REJTETT
KINCSEK
DOWN
EGYESÜLET

EDUMODUL-
Development of children with atypical
development through online support

....

PROTOCOL,
GUIDE FOR SPECIALISTS

Practical guide for creating an online support
platform and developing specialized content

caritas

CENTRUM
LIBERTA

EDU
MODUL.HU

Erasmus+

www.edumodul.hu
www.edumodul.com
www.edumodul.sk
www.edumodul.ro

Table of Contents

Foreword

The main profile of the institutions that have developed this protocol is the development of children with disabilities. Following our previous collaboration, a unified protocol has been established that defines early intervention and supports the spread of inclusive education.

At international level, there is a lack of capacity in education and the health system, which is why technical solutions that support the work of accessible specialists in a limited way are absolutely necessary. The holistic approach to child development, in which the family has an important role, has been around for some time.

This is a particular area that can have a significant influence on the child's development. After learning of the diagnosis parents go through a process of change in which they, in happy cases, can become important supporting factors.

We want to provide specialists with a tool, through which they can support both the efficiency of their own work and their fellow specialists. We provide a knowledge sharing platform and its methodology that can provide great support in this regard.

Kisari Károly,
President of the Rejtett Kincsek Down Association

Concepts

Target Group – potential user group to whom the modules and lessons address.

Development needs – needs resulting from the discrepancy between the current state of development and the desired state of development.

Framework system – predefined structure to ensure homogeneity of modules and lessons. It refers both to the structure of lessons and modules and to the principles of their elaboration. An indicative guide for specialists who develop modules and lessons.

Mixed learning – an integrated approach to learning content that combines traditional learning with online support. In this case, it combines face-to-face development with online support to increase the effectiveness of intervention.

Lesson - a pedagogical structure consisting of several elements that lead the user to achieving a specific pre-defined development goal.

Module - a structured system of lessons that has a given theme, a content that pursues a specific, predefined development goal. The lessons of the module are thus constructed and structured to ensure their gradual completion by the user in order to master the content.

Module system - assembly consisting of several modules that are interconnected and structured in a unitary whole on the objective and / or development objective

Instructional Design Model - planning learning activities and materials needed for them, taking into account educational theories and models.

Online learning platform - online platform that provides the conditions and resources needed for online learning.

Online learning - a form of learning in which learning content reaches the user through an online platform.

Prototype (test module) - element or test learning module that serves as a basis for the development of other modules.

Technical conditions - all equipment (hardware and software) and computer technological knowledge that makes possible for the user and for the specialist who uploads materials to use the online platform efficiently.

Learning unit - a well-defined part with one or more purposes, additional materials and method that supports the learning process.

What is the purpose of this protocol?

This protocol is a manual for specialists who want to develop educational materials on an online platform for children with atypical development, materials that contribute to the development of this target group and provide practical support for parents to be actively involved in their child's development through tasks at home, through games, with tools that can be easily made. The handbook is a guide that provides detailed guidance for educators and early intervention specialists on how to plan, build and develop an online development "tool" that is easy to use by children with atypical development as well as their parents. The manual provides useful guidance on the professional aspects that need to be taken into account when developing a module, respectively what characteristics of the target group we need to take into account, and last but not least, it reviews the necessary resources and technical conditions. The guide presents the consecutive steps that must be taken in order to develop a module on the Edumodul platform.

The topics detailed in each chapter provide practical solutions to problems that may arise in connection with the creation of an online learning platform (module) on Edumodul. Intervention specialists are not prepared to deal with situations resulting from the indirect learning process offered by the online learning platform.

The professional protocol detailed here is the result of a complex, individual and group learning process. Within the Erasmus+ project entitled "Developing the skills of children with atypical development through online support", implemented between November 2018 and October 2020, the Rejtett Kincsek Down Association in Nyíregyháza, together with the Centrum Liberta in Kosice and the Caritas Association of the Dioceses of Satu Mare have taken on to develop an innovative system of e-learning modules. It is possible that by sharing our experiences we can alleviate the situation of those specialists and pedagogues in the field of early intervention who want to develop learning modules within the Edumodul system.

To whom does it address?

We recommend this manual to all colleagues who work in the field of early intervention and develop practical auxiliary materials that support the development of children with special needs or atypical development, at home, with the involvement of parents.

The learning support offered through the online platform is addressed to both the child and the parent, and at the same time to the specialist who deals with the child's development. The parent of the child with special needs receives guidance on how to deal with his child, how to play with his child and how to do this in daily activities at home, in a playful yet developing way, using tools that can be found at home or that can be easily made at home.

The online platform for specialists in the field of early intervention is a "collection of development tools" that they can confidently recommend to parents to use at home, in the child's natural environment, to train or develop new skills, acquiring new knowledge , as well as for their repetition and practice.

What is an online learning platform?

The e-learning system is a web-based system that makes it accessible to users or those eager to study information or knowledge, without considering the limitations of time or geographical proximity, although online learning has advantages over traditional learning, so called face to face learning.[1]

The notion of an online learning platform has been defined in various ways, but what is common in all these definitions is that using the technical opportunities offered by the internet and the computer provides vast solutions that make remote learning possible and thereby developing individual performance. In the case of children with atypical development and their parents, the online learning platform defined in this way means that using the internet and the computer we show parents what effective opportunities they have at hand to effectively support the development and learning of their child at home.

