



MobiLEx Manual

Project Information

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Glossary of Acronyms

Acronym	Extended definition
CRES	Centre of Research and European Studies
EBTN	European Banking and Financial Services Training Association
EfVET	European Forum of Technical and Vocational Education and Training
F2F	Face to face
HEI	Higher Education Institution
ME	Multiplier Event
NGO	Non-profit organisation
SEO	Search engine optimization
SM	Social Media
SMEs	Small and medium-sized enterprises
VET	Vocational Education and Training

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1. Project Summary

Digital learning has come to the fore due to the Covid-19 pandemic in all European countries, as VET educators were forced to quickly start delivering courses online. Most of them did not have any experience with such a way of teaching not to mention using online tools for designing learning implementation and retention tasks hence supporting learners working remotely in knowledge implementation.

Partners observed similar problems with their educators, who expressed lack of mobile learning implementation tools that could be easily added to the system they currently use for online education and the content they teach. Such tools would fill the gap and make learning more attractive, engaging, and interactive, thus increasing learners' motivation to implement the knowledge in their workplace. Another pressing issue and challenge that became obvious was the need to reduce the gap between digital competencies and experiences of VET educators and learners. VET educators are mostly "PC generation" while learners are mostly "mobile generation" and new educational methods should help educators to adjust their way of teaching to new generation expectations.

The overall project goal is to build digital education readiness of VET educators at the same time closing the gap of not being able to support learners in knowledge application efforts.

In particular, the project aims at:

- equipping VET educators with a learning implementation process and digital tools to design Mobile Learning Experience Modules that could amend any type of learning event leading to new skills and knowledge implementation in the workplace.
- expanding VET educators' digital competencies by involving them in MobiLEx development raising awareness of VET educators that supporting learners in learning implementation can boost up their engagement & motivation to learn.

Two core Outputs were produced:

O1 – MobiLEx Learning Implementation System – consists of an MobilEDu Editor for PC (for educators) and a **MobilEDu** App for mobiles (for learners) and presents an innovative learning delivery process. The MobiLEx System allows learners to complete their learning tasks at any time and place. The educators can adopt a learning approach that will stimulate students' engagement and motivation to learn by applying the **MobilEDu** Editor.

O2 – Mobile Learning Experience Modules- focusing on topical subjects from different disciplines and areas:

- | |
|---|
| <ol style="list-style-type: none">1. Sustainability Manager - FHM2. Constructive conversations - PAIZ3. Skills-oriented teambuilding - Militos;4. How to motivate people who are working remotely – Effebi |
|---|

They constitute only a first example of learning contents to be kept as a reference for future modules that can be uploaded on the MobilEDu App. Such modules will work also offline, thus allowing learners to follow them according to their availability and willingness.

MobilEx is aimed at addressing a specific target group formed by VET educators and organizations as well as learners, both inside and outside partners' countries. At the same time, the project addresses managers, team leaders, coaches, and mentors within the VET sector.

Project Partners

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Fachhochschule des Mittelstands (FHM), Germany
PAIZ Konsulting Sp. Z. o.o, Poland
Finance & Banking, Associazione per lo Sviluppo Organizzativo e delle Risorse Umane, (EFFEBI), Italy
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1 The Manual - Introduction

During the development and piloting of the MobiLEx Learning System partners collected information and feedback along with improvement suggestions from VET educators and learners. Representatives of both groups accompanied the creation process and were thus able to bring in own wishes, assess the functionalities, usability and user-friendliness and test the content design in the MobiLEx System. This collaborative approach helped to generate a product which suits educators teaching in different subjects and having various proficiency levels in digital competences.. The aspiration of the project team was to create a Mobile Learning System which can be applied by a heterogeneous group of educators, serving several complexity levels.

The experiences and feedback of participating partners and involved educators are compiled in this manual and are meant to navigate especially educators during the creation, design, and implementation of Mobile Learning Elements.

The manual consists of two main sections: The first section provides information on designing mobile learning elements and explains step-by-step the integration of mobile learning into existing (VET) learning programs. The didactical-related part of the manual supports educators in using their content in the MobiLEx system in the best possible way and on how to make it available to their learners. By using these instructions learners will have the best chance to further consolidate what they have learned in face-to-face learning environments.

The second part demonstrates technical details and navigates through the registration and creation of mobile learning tasks in the MobiLEx System. Illustrative and supportive visualization was chosen to exemplify the technical parameters of the MobiLEx system (the MobilEDu Editor and the MobilEDu App).

Additionally, examples and explanations of the technical peculiarities provide a step-by-step description of handling the editor and the app. To simplify the searching process also a section of “Frequently Asked Questions” was included and supports users especially in solving minor problems that may arise while using the MobiLEx Systems.

2 Designing learning retention and implementation processes

2.1 What is learning retention?

Learning retention is explained by Karpicke and Roediger (2007) as “having the information stored in long-term memory in such a way that it can be readily retrieved, for example, in response to standard prompts”

If you don't retain what you've learned, it will fade from your short-term memory after a while. Finding innovative tactics and solutions to guarantee you engage with the subject is vital to boosting your learning retention. This will assist your brain in recognizing the significance of the new information.” (Blog for Corporate Training, 2022)

Furthermore, according to the Karpicke and Roediger (2007) “Retention of learned information can be defined as having the information stored in long-term memory in such a way that it can be readily retrieved, for example, in response to standard prompts. Transfer is defined as the process by which learning in one context is applied to solve a problem or make sense of a situation in a different context.”

With reference to Disha Gupta (2022) several factors may influence knowledge retention for individuals. These are:

- **Association**

Disha Gupta (2022) in the article “11 Strategies for Improving Retention” argues that association is a widely used technique for knowledge retention that focuses on paying attention to the meaning (s.a.) and significance of learning content or associating it with real-life scenarios. This may help individuals to learn quickly and retain the information.

- **Interest and motivation**

The interest and motivation of a learner in relation to a learning program are of high importance. When learning is accompanied by a motive, it is often retained for a long time as the human brain tends to focus on what is subjectively of higher interest.

- **Repetition**

The process of repeating learning activities may be essential in the knowledge retention process. Literature pinpoints that the more an individual replicates or practises a task, the more the right conditions are created for memorising what was learned.

- **Use of multiple channels**

With regards to (surname, year) another valuable concept to take into consideration when analysing knowledge retention is the use of multiple channels. This may contribute to and positively influence the learning retention process. Different learners prefer different learning styles; some may prefer visual elements; some may need hands-on experience while others require an instructor to guide them. Therefore, for an individual it is important have the opportunity to choose the most appropriate from a variety of customised -learning methods or techniques to foster learning retention.

2.2 Strategies to improve learners’ knowledge retention

Humans tend to lose their memory of certain information within a short period of time - the phenomenon occurs as not all information is needed beyond the immediate moment or

situation. Therefore, the instructional designers and training facilitators are responsible in helping learners to maximise knowledge retention. Essentially, building up memory is described as the process of encoding (inputting), storing (organising) and recalling (accessing) information. Many are the strategies that can be implemented as deliverables to reinforce these functions.

First, in being able to fully internalise tips and strategies for improving learning retention it is necessary to have a look at how learning retention works at different levels. In that sense, the learning pyramid (Grupe, Disha 2022), developed by the National Training Laboratory during the 1960s, is a theoretical model that describes how well learners can retain information based on the different techniques such as listening to a lecture, reading a book, watching videos, etc.

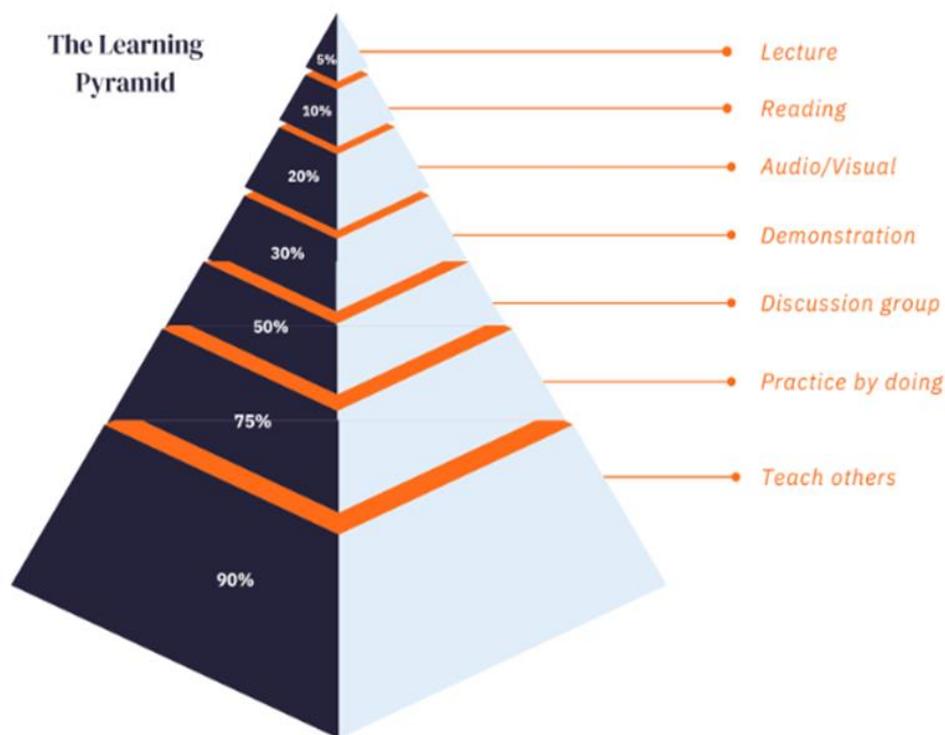


Figure 1 The Learning Pyramid (Gupta, Disha 2022).

The pyramid visually outlines a variety of learning methods: While the base of the pyramid describes active forms of learning (learning by doing, group work, etc.), which are attributed for higher effectiveness, the more upper passive forms of learning (lecture, reading, etc.) are attributed to lower effectiveness.

The learning pyramid is divided into 7 sections corresponding to 7 different learning modes. These are given percentages of effectiveness in terms of an individual's retention of learned knowledge.

- **Lecture**

The classic frontal lecture represents the most passive form of learning. Students are provided with information from a lecturer without a need to demonstrate understanding or a possibility to apply what was learned. However, it is regarded as one of the most effective ways to quickly provide a lot of information to students. Overall, the frontal lecture is attributed to an effectiveness in terms of knowledge retention of 5 percent.

- **Reading**

Compared to listening to a lecture, reading is considered slightly more effective for memorising the concepts learned. Here literature puts forward that reading supports learning by providing a visual element which learning techniques related to listening do not provide. Further, students are supported with reference materials that support learning at a later stage of the learning process.

- **Audio/Visual**

Although it is considered a form of passive learning, training using audio-visual aids is considered more effective than previous training methods. Audio-Visual training is based on, but not limited to, pictures, handouts, flipcharts, presentations, projections, or videos that may enhance learning retention.

- **Demonstration**

According to the Learning Pyramid classification, demonstration is the first learning method to be considered as "active." Since demonstration is described as providing information more clearly than passive study methods, it may lead to greater understanding, especially when information is vague or confusing, and greater assimilation of knowledge (30%).

- **Discussions**

With regards to existing theory, discussions foster a collaborative and open exchange of ideas that requires understanding and reflection on information, promoting retention of learned knowledge.

- **Practice by doing**

Practical application is considered one of the most effective learning methods. Firstly, it allows an individual to apply what he or she has learned to daily practice. And secondly, it fosters a deeper understanding and long-term memorization of the information learned (75%).

- **Teaching others**

According to the above Pyramid of Learning, *teaching others* is considered to be the most effective method in fostering knowledge retention (90%). In being able to transmit knowledge to others, an individual must have a thorough understanding of the concepts and details around a topic.

Below are some learning techniques that trainers may use to help strengthen knowledge retention.

Avoid providing too much information and focus only on essential ones in order to keep learners concentrated

Of course, when faced with a large amount of information, the brain filters out some of the "background noise" and concentrates on learning and retaining a smaller set of important facts. But what if learners hide the most important lessons in your training and focus on less valuable supplemental material?. Effective training must employ content specifically tailored to retention of subject matter knowledge. Additional information or background information is not always helpful. It's easier and more rewarding to take some time to learn the right pieces of information and then solve the overall puzzle rather than hastily stuffing your brain with all the information.

Relate the information you are providing to a real life/work scenario

With abstract amounts of information, trainees automatically ask themselves "Why do I need to know this?". This proves that training is ineffective if the value of information is not recognized. It is always important to emphasise why and when new information is available. That is, why trainees need to know when to use a specific kind of information. By relating information to real life/work scenarios, learners understand the value and importance of becoming as familiar as possible with the data provided.

The art of Storytelling

A great way to foster knowledge retention is to take advantage of the fact that humans in general retain things better when they have an emotional connection to what they are learning. The emotional connection can be developed by crafting stories with situations and characters that trainees can relate to, thus trainers can communicate key learning goals in an engaging and accessible way. Also, trainers should never lose sight on the learning goal they want trainees to focus and learn so they must not invent overly complicated stories because they could risk to get too carried away.

Use engaging video and audio tools to foster knowledge retention

For a learning experience to be positive and effective, it must be engaging. Learning and knowledge stop when learners lose interest in the information you provide. Interactive, results-based learning engages trainees and promotes maximum retention. Valuable tools for engaging learning include user-centered graphics that make complex information easier to interpret. Audio that reinforces visual learning through hearing and videos that help demonstrate dense information and technical processes. By combining these methods, learning never becomes dry. A variety of learning stimuli keep learners engaged and enable maximum absorption and knowledge retention.

Use Gamification to make your teaching material more impactful

Gamification is a great way to motivate learners and improve retention of learning materials. Gamification is the use of game elements that require trainees to learn new skills to improve retention and engagement. For example, collect points, earn achievements and rewards, and compete with other users. Turning boring old lectures into games makes the learning process more fun. Did you know that making work more fun can improve employee skill retention by up to 40% (Giang.V, 2013)? Gamification also helps increase employee engagement by giving them a sense of satisfaction, success, achievement, and victory. Games help release endorphins and make players feel good.

Use quizzes to prevent students from losing focus

Recent research (Karl K. Szpunar, Novall Y. Khan, Daniel L. Schacter, 2013) shows that adding tests and quizzes during lectures can help keep students from losing focus. Asking questions about the material while students are studying is a great way to get their attention. Also, quizzing students improves their comprehension and helps them retain information better. But teachers can also worry. They worry that constant testing will create additional stress that affects student learning.

3 Guidelines for designing learning implementation modules

3.1 Introduction

Over the past few years more and more are demanded from educational events. The learning event is perceived as being valuable if it has direct impact on business or personal results – if the connection between what you have learnt and how it is used to your/organisation benefit is clear. Training impact happens when a part of your job that, if done better, would help produce a valuable result and when a skill, knowledge or tool you have learnt will help you improve that part of your job performance.

According to Wilson Learning study (Leimbach, Michael, N/N), there are eleven elements that, when included in training design, will increase learning transfer. They can be grouped in three categories:

Building Learner Readiness (before learning): by building motivation to learn, motivating learners to use new skills, aligning learning with career goals, building confidence of learners.

Transfer Design (during learning): creating practice and modelling activities, setting learning goals, supporting application and use .

Organisational Alignment (after learning): ensuring manager support/coaching, encouraging peer support, making skills job-relevant, creating a learning culture.

MobiLEx allows both educators and learners to take a complex view on any learning situation and make sure that learning does not stop with the knowledge test taken after the course.

Learning implementation modules created in MobilEDu Editor will allow taking care of the majority of these eleven elements that make learning transfer a successful venture.

Important notice: MobiLEx is not about delivering the learning event itself – it is building on the knowledge and skills the learners acquire during a F2F training, online or through self-learning.

3.2 Performance objectives

The starting point to designing any learning implementation modules is to define performance objectives for each learning unit. Well-formulated objectives will allow to create the tasks that will increase learner motivation to learn, will help the educator to select the training methods and will make designing implementation tasks very easy.

