentations
- ✓ Audiovisual tasks: suitable for uploading audiovisual content

5. Preparing to use the app

Registration and login

Both teachers and students need to register to use the application. Registration is available at the following link:

<https://tanlet.classyedu.eu>



Create and manage groups

Once registered, teachers can easily create their classes or form groups of their choice to share tasks based on other criteria. How to set up a group: students will receive an invitation to their e-mail address via a system message, which they must accept and register on the interface.

Create routes

The creation of pathways (units of learning materials) is the step where the teacher shares the learning materials with his/her group, whose members can then access and solve the tasks in the learning interface. It is through the creation of the pathway that the content becomes visible to the students. In simple terms, the pathway consists of the tasks/content that we want the children to solve. Group formation and how to create pathways are described in detail in the Teacher Interface User Guide.

It is important to note that the pathways have their own set-up functionality (independent of the content), which determines how the system will play the learning material to the students. It is therefore essential that the settings of the pathways are always checked before the assignment is started.

6. Educational content

6.1 Educational content available in the system

At the moment, most of the content for upper primary school is available in the app, in a variety of subjects: mathematics, science, history, reading comprehension, language, Roma studies, manners, etc. The app and the clay already created can be accessed and used free of charge, and can be modified according to local needs and specific educational objectives after registration. The database can be used to access and create both level jumpers and linear content.

- Scattered learning: tasks are structured according to difficulty levels, with the student moving between easier and harder tasks (as described above)
- Linear curriculum: in effect a series of tasks in which the student progresses in a linear fashion

6.2. Helping you develop your own content - Proposed methodology for digital assignment writing

According to the methodology, the task preparation can be divided into separate phases.

The Nexius model was used as a basis for the content development process, adapted to the project conditions. The model itself consists of six phases, based on which the following stages are recommended to be followed during content development:

- ❖ **Preparation stage:** it is recommended to add a preparation stage to the 6-stage model in order to familiarise yourself with the toy engines and task engines and to prepare test tasks.
- ❖ **Conceptualisation:** essentially working through the four questions of the curriculum model: learning objectives, themes and structure, and how we want to teach the content. The concept gives the framework of the curriculum, the technical, content and visual direction, the structure of the curriculum, the criteria for difficulty levels, etc., with a preparatory phase to familiarise the students with the game engines and task engines and to prepare test exercises.
- ❖ **Manuscript writing: drafting a lesson outline in word (Methodological outline):** Opinions are divided among more experienced content developers about the need for this step. The arguments against it are that digitisation can transform tasks to such an extent that it may not be worth developing them in a final form beforehand. The other approach is that the digitisation process is greatly facilitated by the fact that the instructions and task texts already prepared need only be inserted into the game engines, even if they need to be slightly modified. The answer to this question remains an open question; everyone can adapt or leave this phase according to their individual needs and working methods.
- ❖ **Activity planning phase:** this phase involves thinking through the learning activity, which is defined by the system settings shown below. The focus is on ensuring that the settings for each task are appropriate to the subject and didactic development objective.

A következő funkciókat feltétlenül le kell ellenőrizni, mielőtt a diákok megkapják a tananyagot, mivel ezek a beállítások sok nehézséget okozhatnak a gyakorlati alkalmazásban:

- **the learning curve:** suggested progression from simple to complex tasks
- **linear - sync playback mode**
- Essential setting, to set the path of the sync content to sync playback. If it is played in linear playback mode, Help and Explanations will not be activated.
- **test practice playback mode**

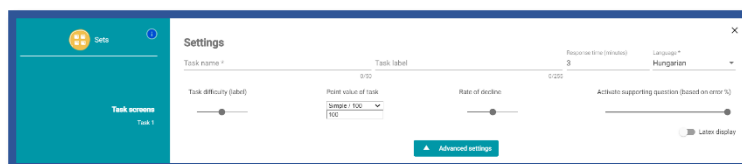
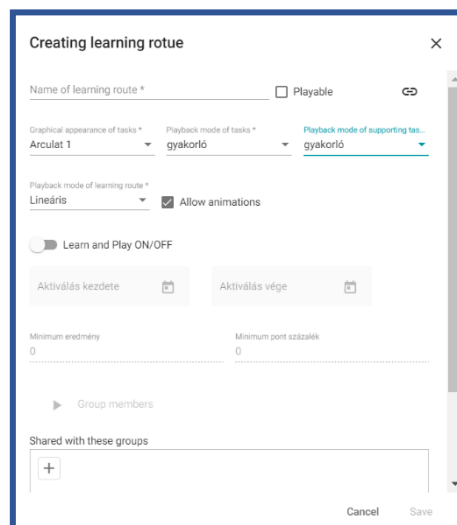
For each type of task, it is possible to define the playback mode according to the educational objective. The practice playback is used for practice, which means that the student can move on to the next task once he/she has given the correct solution. On the other hand, in test playback, the system evaluates the answer to the task, so that the student is given the next task even if the answer is correct or incorrect.