The approach to the above-outlined online learning platform, respectively its application in the home environment by parents in the early development of their child (or even in the case of an older child), is just a support tool that is not appropriate to fully replace the intervention by a face-to-face development specialist. In all cases it is recommended to guide a specialist to choose the right areas of development and to discuss (even online) the problems encountered during the performance of tasks at home.

Despite the fact that the use of modern IT equipment (computer, tablet, smart phone, etc.) is an increasing phenomenon, for many parents online platform orientation is a major challenge due to technical ineptitude or overly professional terminology. Therefore, it is welcome that the first steps are taken together by the parent and the specialist.

Why is an online learning/development platform needed?

For the specialist in intervention is important that he can make a tool available to the parent that he can also use from home, autonomously. It is important for the parent user that he has a possibility that strengthens his feeling that he is able to face the problems encountered, that he can get involved in the development of his child, being helped by a specialist. The parent receives not only a simple guide for home activities, but using the opportunities offered by the online platform, he has access to images and videos, respectively he benefits from alternative ideas related to how he can perform various developmental exercises in playful ways so that they are attractive and full of joy for both of them - both for the child and the parent. Another important aspect for parent users is that in addition to performing many other tasks as a parent they gain free ground in choosing the time and location for the child's development, but also the frequency and pace of activities, since the online platform can be accessed at any time and from anywhere.

---

[1] Sun, Tsai, Glenn and Yeh, 2006

In the relationship between the intervention specialist and the parent, during the collaboration, there are occasional difficult periods in the intervention process, periods in which the therapist feels that he should offer more, something different from what he offers from a meeting to another to the child, the parent, the family; the development process stops, stagnates, this period being extremely difficult for both the parent and the specialist. In such situations it could be a solution for the specialist to provide opportunities for parents through the online platform that make it possible to perform tasks with his child at home.

It is natural for parents of children with atypical development to want their child to benefit from as much and as intense a development as possible, but this desire is often not fulfilled, due to the accessibility of services or space, time or financial limitations. At the same time, many parents feel that they can do something for their child's development, which improves the feeling of helplessness, has a beneficial effect on the individual process of dealing with problems. In the process of early development it is a professional requirement from the specialist to equip the parent with skills or teach him exercises that he can use, practice, repeat in a safe environment at home, thus making development more efficient and dynamic.

For some families, due to their residence, the specialized services are difficult to access from a geographical point of view, or even if they make an effort, they do not have access with an optimal frequency to activities.

As specialists, we often find that parents take care of their child in such ways, trying to teach him things of such nature that does not correspond to the child's level of development and real abilities. The explanation for this is that parents do not know exactly what period of development the child is in or have too high expectations from him.

The aspects detailed above, based on long experience, show that there is a great need for a specialist-guided platform on which the parent can confidently find and use materials recommended by the early intervention specialist to support activities carried out at home with his child.

The opportunity to use an online development / learning platform offered to the parent / child must be considered from the following points of view:
   ✓ What is the use of the learning opportunity offered, how does it help the user?
   ✓ Does it offer solutions to the problems of the parent and / or the specialist?
   ✓ Are the conditions and technical knowledge, the required experience for the use of such a learning platform provided by the parent?

Developing a learning tool that requires an online platform in most cases involves much more time, energy and financial investment compared to conducting a therapeutic session. It is valid primarily in those cases where the necessary technology (video, website, etc.) is expensive, but reaches a much larger number of users at the same time, can be used again and again without costs, does not involve travel and therefore no travel costs.
This type of learning provides methods that provide immediate feedback to parents about how they performed the task and taking into account the pace of individual learning, provides ground for various types of practice.

How to harmonize online support with traditional face-to-face intervention?

Lately, but even more so in recent months, as a result of the long-term suspension of early intervention services due to the pandemic, support or even online therapies for children with special development or disability have intensified, have gained an even more important role in the life of families and in the process of empowerment / rehabilitation of children and not only. This period has produced great changes in the lives of families with children, and specialists in the development and rehabilitation of children have also had to face many challenges. It is a natural process but at the same time it raises many questions, in our intervention environment, where both families and specialists are rather familiar with face-to-face interventions, where control and responsibility lies mainly with the specialist, who can intervene promptly and effectively. There has long been research supporting the importance and need for online interventions, but only recently has there been a growing interest in them. In countries like America, where the distance parents have to travel to get early intervention services is considerable, online support for families has been long known. However, experiences say that it would be optimal to combine the two forms, in order to obtain the best possible results from the child's perspective.

Online support should be a guide for parents to support them in practicing those aspects that the therapist introduces or develops in face-to-face therapies practicing may involve performing the same tasks that the child performed in therapy with the specialist in front, in order to better imprint or diversify what is learned in order to expand knowledge. The recommendation is that the therapeutic intervention should be built by the specialist taking into account the needs of the child and the recommendation of the contents of the online support that should also be within his competence.

The frequency of face-to-face interventions depends on the degree of accessibility of therapies by the family. In all cases, regardless of whether the frequency of the meetings is weekly or once a month or less frequently, in exceptional cases, there should be a space for preparing the parent for the use of this platform, discussing the offered contents.