What is the difference between learning objectives and performance objectives?

Learning objectives describe knowledge and skills the learner will acquire during the training/educational event and possibly what influence can these have on his/her attitude to work.

Performance objectives describe how the knowledge will be used in practice and what specific behaviours will come out of the new skills when these are applied in a real life environment. They are always connected to the work environment and if well formulated have the power to motivate learning, align learning with career goals, build confidence in learners, make new skills and knowledge job relevant and much more.

As in the example:

Learning objectives

The learners will be able to:

- Explain the important impact that daily constructive conversations can have on employee performance and engagement.
- Describe the benefits of active and empathic listening.
- Understand the importance of having feedback conversations.
- Name the steps of an effective feedback giving process.
- Know the mistakes leading to incorrectly given feedback.

Performance objectives related to the learning objectives

The learners will be able to:

- React to unsatisfactory performance in a constructive way.
- Find a proper time and space for the conversation.
- Prepare by gathering the facts and putting them in a perspective.
- Abstain from personal remarks and concentrate on the behaviour.
- Start the conversation in a friendly way building rapport.
- Follow the structure of a constructive feedback conversation.
- Include the employee's perspective where needed.
- Check agreed actions and employee understanding of expected performance.

3.3 Categories of tasks

When learning and performance objectives are in place and the training design has been finished, it is time to design the tasks that will stimulate motivation to learn and use the learning in practice.

<u>Tasks for Learners</u>		
Preparation tasks - BEFORE the educational event	Knowledge-related pre-event readings, questionnaires	Real problems or work examples the learners would like to discuss or work on during the event
Retention tasks – AFTER the educational event	Content related. <ul style="list-style-type: none">● Knowledge retention● Knowledge extension	Knowledge and Skills implementation tasks <ul style="list-style-type: none">● Tasks to do alone or in teams● Task which will require a support from trainer,

		educator, coach, manager or peer
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<u><i>Tasks for Trainers, Educators, Coaches, Managers</i></u>	
Preparation tasks – BEFORE the educational event	Inspiration or motivational tasks to increase learners’ readiness for learning
Implementation support tasks – AFTER the educational event	Tasks to support learners in implementation process

The achievement of tasks can be approved in several ways:

- self-approved
- team/peer approved
- trainer/coach/manager/peer approved

PREPARATORY TASKS

The objective of these tasks is building motivation to learn, motivating learners to use new skills, aligning learning with career goals and building confidence of learners. They should be strictly connected to and supporting performance objectives.

Knowledge related tasks will check pre knowledge of the learners in the form of open questions, quizzes, case studies, selected reading or videos.

They can also take a form of job-related questions, such as selecting examples from the work environment to focus on during the training or run a questionnaire and bring results to the training to work on.

Task example 1:

Look at the objectives of one person from your staff. Bring with you to the training two objectives that you think are not ambitious enough in relation to that employee. You will work on them during one of the workshops. Working on the examples you are familiar with will give you a very practical perspective.

Task example 2:

What suggestions would you have that could help handle those two situations? Please be prepared to share them at the workshop.

1) An employee who is a safe pair of hands, does not want to develop himself and wants to be left alone to do his job. How to motivate this employee to be a part of the team? How to motivate an employee to walk an extra mile in the constantly changing environment?

2) Several people on your team have been mentioning on different occasions that it is almost impossible to get the necessary information from Mary on time. Because of that, sometimes other departments cannot finish their work to meet the deadlines. You have also experienced this situation yourself. How are you going to approach her?

Task example 3:

Select an SME (ideally one you interviewed) as an example to work on during the workshop where it will undergo a 9R analysis. A manufacturing company is recommended (you are also welcome to use your own organisation as an example if you like). As a preparation for the workshop, please check the document Categorization system for the circular economy and get familiar with the 9R concept. (Hirsch, P.; Schempp, Ch., 2020)

RETENTION TASKS

Content related:

These tasks are to prepare the learner for using the newly acquired knowledge by refreshing its most important aspects or adding to it some new perspectives. They should be strictly connected to and supporting performance objectives.

Knowledge related tasks will check post training knowledge of the learners in the form of open questions, quizzes, case studies; they will also aim at expanding the knowledge with selected reading with questions for analysis or videos also supported by questions.

Task example 1:

Listen to the presentation, and answer the question: how well have you mastered listening skills? Before coming to the training, please verify in practice Von Thun 4 Ears theory at home or with your friends – ask them which ear you are using the most, in their opinion, of course).
<https://www.youtube.com/watch?v=t6Fy1Y0-UhU>

Task example2:

Look for CE/sustainability policy formats from a variety of organisations that you could use as a benchmark in that aspect to share at the LTTA as model and inspiration.

KNOWLEDGE AND SKILLS IMPLEMENTATION RELATED:

Task example 1:

To practice giving feedback on a regular basis, start right away. When you notice a situation/behaviour that requires feedback conversation ... stop! Think about the process; Think about the words you will use; Find the right moment and ... consult with your teammate from the training to go over the situation and your planned reaction. Only then have the conversation with the employee. It will take more time at the beginning but you will do it right.

Task example 2:

During the first week after the training, inform the employee whose “case” you presented during the training that you would like to have a meeting with him to talk about his options for development. Send him/her an email with instructions on how they could prepare for the conversation.

3.4 Recommendations for linking theory and practice



Figure 2 Linking Theory and Practice.

4 Practical examples on how to add mobile learning experience modules into existing VET learning program

The following chapter outlines several steps that are important for the development of mobile learning experience modules supporting performance objectives for your curricula. Additionally, this chapter discusses in further detail didactic considerations to be taken into account when using the MobiLEx system to implement mobile learning elements into existing curricula.

According to Gloerfeld (2018, p.263) mobile learning can be understood as "a pedagogically motivated process in which learners interact with people, technologies, and contexts via personal mobile devices and with people, technologies, and contexts and generate sustainable knowledge and additional didactic added value." New digital solutions have the potential to make the learning, retention, and application of knowledge more engaging, diverse, challenging and motivating and contribute to the improvement of learning outcomes and raising achievement.

It is important to keep in mind that new digital mobile learning tools are not meant to reproduce or duplicate courses, but to enrich and diversify learning ways, increase knowledge and skills retention and thus enable the learners to apply it in a real life environment. MobiLEx system is a tool created to experience new possibilities to gain knowledge, understanding, skills and develop behavioural patterns.

New digital tools serve to enhance, enrich, and diversify the existing curriculum and to improve the achievement of defined learning outcomes. Mobile learning does pertain to educational content, objectives, and competencies that shall be fostered while on the go. So, the starting point are the approved curricula, which should be extended by mobile learning elements pursuing the general aim, to better achieve the learning as well as performance outcomes.

In general, curricula are following a predefined and unified structure, containing key information about

- Learning objectives and competencies;
- **Description of the tasks, activities;**
- Description of the learning environment (pedagogical materials, resources, tools, etc);
- Forms of assessment.

Step 1: Start with the learning outcomes and consider the tasks and activities fixed in the curriculum to achieve the learning aims and competences.

Guiding questions:

1. What kind of tools are you already using in your classes for giving tasks to stimulate learner interest and motivation and better prepare the learners for the F2F classes?
 2. What kind of tools are you already using to support knowledge retention?
 3. What tools are you already using to support skills and behavioural patterns development?
 4. How do you evaluate their effectiveness in helping the learners to reach learning and performance objectives?
- ⇒ Do the tasks and activities distributed to the learners via MobilEDu App have the potential to enrich the curriculum and advance the learning process?
- ⇒ Can they boost learners' engagement, motivation, and inspiration?

Step 2: Draft or revise your curriculum with MobilEDu Editor to extend the learning process beyond the classroom.

Guiding questions:

1. Elaborate how using the process and the tasks you design in MobilEDu Editor and make available to your learners via the MobilEDu App could influence the knowledge transfer as well as skills and behaviour development in the chosen module.
 2. Select appropriate topics and subjects, which are from your point of view suitable for creating a learning and engagement path in the MobilEx System.
- ⇒ Check, what kind of tasks can contribute to knowledge and skills transfer and knowledge retention – PREPARATION or RETENTION tasks? (more information about these different types in Chapter 3)
- ⇒ After choosing the type, check, how much time should be spent and calculated for the fulfilment of the task?
- ⇒ Think about possible (technical) constraints and how you can overcome them?

Step 3: Design and implement mobile learning elements using MobilEx System

Guiding questions:

Looking at the learning and performance objectives think over the answers to the following questions:

2. What kind of preparation or retention tasks would contribute to better involvement and active participation during the lesson/training?
3. What kind of tasks will help the learner to implement the knowledge and new skills into the workplace?
4. What kind of formats are the most appropriate to support the learning outcome achievement (interactive resources, videos, quizzes, etc., should be selected accordingly)? How can the acquired knowledge be assessed? Which tools can be used for the assessment?

- ⇒ Use the MobilEDu Editor to define and design PREPARATION and/or RETENTION tasks followed by IMPLEMENTATION tasks for selected topics (more in Chapter 3).
- ⇒ Select relevant sources that will help to refresh, expand the knowledge or give a different perspective (more on Chapter 2 and 3).
- ⇒ Create Tips that will support implementation of learning in practice (more on Chapter 2 and 3).
- ⇒ Develop, if necessary, an assessment method to track level of completion and quality
- ⇒ Share the tasks via the MobilEDu App with your learners (more on Chapter 5 and 6).

Step 4: Evaluation of the acceptance and success of using learning implementation support with the MobiLEx System

Guiding questions:

Quantitative indicators:

1. How high was the participation rate of the learners after the first run, second third? Is there a positive dynamic?
2. How high is the level of task completion? Is there a positive dynamic?

Qualitative indicators:

1. Did the level of motivation during the training improve?
 2. Did active participation/collaboration in F2F improve?
 3. Did the level of knowledge retention improve?
 4. Did learners accept and use the MobiLEx System – how is the oral or written resonance and feedback?
 5. Are there any suggestions for improvement/extension/adjustment?
 6. Is there any obvious and visible improvement and enhancement of learning outcomes achievements?
 7. Did it contribute (significantly) to a higher knowledge and skills implementation?
- ⇒ Conduct the evaluation and record the impact.
 - ⇒ Make conclusions.

⇒ Revise and adjust if deemed necessary and recommended.

General recommendations and assumptions:

The general aim of incorporating new digital elements, such as the MobiLEx System into the educational process, is to improve the effectiveness of the learning process with focus on extending the learning beyond the educational event. The added value for educators and learners must be obvious. The digital tool should improve learning success and contribute to knowledge retention as well as support the achievement of the defined learning outcomes and the possibility to integrate what was learned into the daily work. A sensitive integration and application of such a digital tool are the core tasks of the educator.

With regards to the context, it is important that the content, the pre- and post-tasks are of utmost relevance to the learner's needs, interests, or professional backgrounds and address the specific challenges, learning outcomes and situations learners might be facing in their work or other environments. This means that the learning content should include real-life examples and scenarios that are relevant to the learners' experience.

It is important to have a clear picture of the elements that shall be integrated into the MobiLEx modules design in order to implement tasks, resources, and tips that will help your learners to consolidate what they have learned or to pre- or rework on content that was part of e.g., a regular lecture.

In general, engaging content for tasks and resources can be of various forms. This can include videos (see example in the above table) or collaborative work on an external platform as a pre- or post-task (see example above) developed with the MobilEDu Editor. These tools enable learners to engage with each other, share their knowledge, discuss various aspects of the tasks to clarify understanding, or simply have more fun through a form of interaction.

Engaging content should be designed by the educators to be visually appealing (if necessary), concise in language, and easy to understand, and relevant to needs with respect to the overall objectives and targets of the online experience module. Also, real-life examples and scenarios help learners to experience the content as more relevant. In terms of the medium used, engaging content can include, but is not limited to, images, charts, diagrams, videos, or quizzes.

It can be stated that the integration of mobile learning elements allows to cater to different learning styles and levels of proficiency – tasks providing different levels of difficulty, different formats and the ability to personalise the learning experience can be designed.

5 How to use the MobilEDu Editor

The **MobilEDu Editor** is a web-based application. In the editor pre- and post-course tasks for the learners can be designed. The creation starts with defining the name of the courses, the description of the courses, the pre- and post-training tasks, some tips and resources when necessary for the learning process.

Following 10 steps will illustrate the process and support you in applying the MobilEDu:

STEP 1

1. Go to www.MobilEDu.eu website.
2. Agree to cookies to use the **MobilEDu** Editor.
3. Select your language.

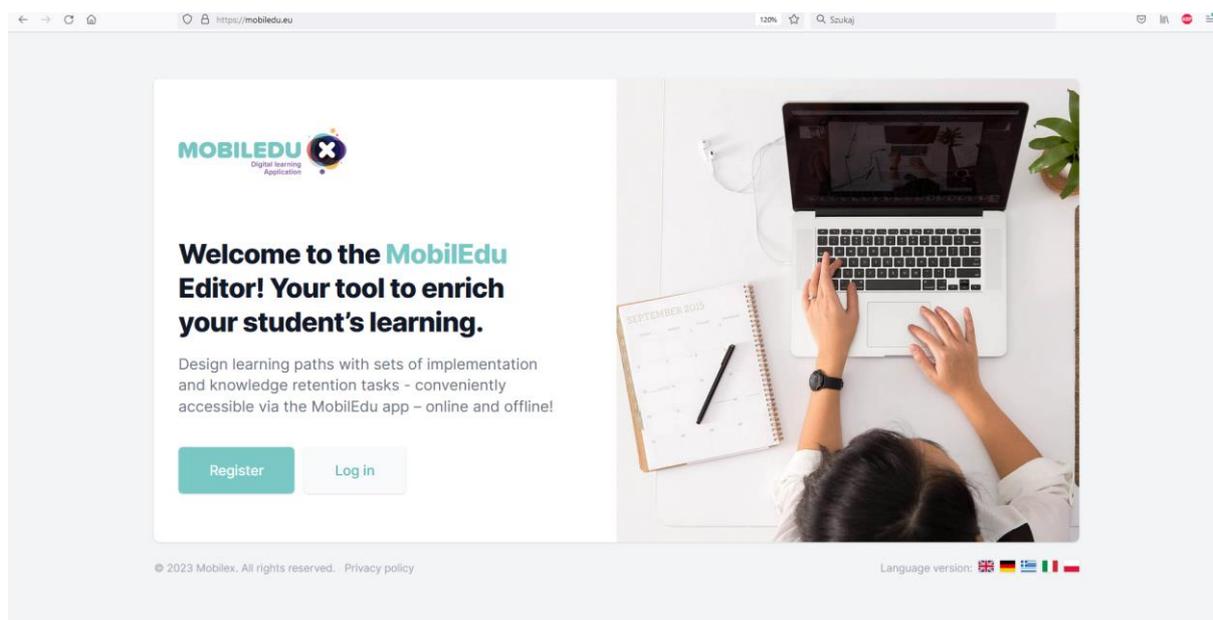


Figure 3 MobilEDu Editor Homescreen.

STEP 2 - Registration process

When using MobilEx for the first-time registration is needed

1. Enter your name.
2. Enter your email address and create a safe password (min. 8 characters)
3. A link will be sent to your email to confirm.

4. Click on the link and confirm your email address.
5. After registration, you will receive a message to your email address with a link to complete your registration.
6. Click on the link you have received in the email to and you will be redirected to the **MobilEDu** Editor webpage.