In the case of synoptic learning materials, the appropriate setting is Test Play mode for the Basic Task and Practice mode for the Help Task. According to the operational logic, if the student fails to solve the Basic Task, he/she will receive the Help Task, which must be solved correctly in order to proceed.

- **number of repetitions:** this setting determines how many times in a superunit, if the student fails to solve the problem correctly, the student is given the basic task, the help task and an explanation (e.g. can he/she try again to solve the original question after the help task). Different variations are possible, but it is essential that the basic task must be repeated at least once in a Superunit.
- **evaluation:** when a topic is considered to be completed.

How to activate the help request Percentage means the number of tasks that need to be completed correctly when using multiple screens in order to be considered successful.

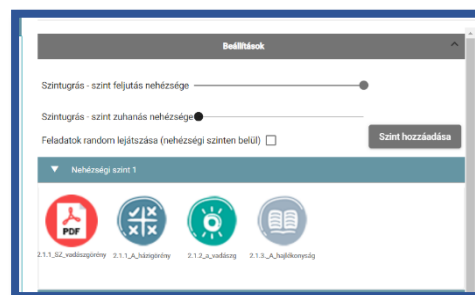
If you find that the good solution is not accepted by the system, you may want to lower the Help Request activation in the Advanced settings menu.



- **replayability:** this setting determines whether the student can solve the content more than once. If replayability is not "ticked", the student can only go through the content once (useful setting for test writing, for example)

- **movement between difficulty levels:** difficulty of ascent and descent

In the system, you can choose to use difficult, medium or easy ascent and descent, which means you have to get 1, 2 or 3 tasks right or fail to change levels.



- **random playback of tasks**

This system setting determines, for level-jumping content, whether tasks at one level of difficulty are given to students in sequence, one after the other or randomly (mixed).

❖ **Scenario writing phase:** in this phase, the outline is completed by assigning game engines to the tasks. The final text will be developed in the outline containing the tasks, and the previous solutions will be corrected according to the possibilities of the curriculum development system. A crucial aspect is the LMS in which the course material will be played and the technological devices used by the students (computer, tablet, smartphone). It should be taken into account that the amount of information that can fit on one page is limited, overcrowding should be avoided, all visual aids, pictures and diagrams should be legible and clearly visible. At this stage, it is recommended to prepare all illustrations, pictures, texts and diagrams to be used in the exercises.

Preparing the documents to be used properly:

- **Add picture:** in several game engines, it is possible to add a picture, which students can click on to enlarge.
- **Textual content:** texts can be uploaded as a stand-alone game engine in pdf format, e.g. for text comprehension or the use of resources. To do this, the document created in word or ppt must be saved as a pdf file. Another way to upload a text is to use the Info button, which is available in all game engines, so that pupils can view the content here while solving a task, if necessary, without having to backtrack. The Info button can be used to insert the text into the task as an image, converting the word or ppt file into

an image using one of the PPT to JPG converters available online (<https://image.online-convert.com>).

The length of the text used is an important consideration, with shorter documents for younger children and longer for older children. At the upper primary level, one or up to one and a half A4 pages of text can be used (similar lengths are used in the secondary school entrance examination) but bear in mind that reading long texts on the phone can be tiring for children. A solution to this may be to give the text to the pupils in stages rather than all at once, using several shorter texts instead of one longer one.

Using the right font size is also important to ensure that content is readable on smartphones and tablets.

- **Audiovisual content:** videos can be uploaded in MP4 format from your own computer or by copying a link from the internet.

- ❖ **Digitisation**, whereby the electronic learning material is created, i.e. the individual tasks are integrated into game engines. The created tasks can be previewed and solved in the form the student will encounter them. And the modify function allows us to change the already completed task. For information on how to create game engines and the basic settings system, please refer to the Teacher's User Guide, which describes the content development interface in detail.

- ❖ **Checking - testing - bug fixing:** Before the content is made available to the students, it is worth testing the material so that any errors found can be corrected and the course material can be finalised.

7. Task specification criteria

The professional-content, formal, quantitative and technical criteria for writing the assignment are:

7.1. Content-methodological aspects of task writing

- content appropriate to the didactic function (new material, repetition, practice, etc.)
- content relevant to the subject matter
- whether the language of the task is appropriate for the age group concerned
- clear instructions, task definition, avoid ambiguous wording
- whether the task contains all the information needed to solve it
- the time allowed for the task is appropriate
- didactic illustration (contributes to comprehension and memorisation)

- developmental objective: the task should develop what you want it to develop (skills and abilities, knowledge)
- the task has a clear solution
- if possible, relate part of the task to a real-life situation
- grammatical correctness, spelling
- appropriate visual representation of tasks (font size, spacing, legibility, etc.)

7.2. Aspects of the support tasks

- its content is methodologically justified: it contributes to understanding, helps to unblock
- content is related to the basic task, not a new question
- easier than the basic task

7.3. Aspects of the explanations

- contains the solution and
- explains how to find the correct solution