As the online support is only supportive and does not fully replace (meaning it is not recommended to replace) the face-to-face intervention, when developing the intervention plan, it is recommended that the specialist grants enough time and space for parent training and regular discussion of the problems that arise.

If this possibility is given, the intervention deserves to be structured in such a way, that the traditional face-to-face intervention represents the framework of the intervention, establishing the direction of the development and the online support should be granted for exercise.

In the following table we compared the two types of intervention:

ONLINE INTERVENTION	FACE TO FACE INTERVENTION
Accessibility - in time and space	
Can be performed at any time	Depends on distance
Not limited in time	Requires pre-programming
It is done when it is best for the child	Depending on the possibilities it can be suited to the daily program of the child and family
It can be repeated several times	The therapeutic session has a set duration
Efficiency	
Cannot react immediately to each situation	Specialist reacts flexibly and immediately to problems
Can serve multiple beneficiaries	A specialist can serve a single beneficiary or a small group at once
Technical conditions and instruments	
The technical conditions are limited by the material situation and the knowledge of the families	The technical conditions are provided by the specialist or the rehabilitation center
They are given, but can be extended according	Has tools based on
to the creativity and abilities of the parents Priority is given to simple tools that can also be made at home	experience, knowledge and resources. The tools in the specialist's inventory can be used for intervention
Content	
The parent can select from the	The specialist in early intervention,
contents in certain areas	can modify the content
	depending flexibly on the situation

Planning, control

The specialist must make the plans for a longer term

The specialist plans the intervention for each week

Has no direct control over the intervention

making changes depending on the evolution of the development

Closely monitors development, intervention

Parent

He is alone, without quick support
The responsibility belongs to him, he is the producer

He feels safer
Closely monitors development, intervention in the development process

Costs, sustainability

It is efficient from the point of view of the costs, because an elaborated content, tool can be used by several,

They are calculated at unit level, therefore

for a longer period of time

the related indirect costs are higher

Quality elements of the online support system

When developing such a platform, several aspects that support and strengthen the learning process must be taken into account. These aspects must be reflected both in the construction of the modules and in the entire content:

- ✓ to meet the needs of the user
- ✓ to ensure progressiveness in learning
- ✓ be motivating and interesting for the user both in terms of content and how it is developed
- ✓ be easy to understand and use
- ✓ to focus on the topic
- ✓ to take into account the free time available to the user - not to be too long, the realization should not require too much time.

The following contributes to the *efficiency* of online support:

- ✓ t*he relevance of the content* from the user's perspective
- ✓ *structuring the content* according to the level and abilities of the person browsing them
- ✓ *time* required to complete the lessons, module

✓ aspects related to *IT knowledge* required - modules structured in such a way as to be easy to access and use.

Steps to develop a module on the Edumodul online platform

The process

Proper planning and development are essential elements of a program that supports learning, especially in the case of an online program, where the possibility of intervention is not immediate. Developing the program in such a support system requires more time and energy invested, than its implementation, especially compared to traditional intervention. In the face-to-face intervention, if the child does not respond to the game, task as the specialist would like that, he knows immediately how the task can be modified, so that it is attractive and easier to understand for him. The online situation does not allow this, only the corrective parts can be intercalated. In the case of online support, the time and energy invested pays off by reaching many users who can use a material several times.

In the specialty literature we find the description of several Instructional Design Models that provide a useful framework for developing an online system. Most models include the following elements: ***defining*** the target group and learning objectives, knowing the needs and conditions of the target group, as well as ***analysis*** of contents, ***design*** of content structure, their ***development and implementation*** of the realized system and ***evaluation*** of the whole process. In order to build a functional and efficient system, it is good that the whole process is accompanied by evaluation, by a control element. It allows us to get to know after each phase, the contents uploaded so far, the operation of the system and, if necessary, to make changes. The evaluation stage may have an additional element, ***testing*** the system, meaning that after developing a module consisting of several lessons, we test them in a smaller target group to see what the program's shortcomings are, what needs to be improved or what needs to be completely restructured.