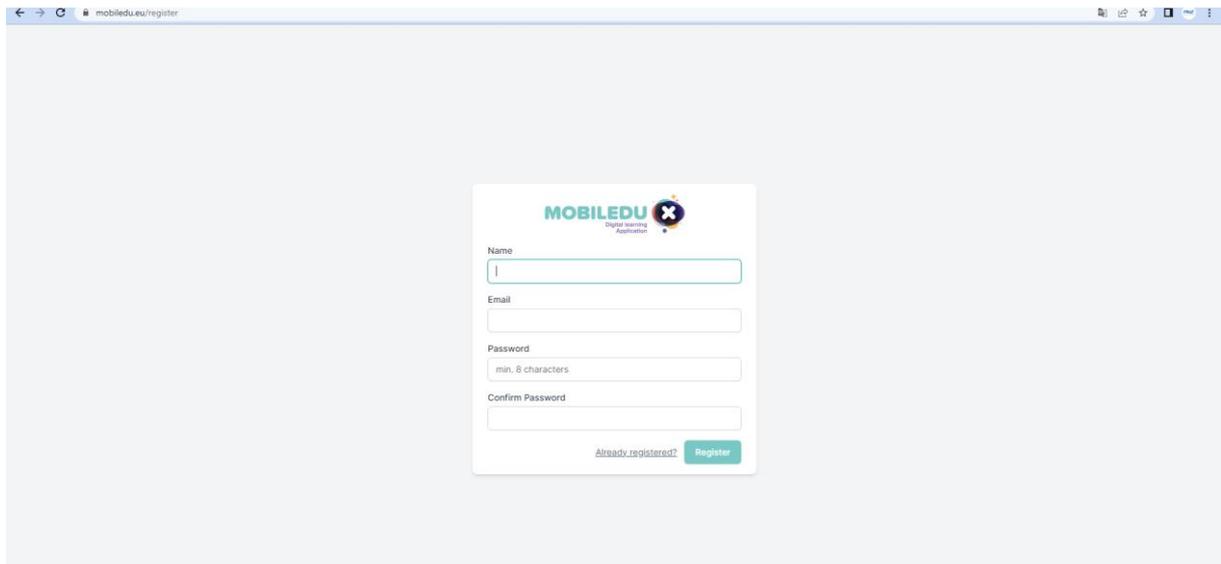
A screenshot of a web browser showing the registration page for MobilEDu. The browser's address bar displays "mobiledu.eu/register". The page features a central white registration form with the MobilEDu logo at the top, which includes the text "MOBILEDU" and "Digital Learning Application" next to a circular icon. The form contains four input fields: "Name", "Email", "Password" (with a note "min. 6 characters"), and "Confirm Password". Below the fields, there is a link that says "Already registered?" and a green "Register" button.

Figure 4 MobilEDu Registration.

STEP 3 - Log-in process

1. Enter your email address and the password to sign into your **MobilEDu** Editor account
2. In the case you have forgotten your password - click "Forgot your password?" and follow the instructions on the screen to reset it.

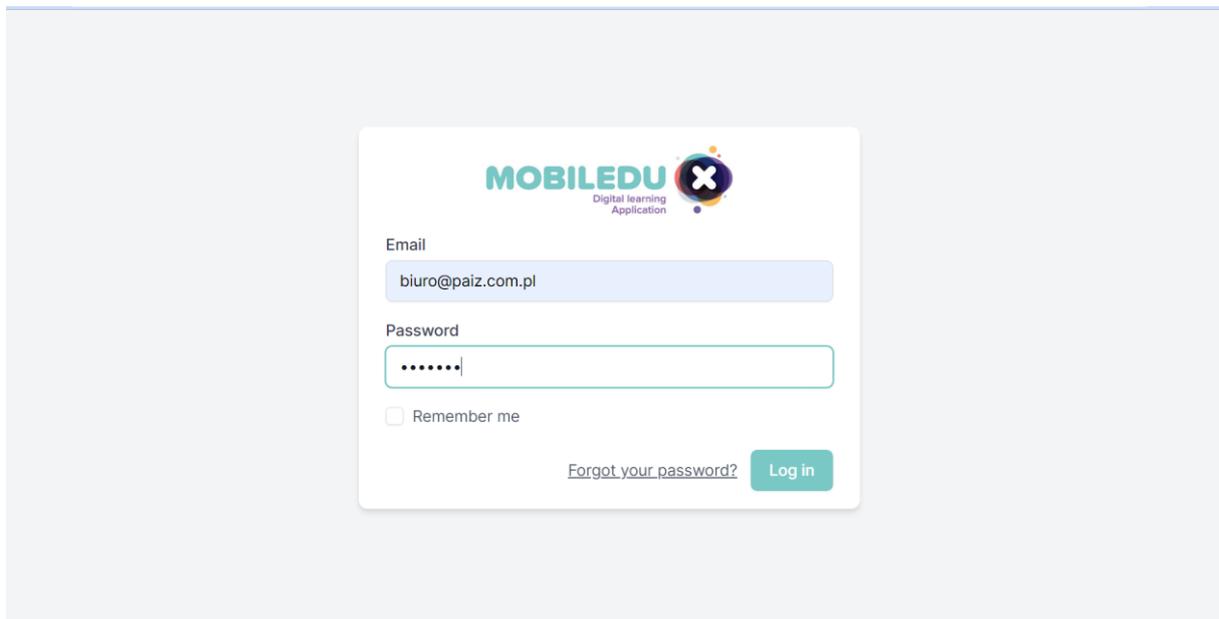


Figure 5 MobilEDu Login.

STEP 4 - Create your course

After having logged in, you enter the **MobilEDu** Editor platform and can start with the creation of the course.

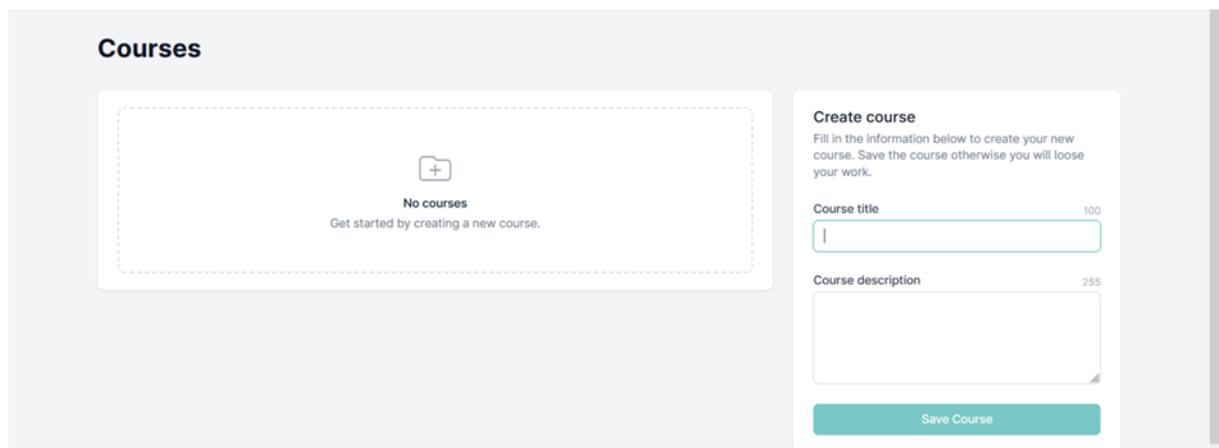


Figure 6 Creating a course.

1. Enter your course title in the field "Course title".
2. Describe briefly the course in the field "Course description".

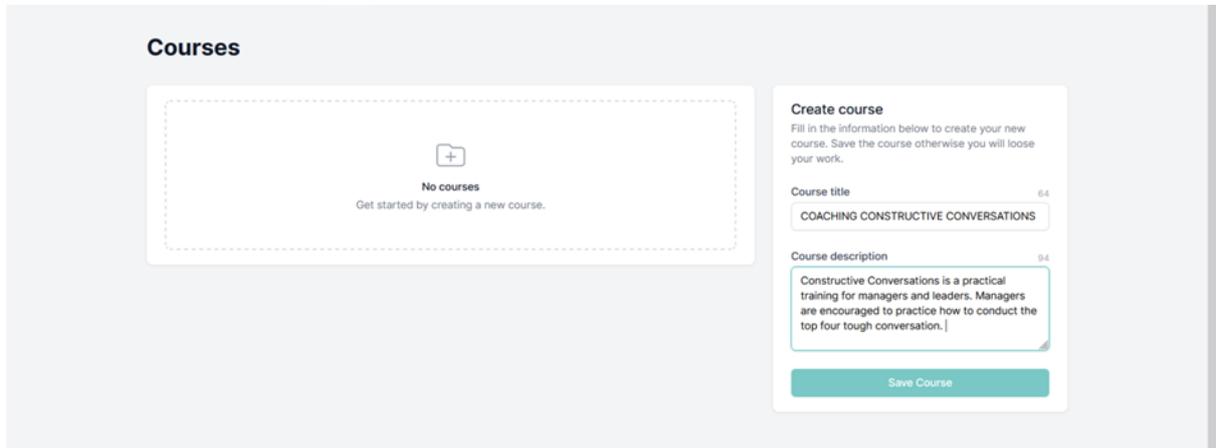


Figure 7 Description of a course.

3. Click the button "Save Course" to save the course.
4. To change or edit your course name or description press the pencil icon.

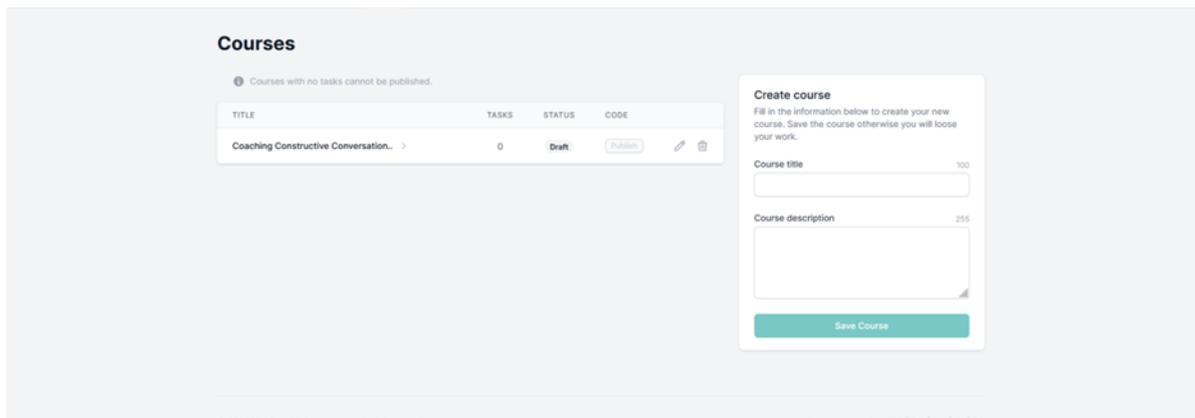


Figure 8 Changing a created course.

STEP 5 - Create your tasks

In the next step you can start with the design of the tasks for your course.

1. Click on your course name to go to the page to add the tasks.

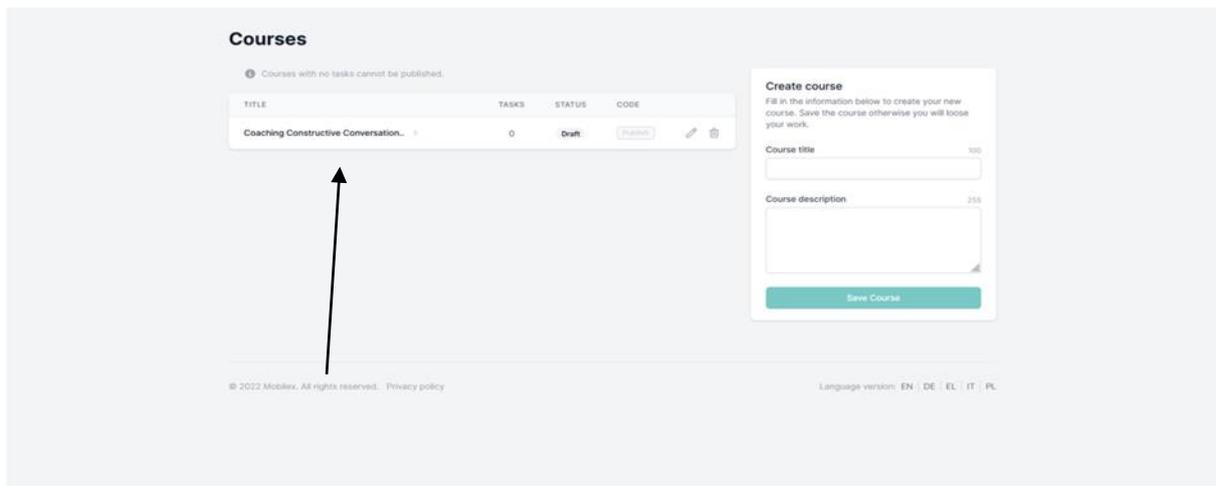


Figure 9 Next Step - Creating a Task.

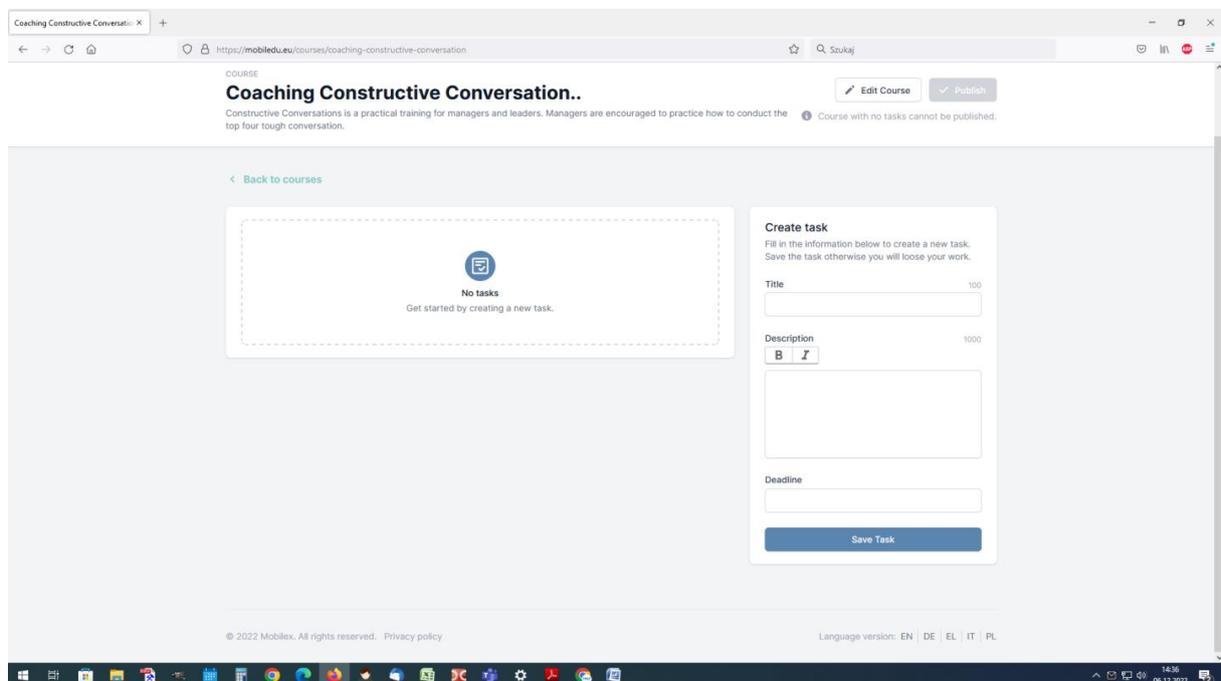


Figure 10 Create a task.

2. Enter the title of your first task.
3. Enter an appropriate description of your task.
4. Set a deadline for the completion of your task.
5. Save the task (press the button “Save Task”).