As in each case, in this case also, the emphasis is on the basics, the first two steps, the definition of objectives and analysis, steps that, according to the specialized literature, specialists who develop online study materials are prone to ignore, not to give them due importance.
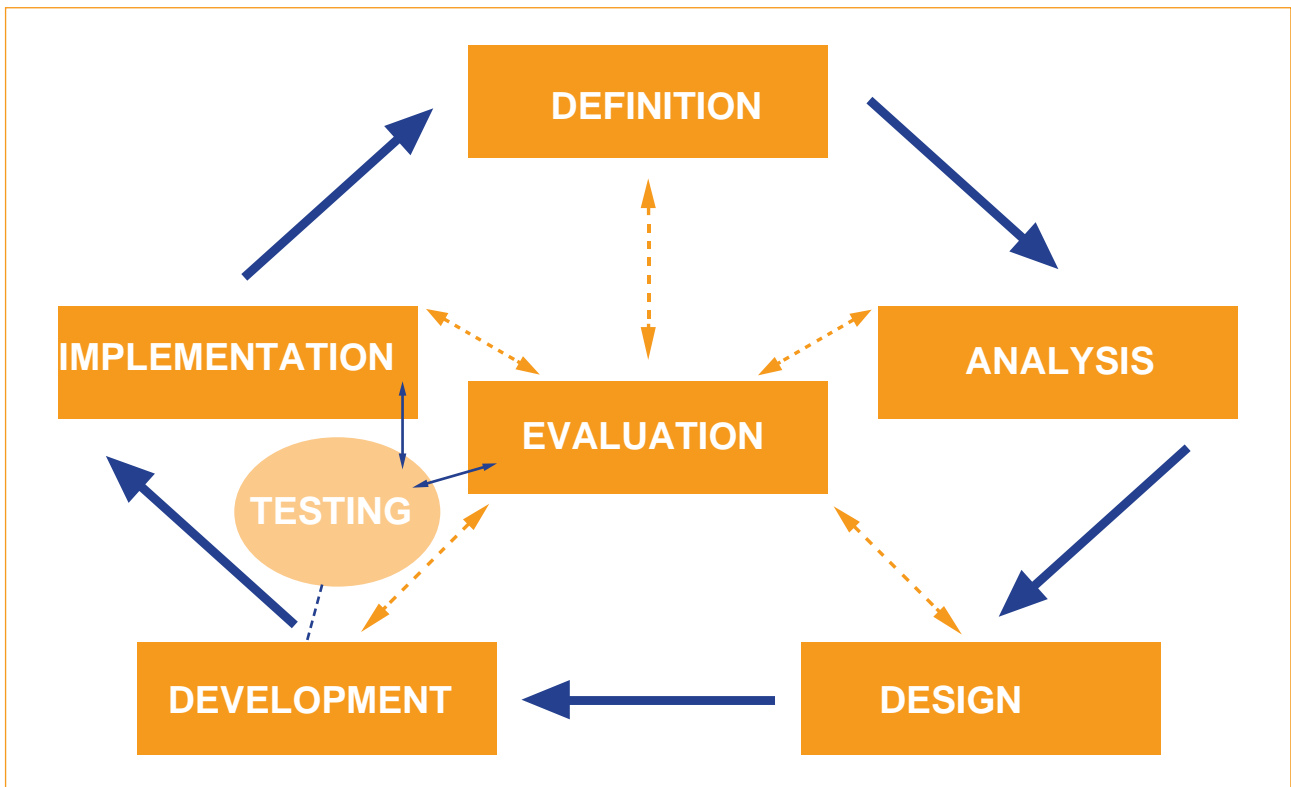
Figure 1. The process of developing the online support platform

What we want to achieve, what users will learn or what the content of the modules are good for, in what sense and how much the child will develop, if he goes through a certain material, what we offer - are all aspects that define the learning objectives. This is a first aspect in any learning process regardless of the environment in which it takes place or the nature of the target group. It is an aspect that will later determine also the structure of the material.

The principle that will guide us from the very beginning will be that we learn something to develop our skills, and we develop our skills because we have deficiencies in that field. At the end of each learning process our knowledge, skills and capabilities change, develop. This also has to be defined in the case of the development of an online platform.

The analysis refers to the identification of needs, as well as the existence of technical conditions and the ability of the target group to use them, respectively to the clarification of tasks and roles. Design and development are largely influenced by the characteristics of the target group, such as knowledge and experiences related to the online environment, what technology they have at hand, and how they can use it.

Regarding the design we need to determine what objectives we want to achieve, what are the objectives of each module, what strategies we will apply to the development, implementation and evaluation part. The result of this step is a model that can be useful for us in the development of the following modules. The model must include the structure of each lesson, the use of auxiliary materials and of the conditions for the start and completion of lessons.

After we have taken the preparatory steps, it is followed by the development, the use of the material and at the end of the process, the evaluation.

Definition of the target group and the learning objectives

Target group must be defined very precisely in order to know, to whom to recommend the instrument. In the case of children with atypical development it is necessary to determine who the modules are addressed to– early development specialists, parents or children. The following aspects should also be taken into account when defining the target group:

✓ Environment- the importance of this aspect lies on one hand in identifying the spoken language, in case the modules will have language specifics and on the other hand it must refer to the particularities of the user's background (in the case of specialists the reference is made to the environment in which he works and in the case of families to the place of residence)

✓ Age – in case of children it is important to pay attention to this issue as well, as they are the main target group.

✓ Experience in using the internet as a source of information and training - knowledge of the skills of using technology of the target group will determine the technological complexity degree of the material developed and its way of access.

✓ Access to internet or other devices - limited or low speed access can negatively affect the user's motivation and the lack of a printer, laminator, etc. will make it difficult or impossible to complete lessons.

The contents should be structured, the tools and language of use are recommended in the light of the above mentioned aspects.

Defining objectives is an indispensable element in the development of a material that supports learning and development, because by these we can measure how effective the support was. A development, support material relieves deficiencies and helps the user to acquire new knowledge, develop their existing skills, which is already sufficient to address, treat a current or new situation. This makes it possible during the projection and the elaboration of contents that the knowledge or the skills to be acquired, be at the focus of the content and not the use of it.

Learning objectives define the acquiring of knowledge, skill, that users can use in a given situation or context. For example, words appropriated in the way of word recognition can be used by the child in everyday life when choosing objects (to choose milk from the refrigerator or from the shelf in the store, for example).

Objectives should be defined on three levels: as a whole for support material, but also for modules and lessons. The first may have a more general and comprehensive wording, but

the closer we get to the level of lessons, the wording needs to become more specific and more concrete.

The definition of the general objective must always be formulated from the user's perspective, for example: by going through the lessons in which way the child will become more competent, what he will do best. For each lesson, let's try to have a wording as specific as possible, for example "learn to read two words" or "can place a bead with 3 small holes on the string".

Objectives should be defined on two aspects:
- ✓ expected performance
- ✓ content – knowledge or skills – acquired.

Objectives have an influence on every step of developing the online support platform, from structuring modules, to selecting content, to videos recorded for lessons.

Analysis

The analysis shall cover three main areas: *needs, the conditions and technical skills* of the primary and secondary target group, respectively *the content of modules* to be developed.

Identification of needs is the first and most important task in developing an online support module to ensure the most efficient support that meets the expectations of users. This process must identify the deficiencies arising from the system to which the content to be developed must respond, meaning whether this is the most appropriate approach in eliminating those deficiencies. It is important to know that the support, the online intervention is not a solution for any kind of needs and deficiency. In principle, the development of children with atypical development must be a face-to-face interaction. Online intervention should be viewed as an additional support.

Deficiencies, that such a type of intervention may meliorate them, but cannot eradicate, may be:

- ✓ environmental
  - ➢ adequate services are not accessible to the child.
  - ➢ the child's condition does not allow him to travel longer distances (he is recovering from a long-term illness, suffers from epilepsy, etc.)
  - ➢ existing service is not accessible to the family because it does not have a car and/or there is no public transport in the locality
  - ➢ family does not have sufficient financial possibilities

- ✓ organizational
  - ➢ the parent must perform other tasks, cannot organize his, her or the family`s daily or weekly schedule, so that he or she regularly reaches an intervention with his or her child
  - ➢ the number of interventions offered by the rehabilitation center is not optimal, but there is no possibility for more

✓ personal reasons
  ➢ the parent would like his child to benefit from more intervention

  ➢ would like to try something else than what is offered to him in the course of the intervention activities

Depending on the target group, the needs may relate to:
  ✓ acquiring of knowledge – for example, learning of new methods
  ✓ developing or training a skill – for example, as a parent how to teach the child to eat with a spoon
  ✓ behavior, attitude – for example, how to proceed if the child has aggressive manifestations in a group

Identification of these needs for specialists and parents is possible by completing an online questionnaire such as https://www.google.com/intl/hu/forms/about/ or similar questionnaires, thereby increasing efficiency. In the case of intervention specialists dealing with children, young people and their parents in an early development center or similar unit, the identification of needs can also take place by completing a questionnaire within a focus group, which allows for a better identification of the needs of the parents related to the intervention, respectively by individual discussions or through various forms thereof. The organization and deployment of focus groups is described in the appendix.

In case of children the needs come to the surface through intervention, the early intervention specialist observes what are those tasks and/or areas where the child or young person is experiencing difficulties and which can also be developed through online support.

Before drawing up the content it is useful to clarify the technical conditions and competences of the target group. When defining the target group, this was something that we took into account, because it significantly influences the complexity of the modules both in terms of structure and in terms of recommended support materials. It is also useful to identify digital skills because it is not certain that the parent or early intervention specialist who uses Facebook or similar social media pages every day will, for example, manage to download materials on an online platform. In each case it is useful to receive a short, easy-to-understand description of how to use different parts, and if possible, these descriptions to be supplemented with short videos to facilitate understanding.

The above-mentioned instruments or their combinations may also be used for this purpose, but even the identification of needs can be linked to the existence of technical conditions and competences, so that they can be achieved more quickly.

Content analysis should be carried out on three levels: at the level of the whole material (meaning at the level of the development areas), within each area and at the level of the module.
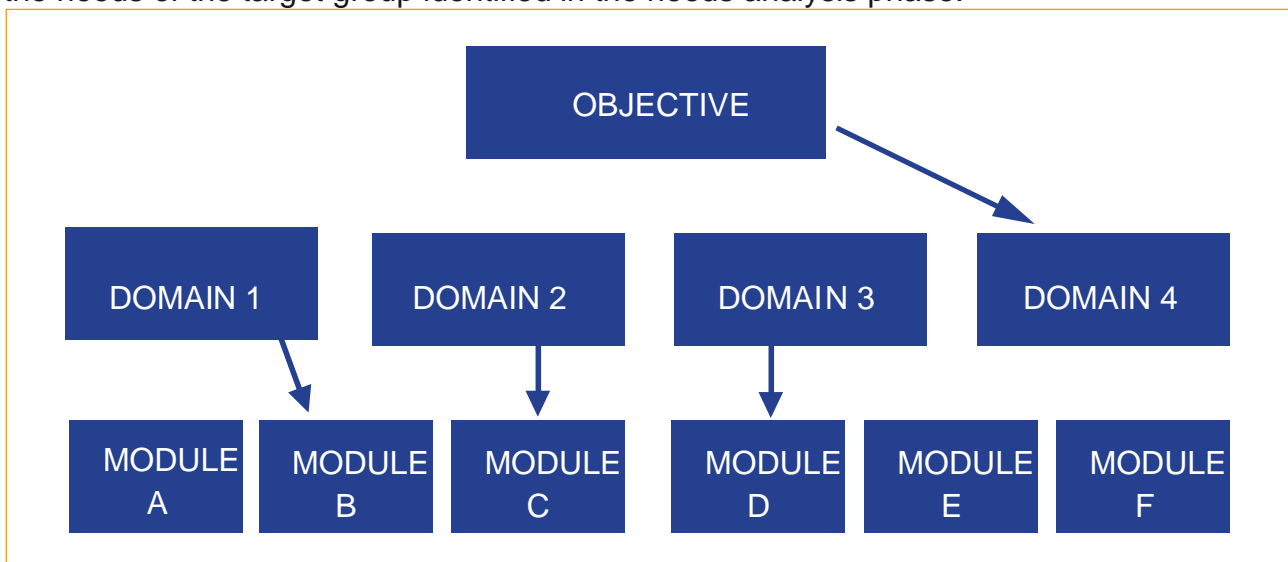
Starting from the purpose of the online support, the domains are defined, the sectors that will be targeted, respectively the modules that will each belong to one domain. A domain can include several modules, depending on their content.