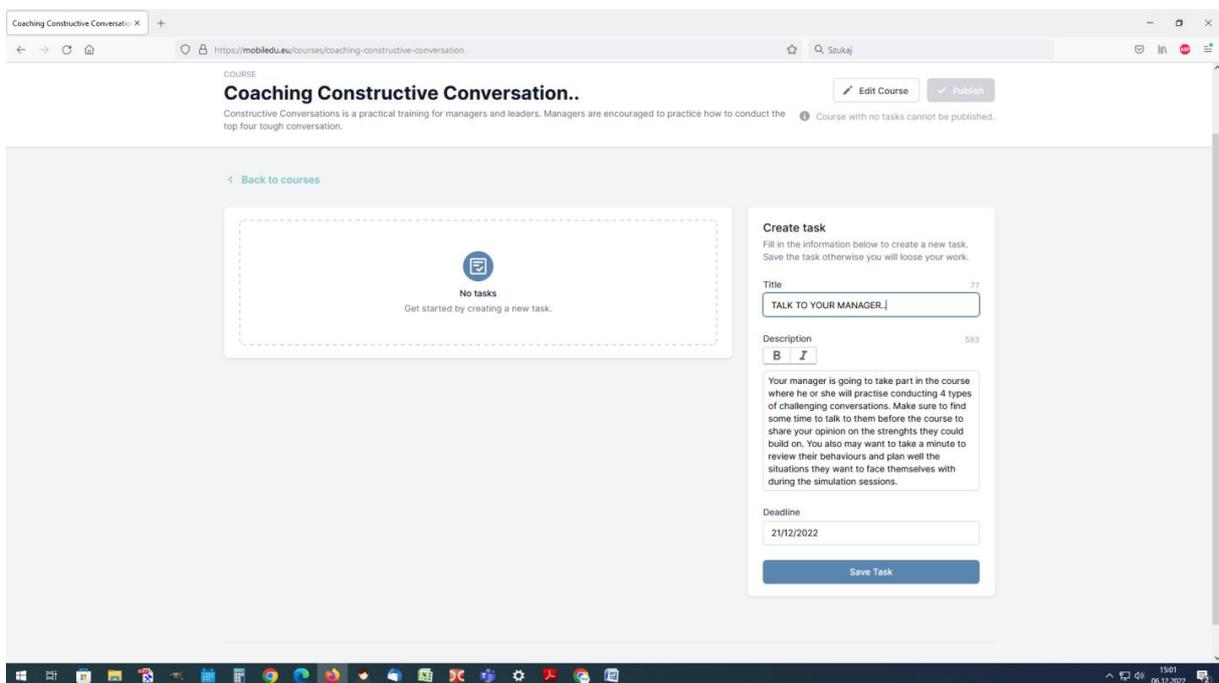


Figure 11 Save the created task.

STEP 6 - Create the tips

1. Click on the task title to go to the page where you can add tips and resources.

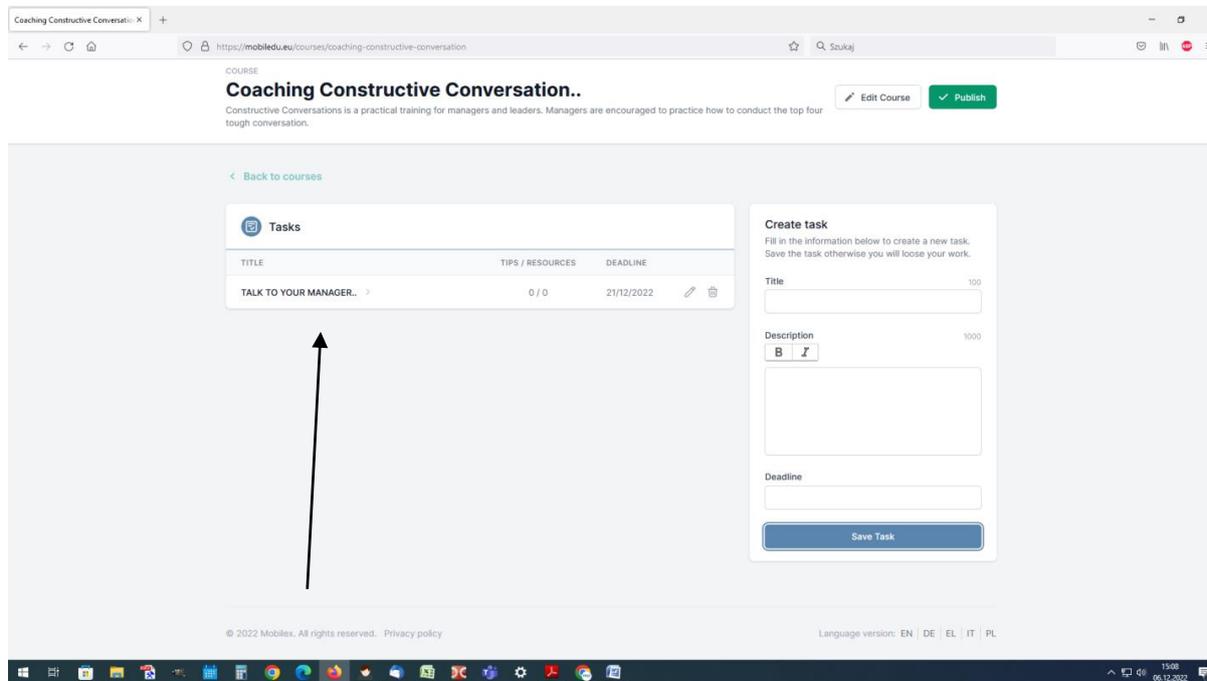


Figure 12 How to create a tip.

2. Enter the title of the first tip to the task.
3. Enter the description of the tip.
4. Click on "Save Tip" field.
5. You can add as many tips as needed to a course.

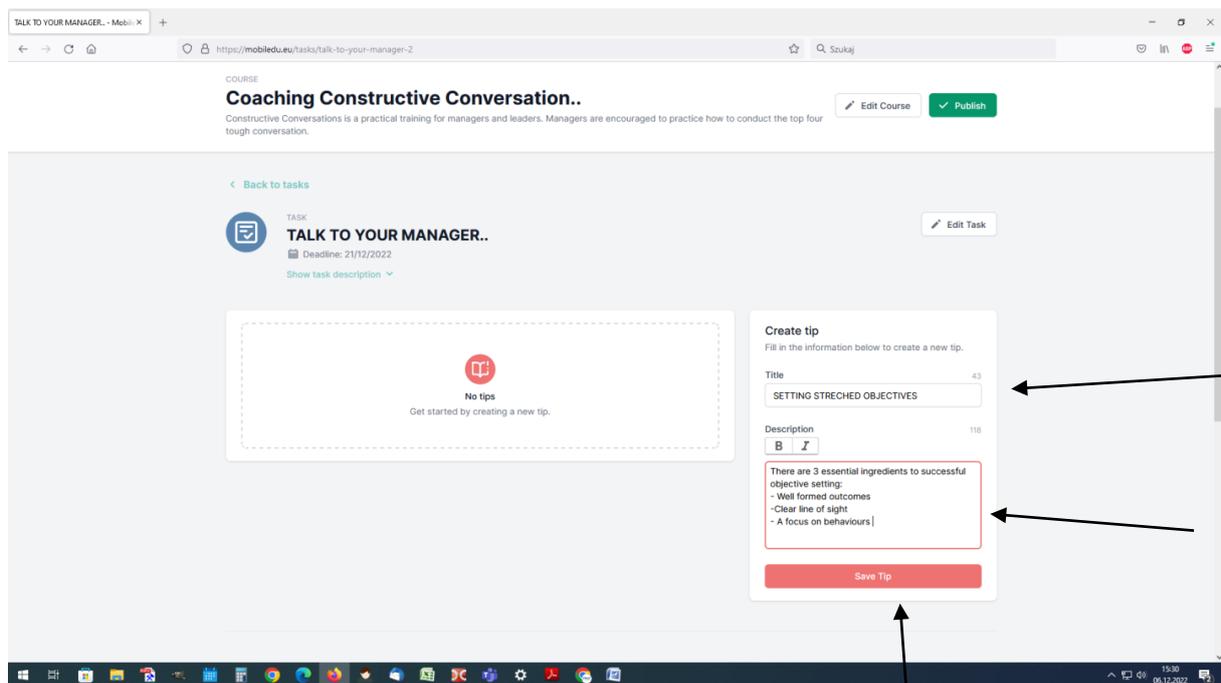


Figure 13 Creating a tip.

STEP 7 - Create your resources

1. Enter the title of your resource.
2. Enter resources for the course.
2. Enter the description of the resource.
3. Paste the link to the source into the URL field provided.
4. Press the button "Save Resources".
5. You can add several resources to one task.

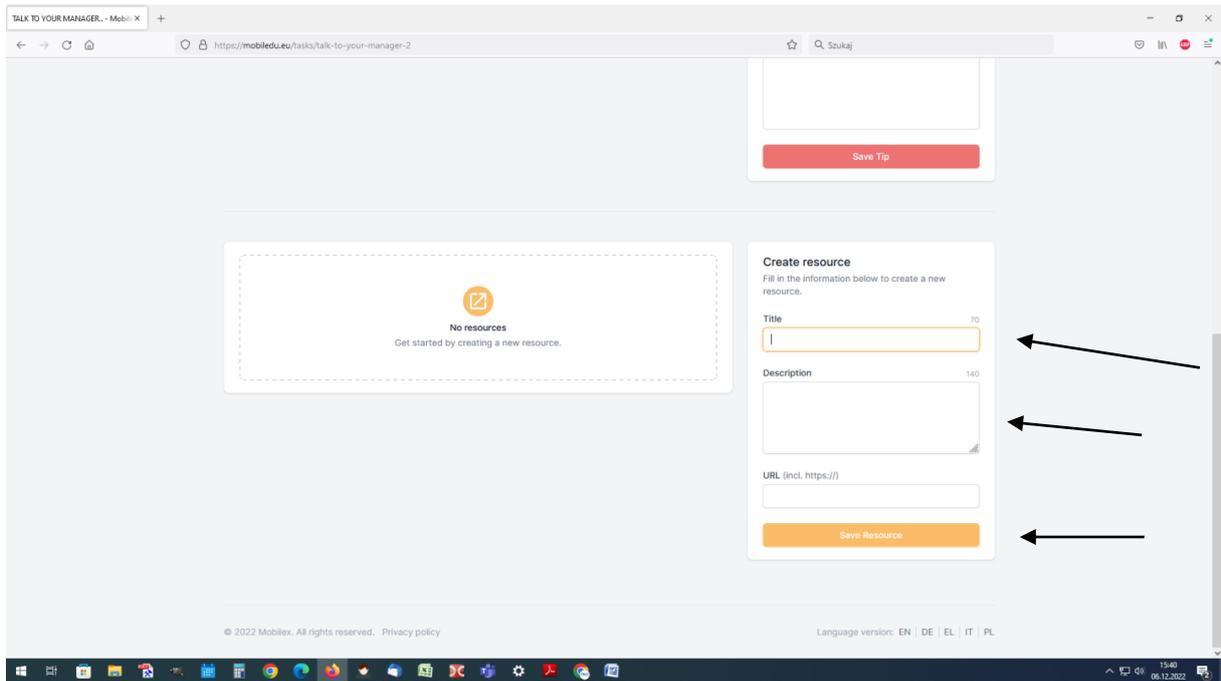


Figure 14 Creating a resource.

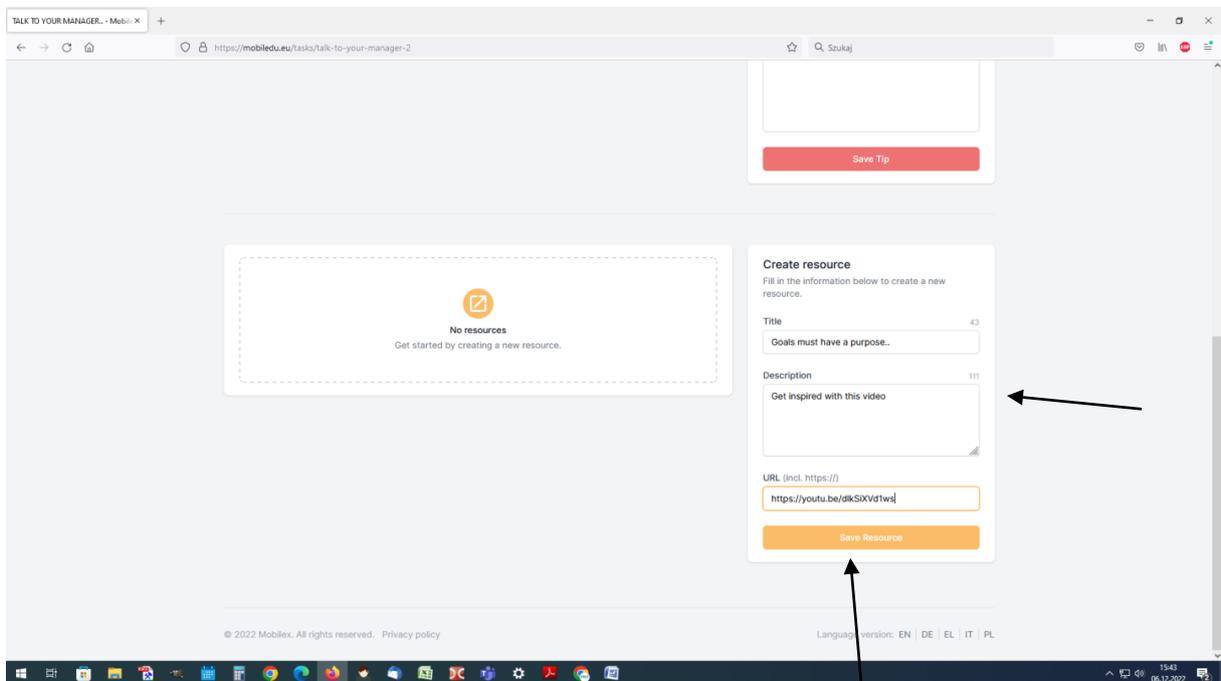


Figure 15 Saving a resource.

! Using the same procedure you can add more tasks, tips and resources.

! If you want to edit any of the tasks created, go to the task name and press the pencil icon. Then follow the steps described above.

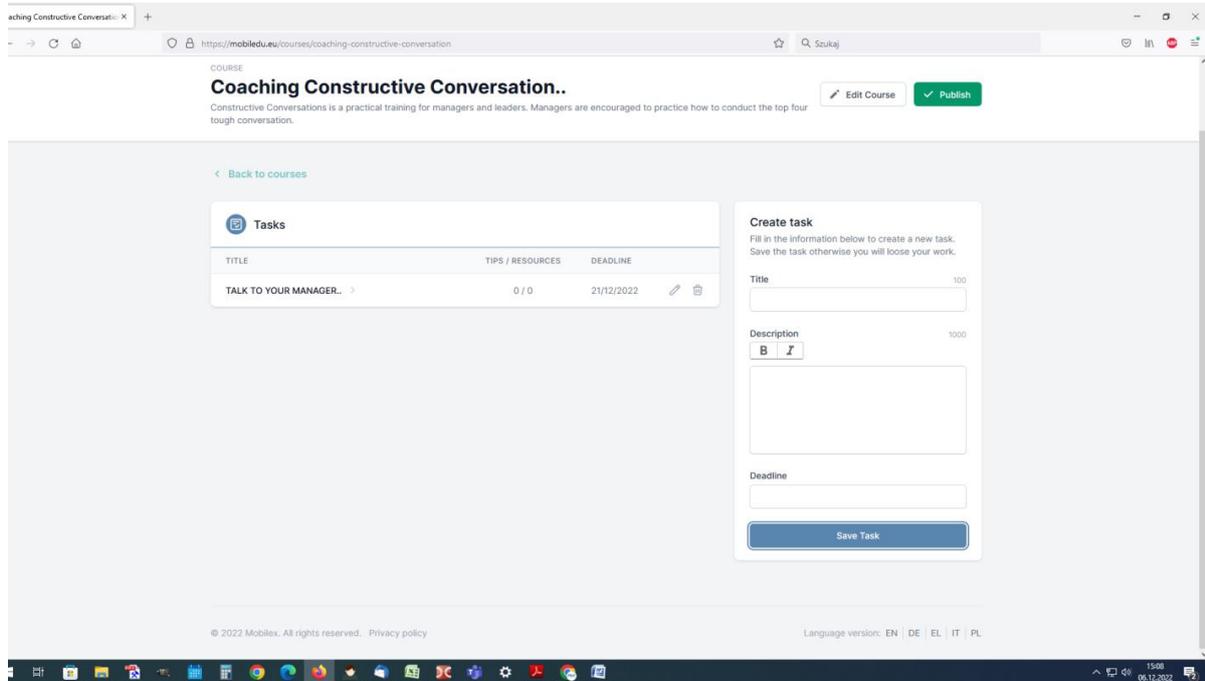


Figure 16 Course Screen.