This analysis process is carried out by a team of specialists using visual methods to make it easier to identify the connections between the different modules. You can use the mind map method for example. [2]

The choice of themes to be developed in the different modules must be in accordance with the needs of the target group identified in the needs analysis phase.

PLEASE SELECT MODULE TYPE!

Gross motor skills

Fine movement

Communication

Socialization

Self sufficiency

Thinking

---

[2] https://www.mindenmegtanulhato.hu/az-elmeterkep/

Content structure design

After completing the analysis tasks, follows the elaboration of the content structure, the designing of the structure of the modules and of the lessons, meaning of the contents belonging to each module. This is a task that includes several steps and whose end result is a model structure that will serve as a basis for structuring the content of each module, respectively lesson. This model structure will have to include the following aspects: the structure of the modules and lessons, videos and other visual materials used, the analysis before the start and after the completion of the module and the lesson, auxiliary materials, tools needed to complete the lessons.

All must be included in a framework system that ensures the unity of the materials developed. You can find such a model in the appendix.

The essence of the planning phase is the creation of a model structure, based on which all modules will be developed and which will allow the user to learn new content or develop a skill or attitude, namely to achieve its goal.

Experience shows that the structure of a module must be defined according to the objective of the module
- learning new content, methods, training skills or patterns of behavior. When aiming the transmission of new knowledge, learning of new methods or training skills, the most proper structure is the linear one, in which the learning units are interconnected, each new unit being based on the completion of the previous one. They are designed to be gradually completed. The formation of the ability to cut with scissors is a suitable example for a module with a linear structure, as cutting with scissors requires the existence of previous skills such as digital forceps, bimanual coordination, oculo-motor coordination, etc. Each of these aspects on which learning to cut with scissors is based, can be the subject of a lesson and their completion leads the user to achieving their goal, namely the ability to cut with scissors. For a better view the linear structuring model is shown below in figure 2.
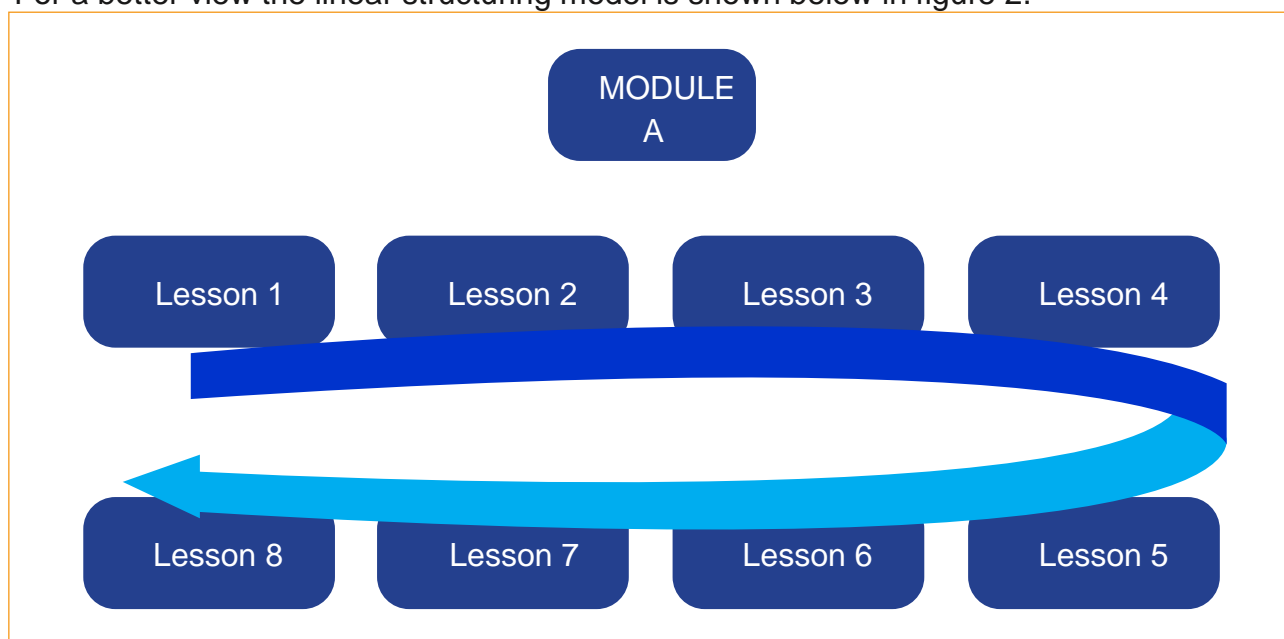

Figure 2. Linear lesson model

The lessons are quite distinct units, the only connecting element between them being the topic they focus on. The units themselves are not connected, they can be covered independently of other units. The user chooses only those units that deal with topics, contents that interest him, it is not necessary to go through them all gradually to achieve the goal.

This type of content structuring is considered a random one. The user selects the content according to the topic treated by the respective unit. The representation is shown in the below figure 3.
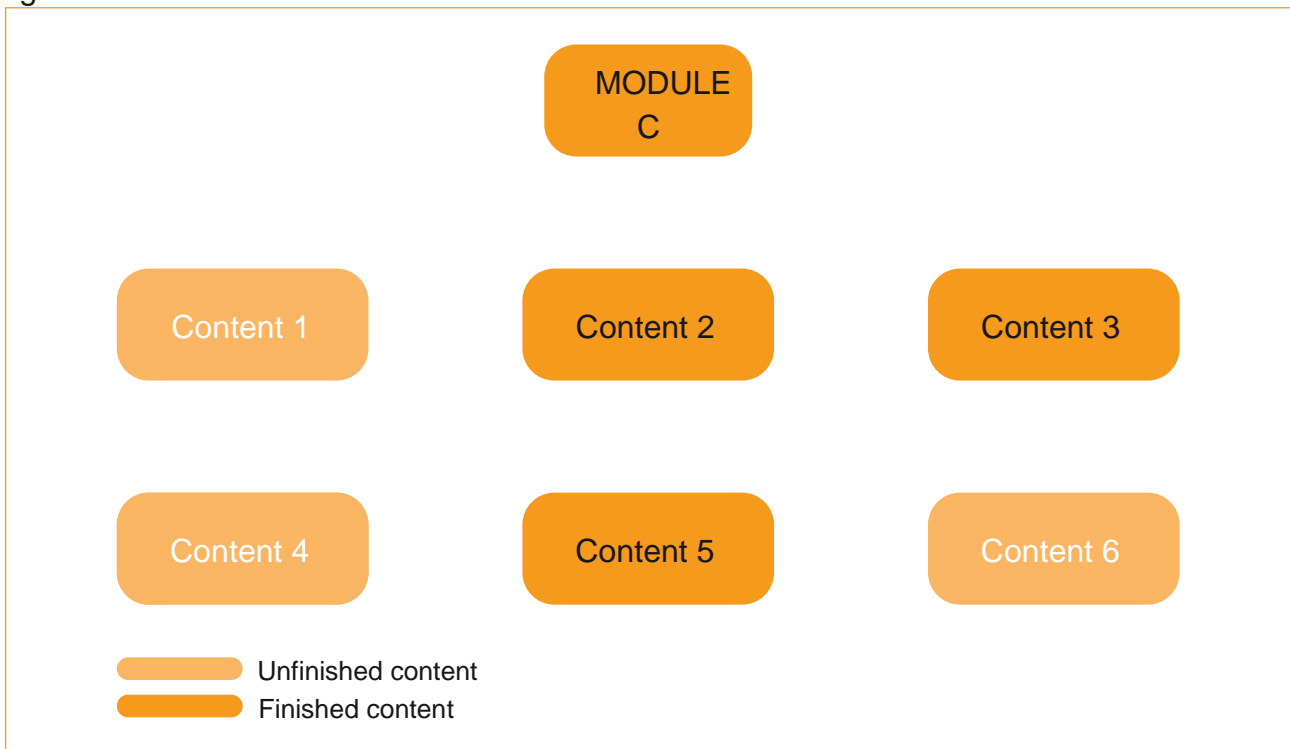

Figure 3. Random structuring

For a better understanding of this module structure, we represented the contents covered by a possible user with a different color than the rest that belong to the same module but are not of interest for the one who browses the module. It is important to remember that in this type of structuring the contents belong to the same big theme, only that the different units deal with different aspects of the topic. An example of this can be the following: a parent of a child with autism has difficulties in making his child understand, that, when buying a product in the store he must first pay before using it. Such content can be found for example in the field of socialization, in the lesson entitled
"Rules of behavior outside ones home". In this module there may be other contents but not of interest to the parent in question, because his child does not have difficulties that suit themselves to the other contents treated.

Regardless of the structure chosen for the module, the defining elements of its structure as well as the lessons or units that make up the modules must also be specified.

It is recommended that in the case of modules at least the following elements be specified:
- ✓ the goal - what will those learn who completed it
- ✓ short description of the topic - general presentation of the subject of the module and its usefulness from the user's perspective
- ✓ primary and secondary target group - specifying the people who can benefit the most from completing the module, with their characteristics
- ✓ structure and number of units, lessons
- ✓ lesson monitoring elements

Beyond the elaboration of the structure of the modules, it is good to refer in this phase to certain basic principles that must be observed when developing a module. These principles must refer to general aspects related to the particularities of the target group, the specifics of the approached topics, the objectives pursued and can refer to: the language used, the materials used, the conditions for carrying out the lessons, etc.