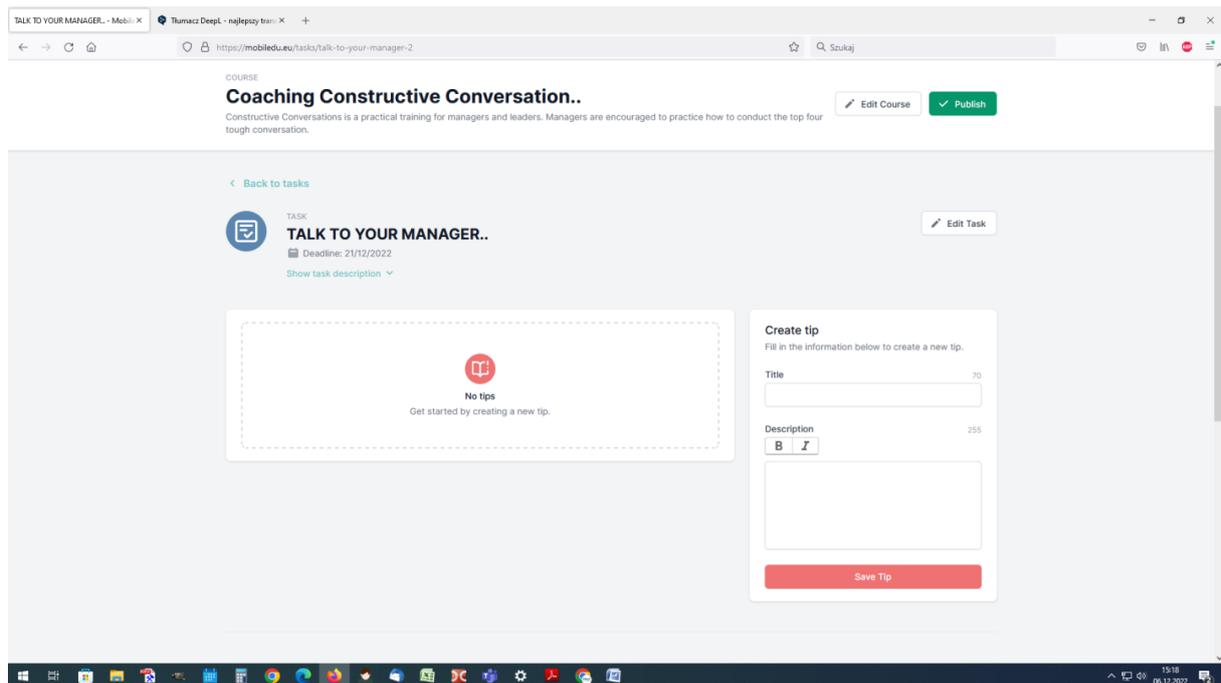


Figure 17 Tip Screen.

STEP 8 - COURSE PUBLICATION

1. Go “Back to courses”.
2. Your course status is “Draft”- you can still edit it.
3. To publish the finalised version of the course press the “Publish” button in the upper right corner.

! Make sure all tasks, tips and resources are in place. After publishing your course you will not be able to make any changes!

4. You will be asked if you are sure you want to publish the course. If so, click the “Publish” button and confirm.

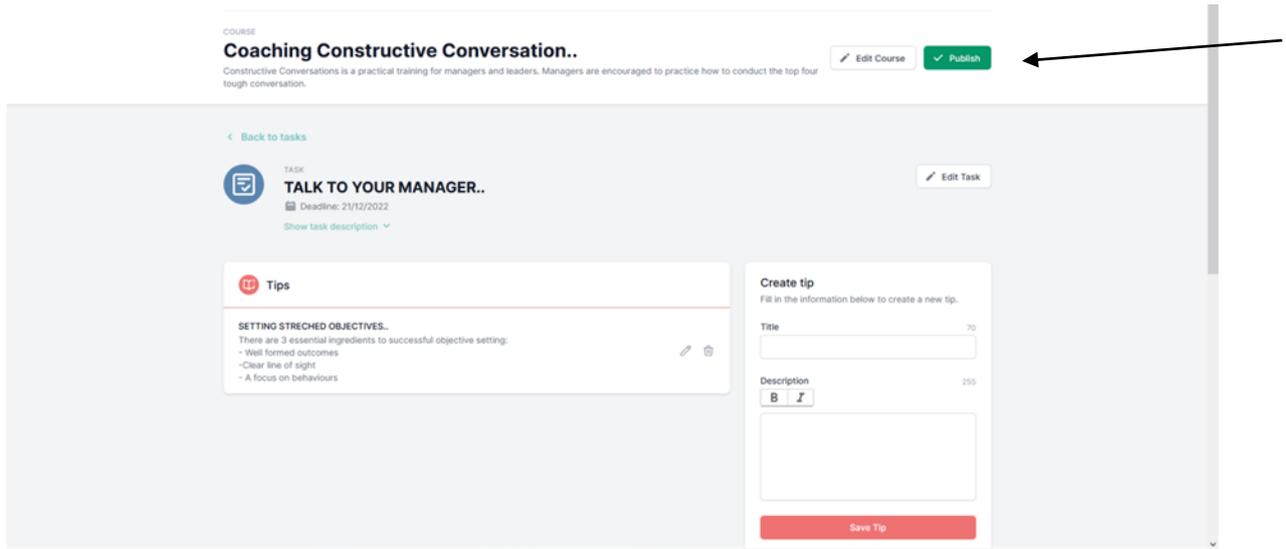


Figure 18 Publish a course.

STEP 9 - Distributing your course to the learners

1. After the course has the status “Published”, the editor will generate a code for the course.
2. Send the generated code of the course to your learners so they can access the course on the **MobilEDu App**.

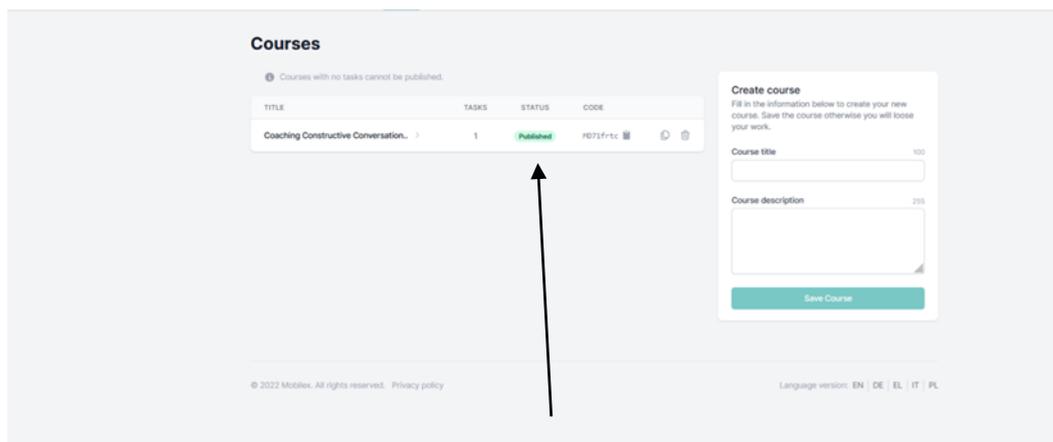


Figure 19 Published course.

! Using the same procedure you can create a new course.

If you want to create a course using information and input from a “Published” course, you can duplicate it and edit it as a new course.

STEP 10 - Duplicating the published course

1. Copy the course by clicking on the duplicate icon (screenshot)
2. You will be asked if you want to duplicate this specific course. Confirm your decision.
3. Now the course you have created before is ready for editing.
4. Press the button “Publish” the course, if you want to distribute it to your learners.

1.

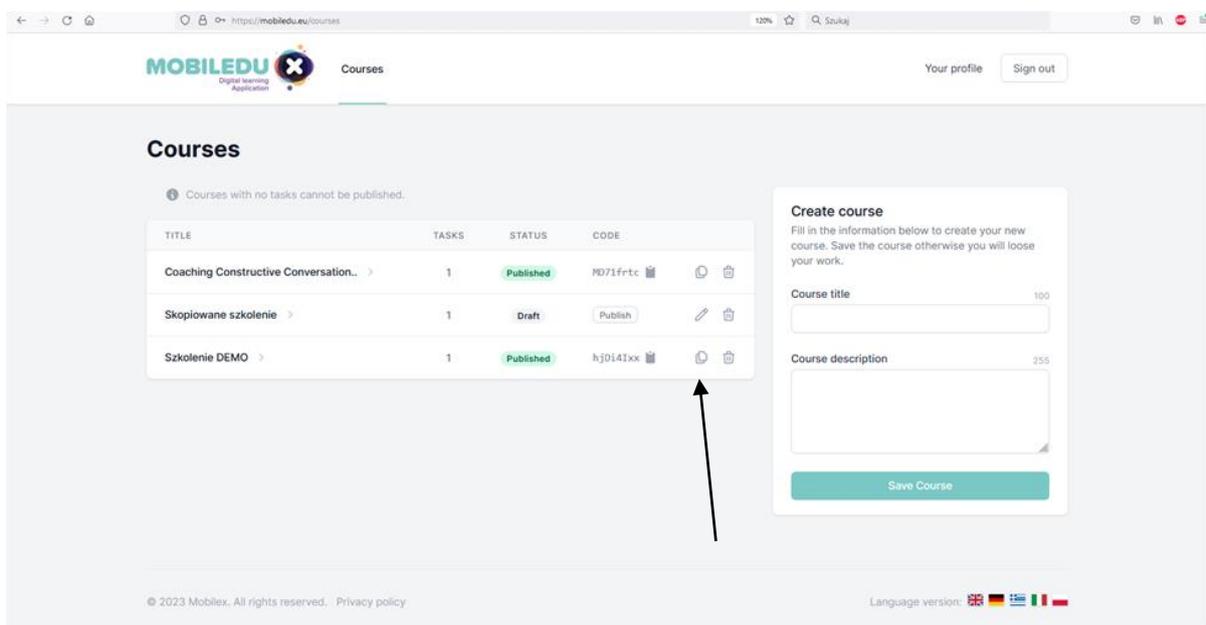


Figure 20 Duplicating a course.

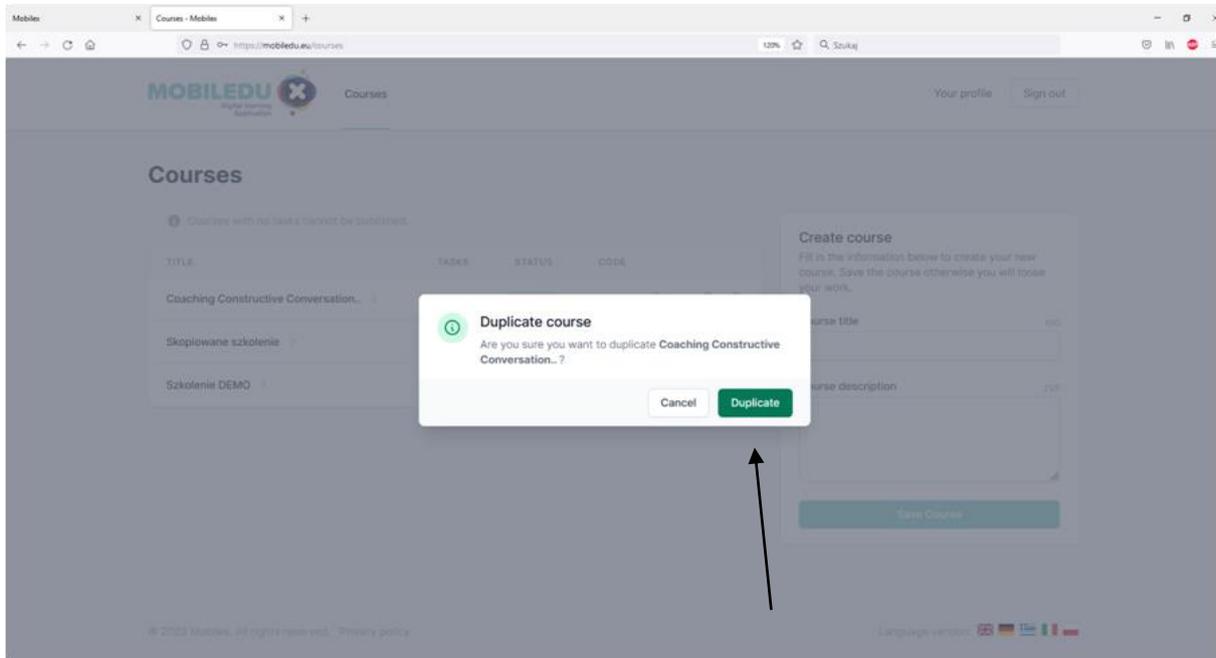


Figure 21 Duplicating a course.

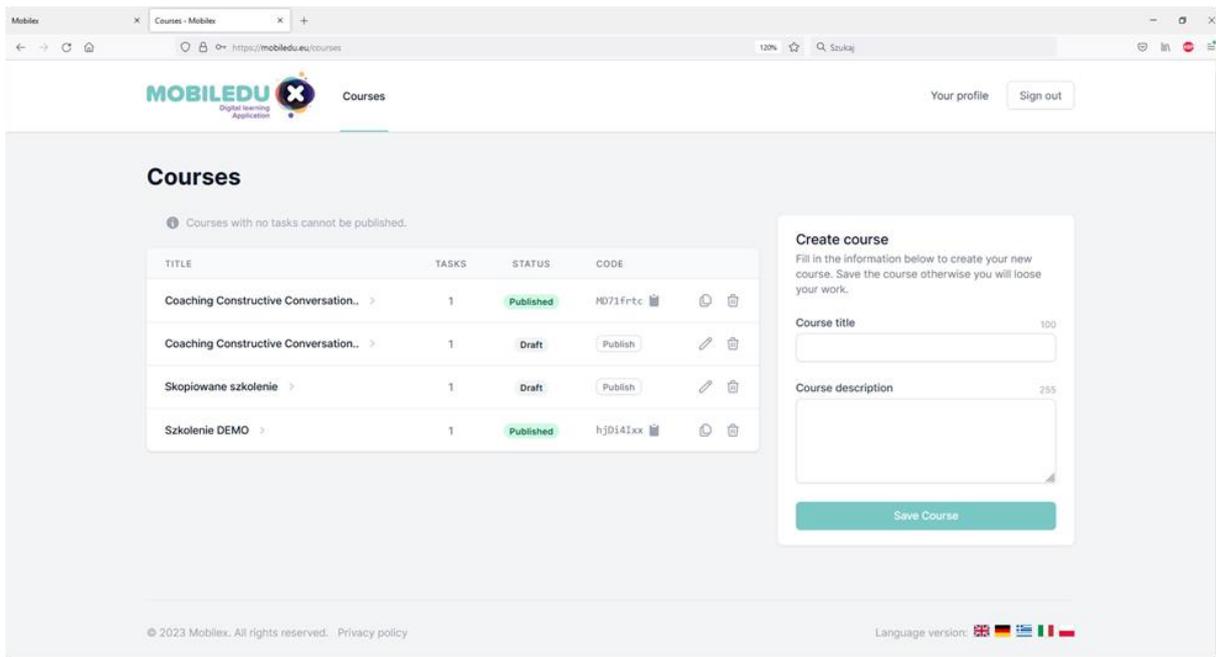


Figure 22 Published course and duplicated course.

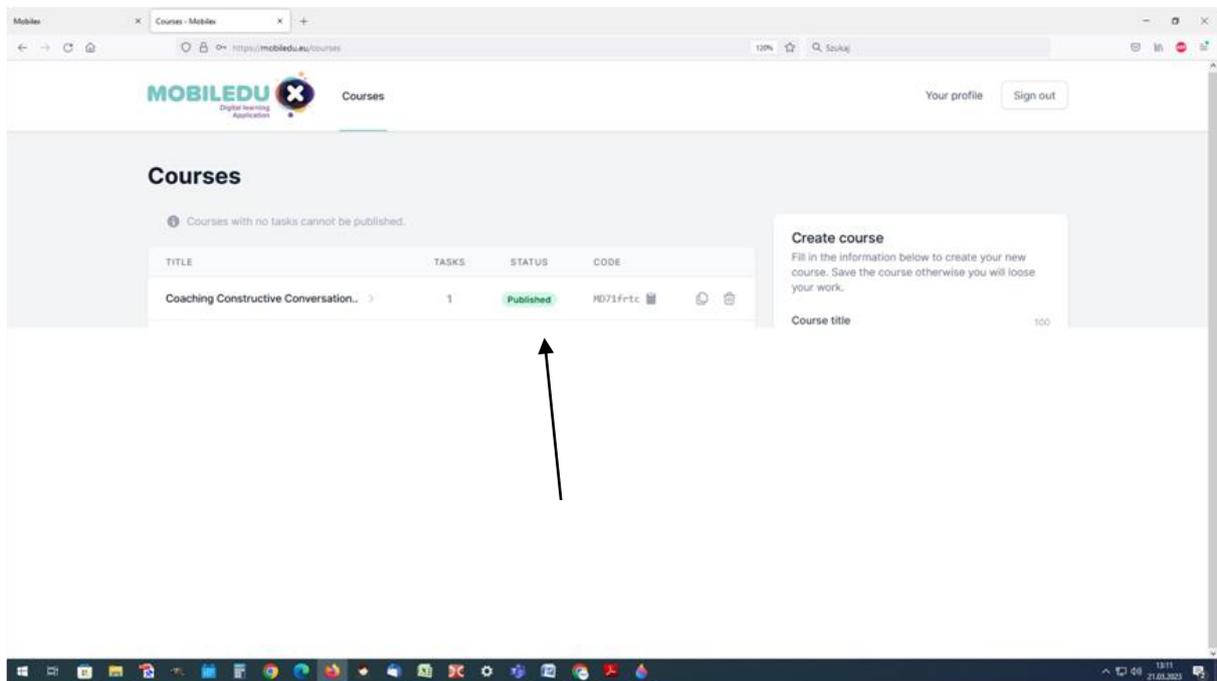


Figure 23 Published course.

! Remember that each time you want to make changes to the course your learners are already using you need to send them the new code to the course with adequate information.

CHANGES TO THE MOBILEDU EDITOR ACCOUNT

1. Profile

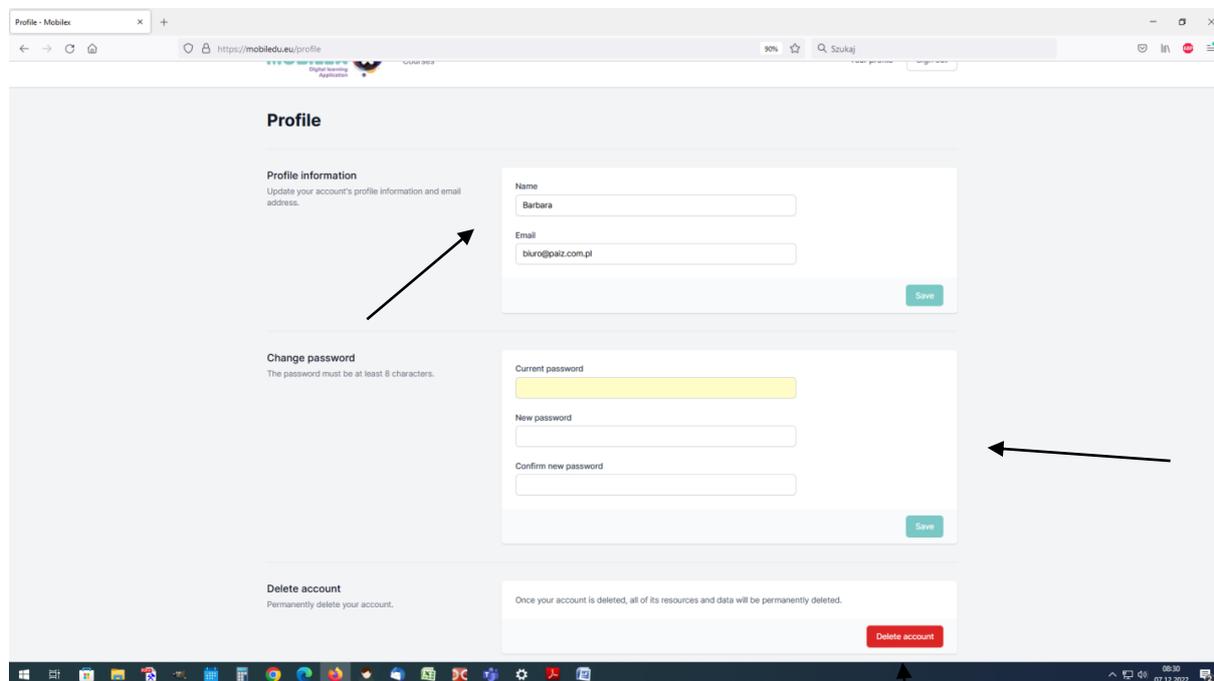


Figure 24 Profile information screen.

You can change the saved data in the fields:

Profile information

1. You can change your name - Enter your new name
2. Enter a new email address –Enter a new email address

Change password

1. Enter your current password.
2. Create a new password.
3. Confirm your password by entering your new password again.
4. Click the button “Save” .

Deleting the account (printscreen)

1. Go to your profile.
2. Scroll to the bottom of the page.
3. Hit the “Delete account” button .

When in doubt, don't forget to visit the FAQ section.

5.1 FAQ - Avoiding technical errors

Q1. What is the required registration password length?

The password should consist of a minimum of 8 characters.

Q2. What do I do when I forget my login password?

If you forget your password - don't worry. Just click “Forgot your password?” and follow the instructions on the screen to reset your password.

Q3. Where to click to enter the course and write a task ?

1. Click on your course name to go to the page where you add the tasks.
2. Enter the title of your first task.
3. Enter a fitting description of your task.
4. Set a deadline for the completion of your task.
5. Don't forget to save the task (press the button “Save Task”).

Q4. How to add tips?

Creating tips

1. Click on the task title name to go to the page where you will be able to add tips and resources.
2. Enter the title of the first tip to the task.
3. Enter the description of the tip.

4. Click on the “Save Tip” field.

5. You can add as many tips as needed to a course.

Q5. How to edit the tips and resources?

If you want to edit any of the tips created, go to the tips name and press the pencil icon. Then follow the steps described above. The same procedure you can perform on the Resources added.

Q6. How to get back to the tasks?

At each stage of creating tasks before publishing the course, you can go back to the previous work by pressing the back arrow or clicking on the name of the task

Q7. How to save a tip in the editor and move on to the next one?

After writing the text in the tip box, click the “save tip” button.

Click “Save Tip” and create the next tip just like you created the 1st one.

Q8. Can I edit the course when it is published?

You will not be able to edit or add new tasks to a published course. The course will be available offline so it will become a “finished” item when you decide to publish it.

Q9. How long can a task description be?

Next to each field you can see a defined number of characters for that item. The course description should contain a maximum of 255 characters.

Q10. What should be the date format?

The date format is day/month/year. Use the calendar to select the correct date.

Q11. How to add resources correctly?

1. Enter the title of your resource.

2. Enter the description of the resource.

3. Paste the link to the source into the URL field provided.

4. Press the button “Save Resources”.

5. You can add several resources to one task.

Q12. Where can I find the course code for the course I have published?

After the course has the status “Published”, the editor will generate a code for the course. You will find it on the screen with all the courses you have created.

Q13. How can I share the course code?

This is up to you. We would suggest that you send the course code via email. Any medium that allows you to copy the course code is fine for this.

6 How to use the MobilEDu App

6.1 IOS

MobilEDu App instruction for IOS

To experience the **MobilEDu** App you may want to go through the following guide or ... try on your own first.

1. After you have downloaded the app under the name MobilEDu from the Apple Store, you will see the welcome screen.

It allows you to add your first course by pasting the code you have received from your educator. Enter the course code in the field provided for this purpose.



Figure 25 Adding a course.

2. Paste your code here.



Figure 26 Pasting a course code.

3. You can also add your new course code when you already have other courses in your MobilEDu App. There is a designated "Add new course" field in the **MobilEDu App**.

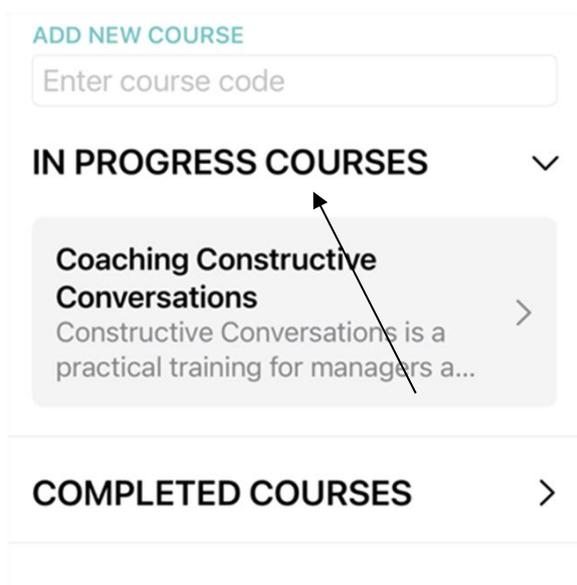
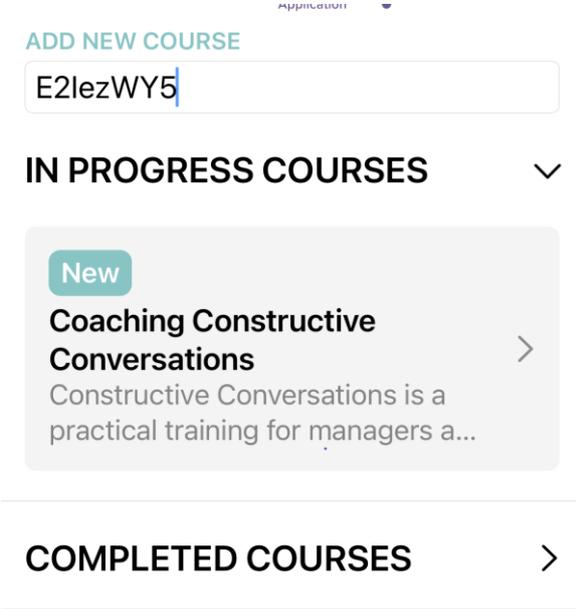


Figure 27 Progress Courses Screen.

4. After you have copied the course code, you will be able to access your new course by clicking on its name.



The screenshot shows a user interface for managing courses. At the top, there is a dropdown menu labeled "APPLICATION" with a downward arrow. Below it, the text "ADD NEW COURSE" is displayed in teal. A text input field contains the alphanumeric code "E2lezWY5".

Below the input field, the section "IN PROGRESS COURSES" is shown with a downward arrow. Under this section, a course card is visible. The card has a teal "New" badge in the top left corner. The course title is "Coaching Constructive Conversations" in bold black text, followed by a right-pointing chevron. Below the title, a short description reads: "Constructive Conversations is a practical training for managers a...".

Below the "IN PROGRESS COURSES" section, the "COMPLETED COURSES" section is shown with a right-pointing chevron.

Figure 28 New course was added.

5. Enter each task by clicking on its name.

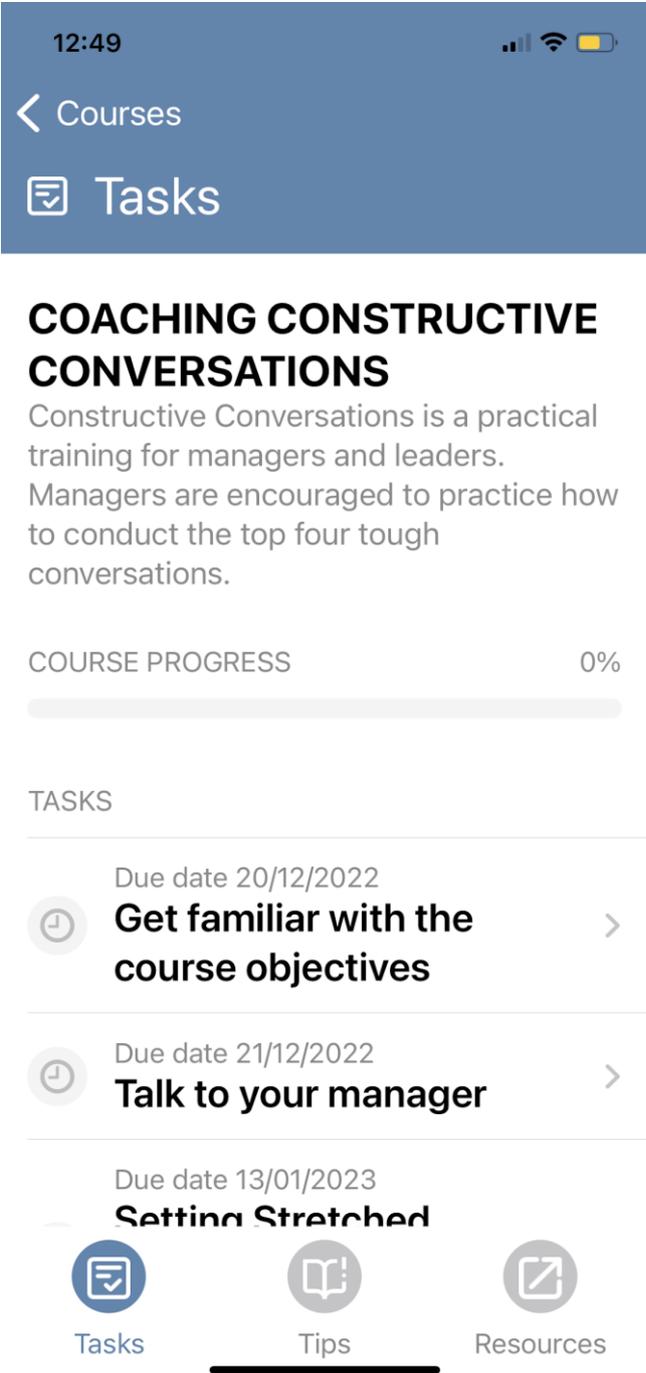


Figure 29 Tasks within the course.

6. Each task has its description and due date.

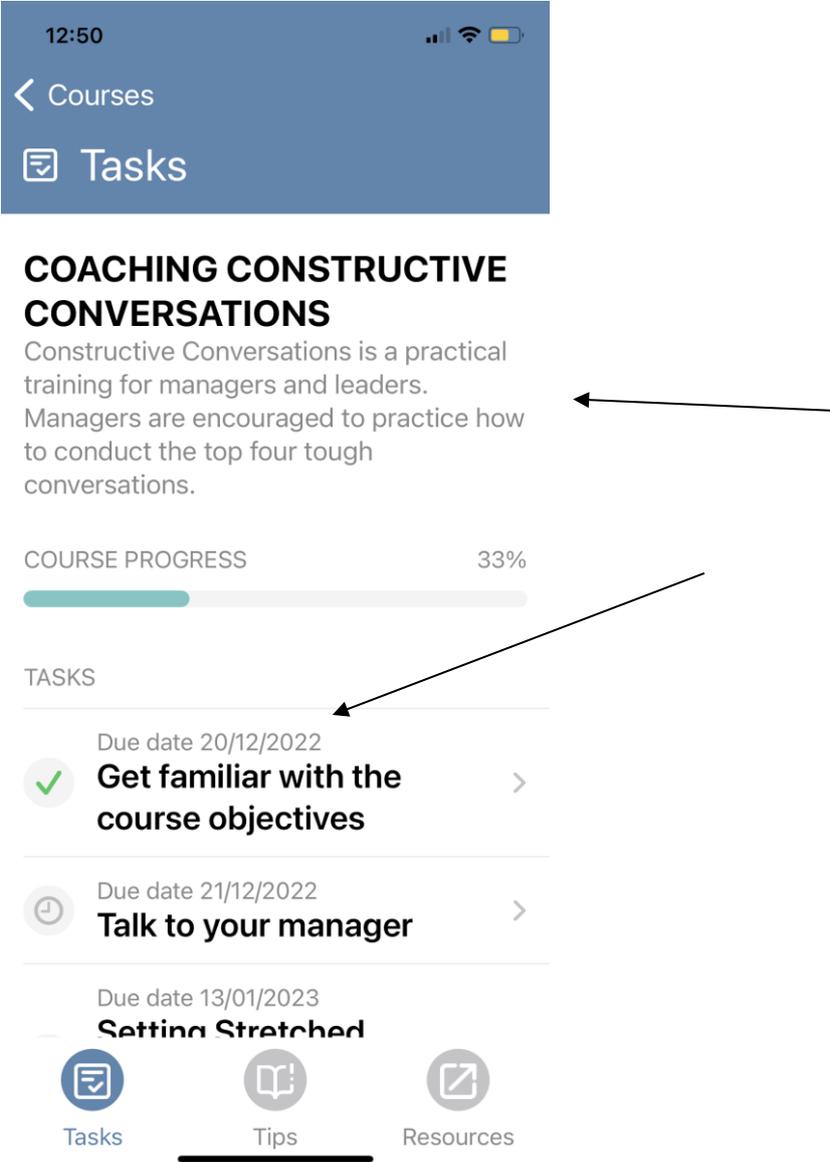


Figure 30 Description and Due Date of Task.

7. Some tasks may have tips and resources. You can access them by clicking on the tips and resource section.

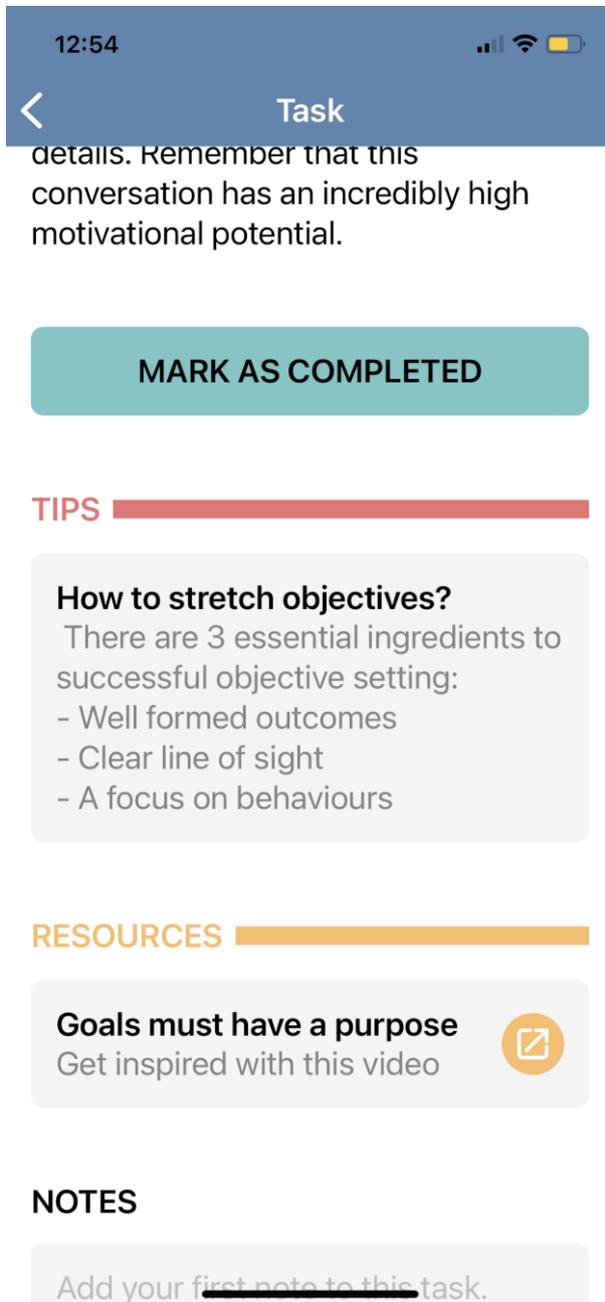


Figure 31 Tips and Resources.

8. You can add notes to each of your tasks if needed. Click on notes and start typing.

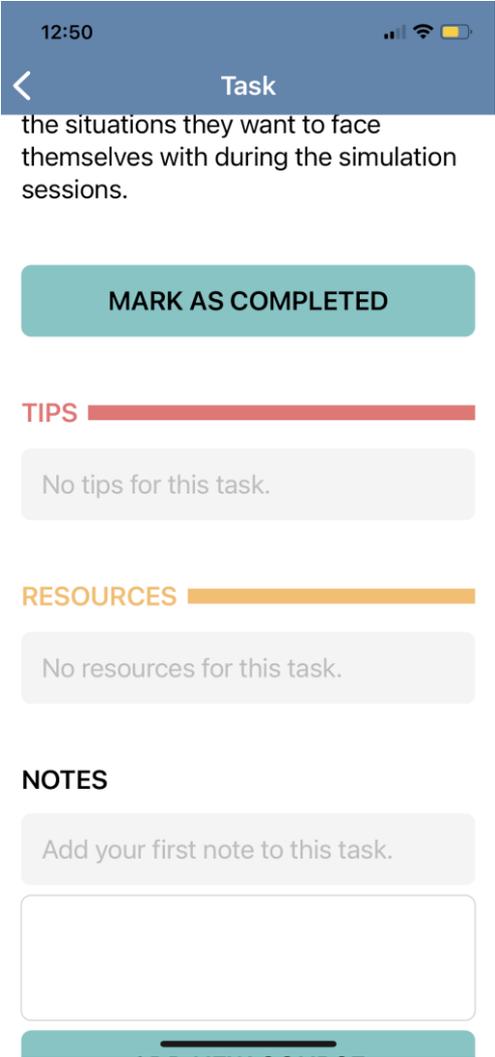


Figure 32 Adding Notes.

9. You have finished a task? Click on “mark as completed”.

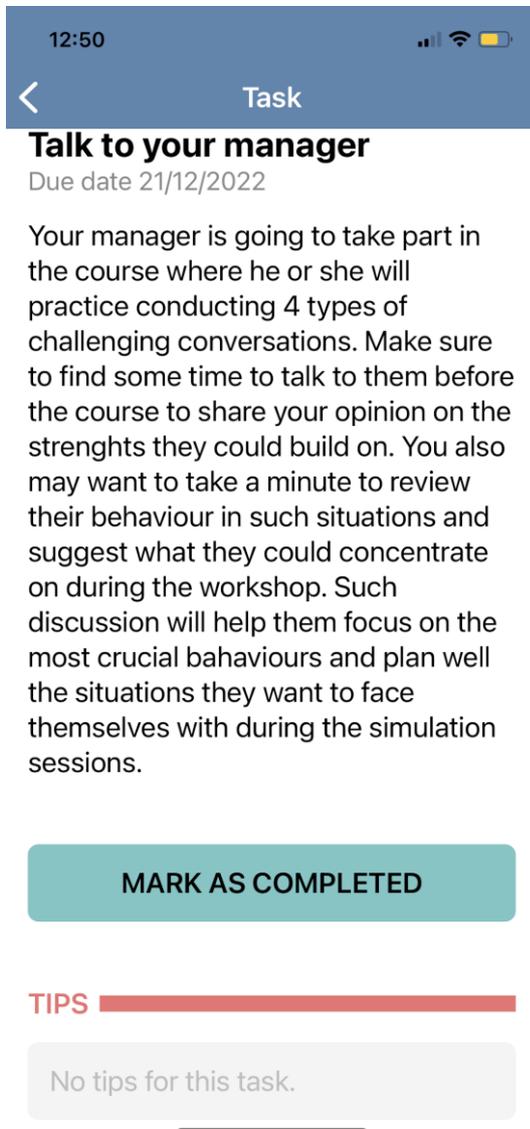


Figure 33 Marking task as finished.

10. You are wondering how far you are with the course? You can follow the progress of your tasks on the task progress bar. It shows your progress in percentage.

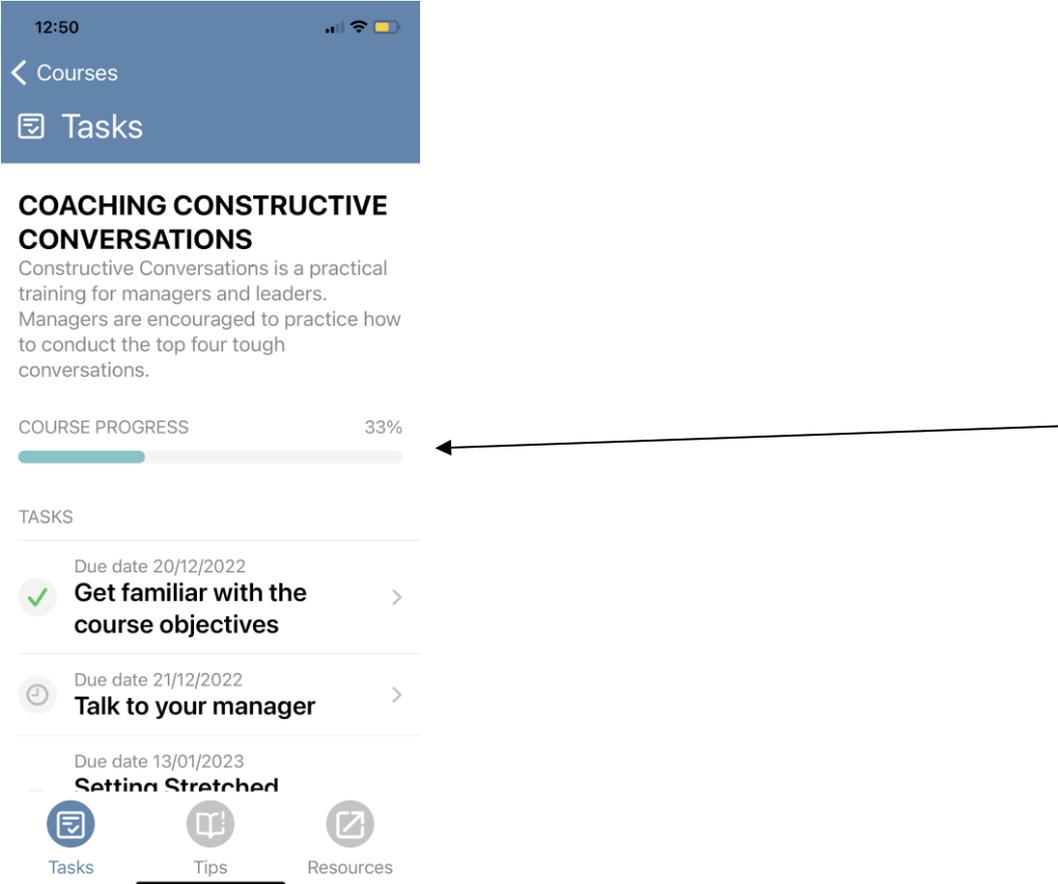


Figure 34 Course Progress Bar.

11. The course you have finished will be archived in the “completed courses” section.

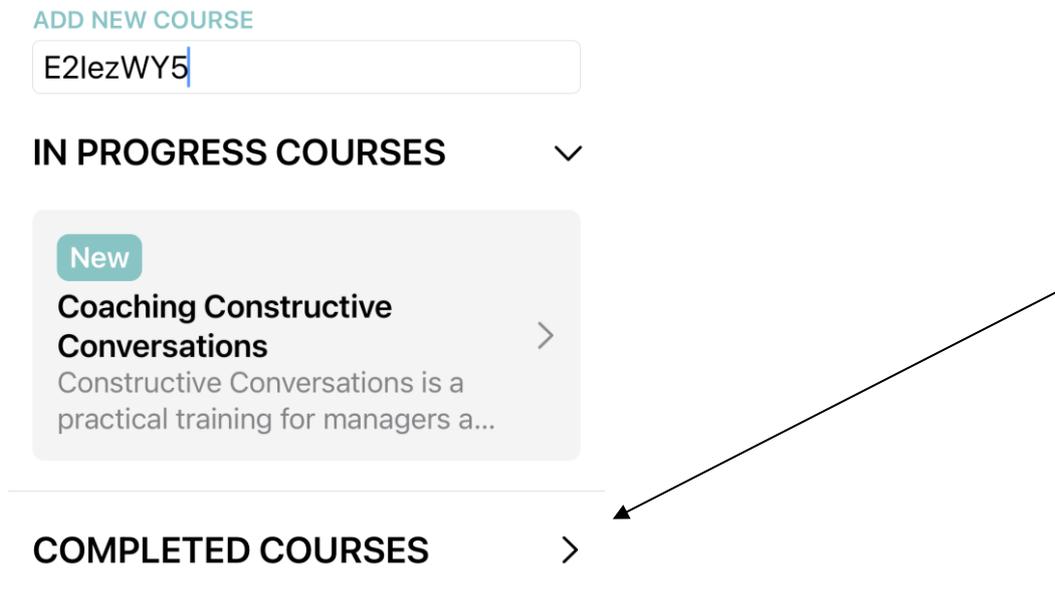


Figure 35 Completed Courses Screen.

6.2 Android

6.2.1 Download and registering process

1. Introduction

The MobilEDu application is mobile application, currently available to all Android devices.

2. Download

In order to download the MobilEDu application, Android users shall search for the term 'MobilEDu'. The MobilEDu application shall then appear first on the results page, through which users can install it by tapping on the relevant button.



12:30

3. Splash screen

Upon launching the MobilEDu Digital Learning application, a so-called *splash screen* shall appear, thus displaying the MobilEDu logo for a few seconds.



Figure 36 Splash Screen MobilEDu App (Android).



4. Home screen

A short while thereafter, the home screen shall load, thus showcasing the following sections in tappable buttons:

- Language (bottom of the screen)
- Add new course (bottom of the screen)
- Active courses (top of the screen)
- Completed courses (top of the screen)



ACTIVE COURSES >

COMPLETED COURSES >

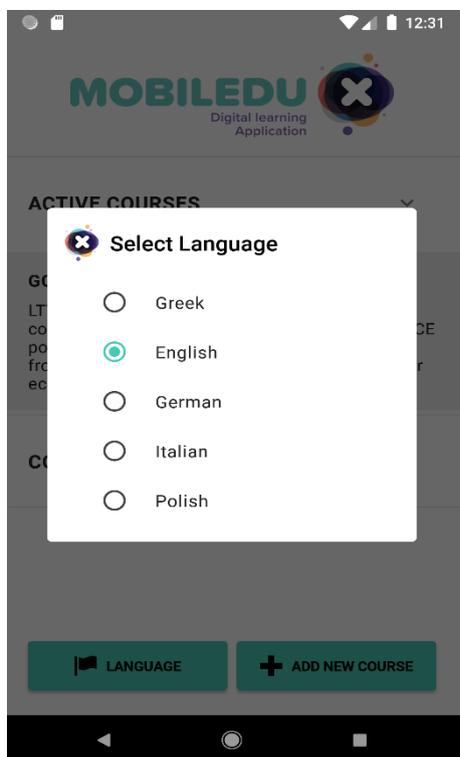
LANGUAGE

+ ADD NEW COURSE



Figure 37 Home Screen Android App MobilEDu.

5. Language



Upon tapping onto the *Language button*, a pop-up window that contains the following language options shall appear:

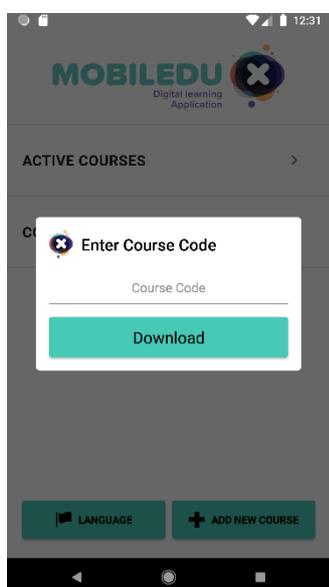
- Greek
- English (shown as pre-selected)
- German
- Italian
- Polish

Users may choose the language of their preference and proceed in it by tapping anywhere outside the aforementioned pop-up window.

Figure 38 Selecting a Language.

6.2.2 Working with the tool

1. Add new course



Users are able to tap on the *Home screen's* bottom right button, *Add new course*, in order to enter a course code that they have previously received from the administrator.

Upon entering the code, users should tap on the displayed *Download* button in order to load all information affiliated with their course.

Figure 39 Entering Course Code.

2. Active courses

All active courses currently followed by users are displayed by tapping on the *Active courses* text, on top of the *Home screen*.

Currently displayed as an example is a course named *Going circular LTTA*.

Users are also able to tap on each course, so as to view the entirety of its relevant information and tasks.

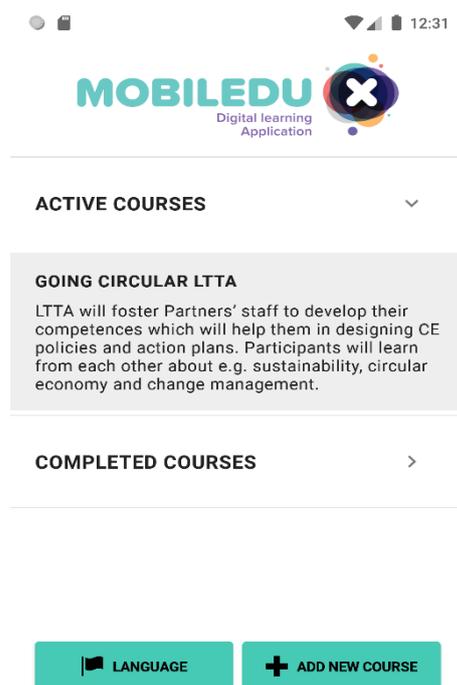


Figure 40 Active Courses.

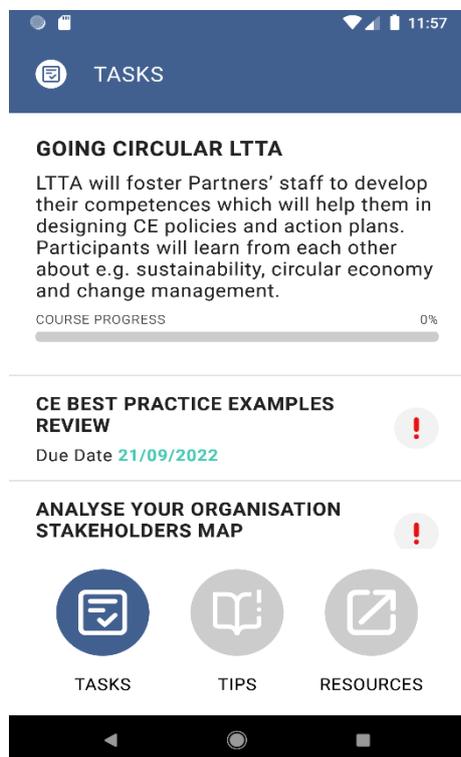


Figure 41 Course tasks.

3a. Tasks

Continuing with the example of the *Going circular LTTA* course, upon tapping on a task, users are thus able to view the following information:

- The course's purpose and relevant data.
 - The course progress.
 - The course's tasks, including due dates for each.
- Users can navigate through them by scrolling up and down. Each task also is followed by a tappable *red exclamation mark*, denoting that the task is pending.

The Course *screen* also includes three icons at the bottom:

- Tasks (currently in view as displayed and therefore non-tappable).
- Tips (tappable).
- Resources (tappable).

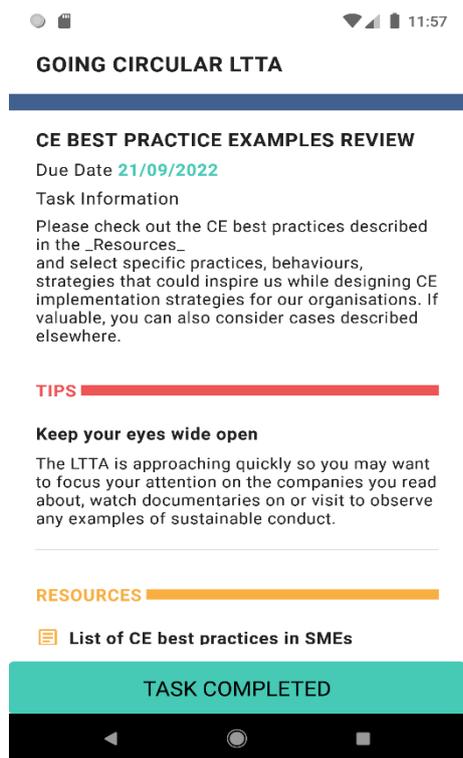


Figure 42 Tasks Screen.

3c. Tasks

Upon tapping onto the *Task completed* button, a pop-up window shall appear. It displays the question ‘Are you sure you have completed the Task?’, along with the options *No* and *Yes*.

Users can tap on *No*, in order to cancel the course’s completion. Users can tap on *Yes*, in order to proceed with the completion. Users can tap elsewhere outside the pop-up window, so as to return to the task.

3b. Tasks

Upon viewing a task’s screen, users can tap onto the aforementioned red exclamation mark.

Proceeding with the example of *Going circular LTTA* course, tapping on the task called *CE best practice examples review* shall lead towards more information on the task.

At the bottom of the screen, a tappable *Task completed* button is displayed.

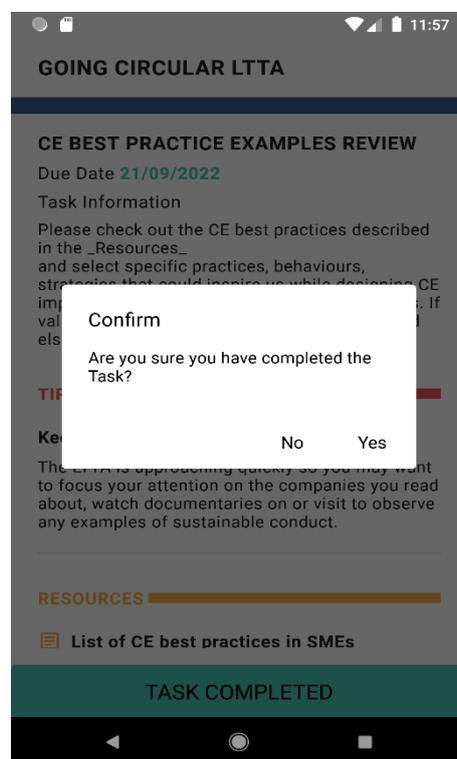


Figure 43 Process of Completing a Task.



3d. Tasks

Upon tapping on the No button, users shall be redirected to the screen displayed at 4.1.3.2, which shall remain unchanged.



Task Completed!

Upon tapping on the Yes button, users shall be directed to the *Task completed* screen, on which they are required to tap on the *Done* button in order to be redirected to the course, which now includes changes due to the task's completion.

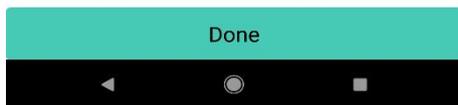


Figure 44 Task completed.

3e. Tasks

Upon the task's completion, users are led back to the course, which now includes changes as the ones displayed:

- The course's progress bar will be increased.
- The task's red exclamation mark will be replaced by a green check sign.

Simultaneously, incomplete tasks will remain unchanged.

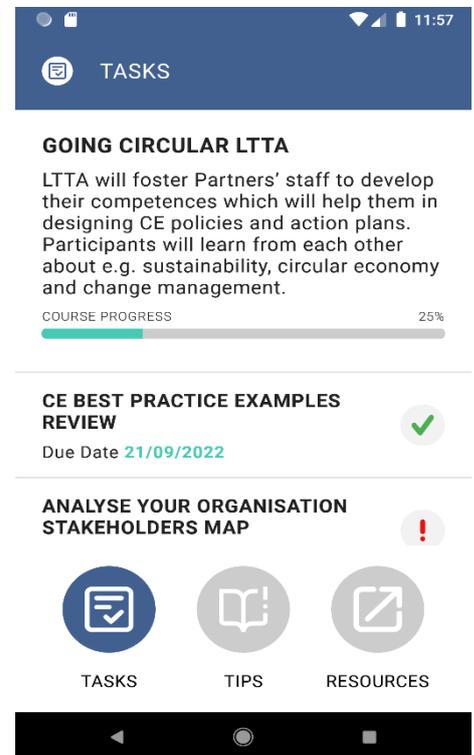


Figure 45 Course Screen and Information.

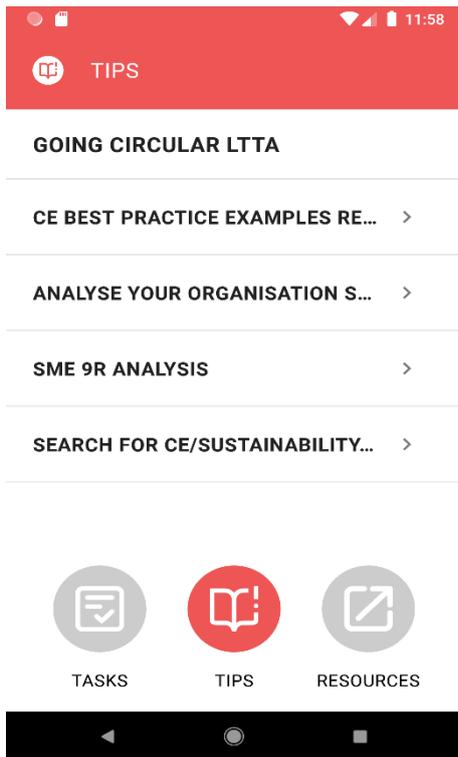


Figure 46 Tips Screen.

4a. Tips

At the course screen, users may choose to tap on the *Tips* button, so as to view several tips related to the course.

Here are displayed several tips related to the example course of the *Going circular LTTA* course.

Users are thus able to tap on any of the *Tips*, in order to expand them and view more information on it.

4b. Tips

Upon tapping on any of the *Tips* on display, more information on it shall appear as it expands.

Users are able to re-hide the expanded tip by tapping again on its title.

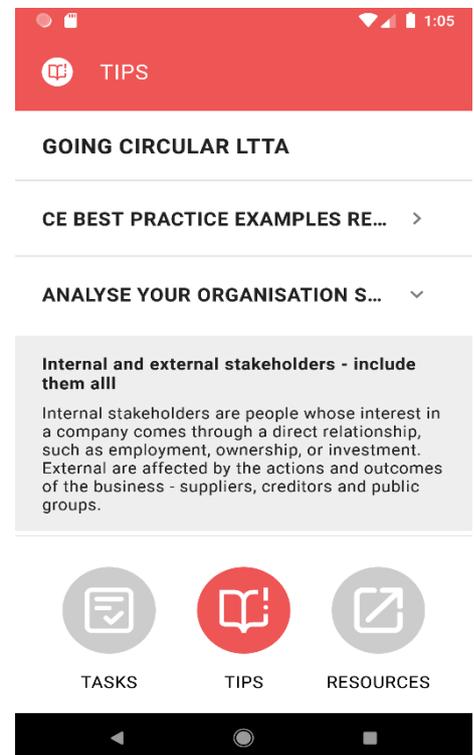


Figure 47 Tips and its description.

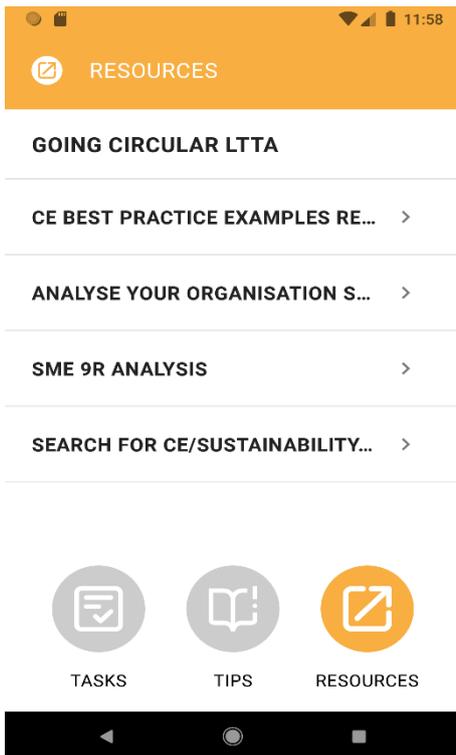


Figure 48 Resources Screen.

5a. Resources

A course's resources are also made available to all users. Access to the *Resources* section is possible by tapping on the button of the same name, which is located at the bottom right of the *Course screen*.

Similarly with a course's *Tips*, its *Resources* can also be expanded in order to display more information.

5b. Resources

As mentioned above, more information is displayed when the first resource of the example course, *Going circular LTTA*, is being tapped on and thus expanded.

Some of the *Resources* may include hyperlinks to third-party websites, such as the one displayed in the relevant image.

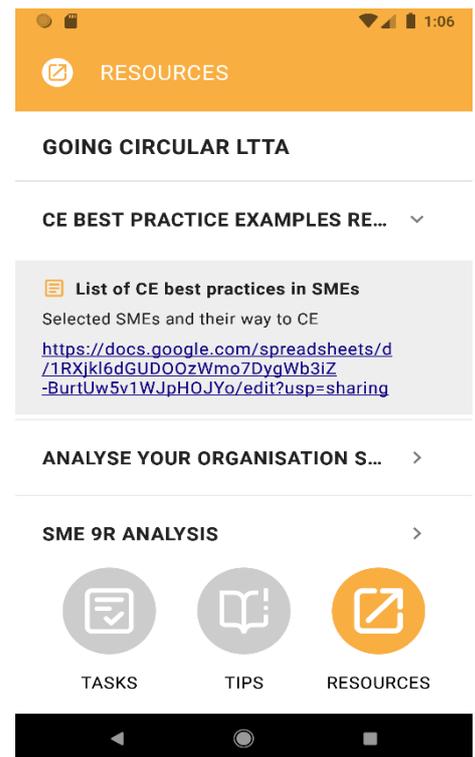


Figure 49 Resources and its Description.

6.3 FAQ - Avoiding technical errors

Q1 My code doesn't work.

Try to enter the code again (it is best to copy paste it to make sure you have recognised all digits and letters properly). If the code still doesn't work, ask your Educator for the same code again.

Q2. Does the application work offline?

Yes, the application works offline. You can use it anywhere you want. You just need to be online to download the course using the code. While this has been done, you will have access to all your courses offline.

Q3. Can I follow the progress of the tasks?

Yes, the app allows you to observe your progress.

Are you wondering how far you are with the course? You can follow the progress of your tasks on the task progress bar. It shows your progress in percentage.

Q4. Are there tips in the tasks?

Yes, in many tasks there are tips added but you won't find tips in every task.

It depends on the concept of the course designer.

Q5. Where can I find additional materials, links to reading or videos?

Take a look at the Resources, there are added links to videos and other materials.

Q6. Do I get the information that the tasks are completed?

Yes, you will see in the App that the task/tasks is/are completed.
Remember: If you have finished a task, click on "Mark as completed".

Q7. Can I add and delete notes in the tasks?

You can add notes to each of your tasks if needed. Click on notes and start typing.

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