The next level is that of lessons or learning units, as constituent elements of the modules. In their case, too, a model structure must be created to represent the scheme of elaboration of the lessons. Lessons or learning units are somewhat the online version of a face-to-face intervention. Just as in the classic interventions, which involve the presence of the child, the parent and the therapist in the same space, in the case of each online lesson it must be specified at least the following aspects:
- ✓ the specific goal - what the child will learn at the end of the lesson or what skill will be developed
- ✓ task description - concrete presentation, in stages of the activities to be performed and the necessary conditions

- ✓ materials used - games, objects, templates, worksheets or others that are necessary to perform the tasks
- ✓ ways of practicing - the same activity, task with what other materials or in what other context can it be performed in order to better master the content or improve the ability
- ✓ other specific recommendations - warnings, particular ideas arising from the specifics of the task of the target group
- ✓ how to monitor progress or achieve the goal

The design phase must also include the establishment of the structure of the evaluation element. In this sense, a first step is to establish what you want to evaluate. On the one hand, it is recommended to evaluate the entire online support - as well as content and system - on the other hand it is good if there is an evaluation of the user's performance, if the modules developed are set out to the formation of skills or the learning of new methods or to acquiring new knowledge.

Elaboration of contents

The elaboration of materials is the phase that is largely based on the previous stages, involving a lot of creativity and close collaboration with the specialist in the realization of the IT support. If the definition of the results of the online support, the analysis and the planning

phase, have been done properly then the elaboration of the materials does not involve such a big effort. It rather involves creating the "puzzle" from the pieces already developed in the previous phases, assembling the pieces of the previous stages. The result of planning is a structure model that serves as a frame at this stage.

The steps that are recommended to be completed in the elaboration phase of the online support materials are:
- ✓ making a model based on which the materials of all modules will be elaborated
- ✓ elaboration of materials
- ✓ testing the model to meet quality requirements and ensure maximum efficiency

The design of the model that will represent the basis of all other materials used in the online support involves the elaboration of:
- ✓ the structure of the learning units or the lessons, the modules, the way in which they will appear on the page,
- ✓ of the contents of the lessons and modules
- ✓ of the activities and tasks that users will have in each lesson, learning unit,
- ✓ the support needed for practice
- ✓ of graphic or video materials that will contribute to a better understanding of the tasks,
- ✓ ✓of the materials needed to complete the lessons, as well as
- ✓ of assessment units if the support is of such a nature.

Depending on the content of the modules and lessons, there can be used different methods of transmitting information online to the users. The most commonly used methods are:
- ✓ explanatory demonstrative - when the aim is to learn new procedures
- ✓ imitative - preferred if the purpose is to practice some content
- ✓ expository - to present scenarios that can be used in different situations
- ✓ combined - when the contents require a more complex approach in terms of transmitting information

In order for the contents to be as attractive as possible and to support the learning process, it is advisable to insert graphic elements and media. They can also be useful in developing an online page.

Graphics can play different roles:
- ✓ decorative - make the content more attractive
- ✓ representative - to facilitate a better understanding or orientation on the page or in the module (eg symbols used)
- ✓ to facilitate the understanding and completion of information in the case of the use of diagrams and drawings

Among the most used media elements is the video, which can be a real support in understanding contents.

Recording and uploading of videos

About video recording

In order for the lessons included in the developed modules to be used as well as possible, it is recommended to make and upload videos on the platform, possibly in just a few simple steps. Let's make an effort to make a good quality recording and informative enough for teachers and parents who will use it. We can record with a video camera or mobile phone, in both cases placing the device in a stable position, thus avoiding shaky and blurred images! From the mobile, the recording can be uploaded immediately to YouTube, and the material is first transferred to the computer or laptop from the camera.

Uploading and integrating video on the page:

The recording must be uploaded to YouTube, taking care that the video is not visible to the public during the upload on the platform.

Upload video from your computer or laptop: Open the www.youtube.com page in your browser. If you have a Google Account, you can sign in to your YouTube account with the username and password you use to access your gmail account. If you do not have such an account, create one.

On www.youtube.com, click the + (Create) icon that appears in the upper right of the camera, then select the "Upload Video" option. Use the "Select file" button to search for the desired recording. Follow the commands: Specify a name for the video, description, specify that the material is content that is "Not for children". Click the "Continue" button if prompted by the platform. Click the "Publish Now" scroll down menu and select the "Not Public" option, so the recording can only be viewed by people who want to view it on the Edumodul page. Click the "Finish" button, then select the "Embed" option, and copy the resulting string when you load the lesson at the bottom of the "Video" text. After that, continue uploading the lesson by completing the following lines!

Upload video from mobile phone: Select the recording you want to upload from the phone gallery. Select the distribution icon (differs from phone to phone), and select "YouTube" from the displayed options. Specify a title and description for the recording, then select the "Not public" option. Select the "More information" option, where you can set whether the content is intended for children or not, or limit the audience (this is not required). Publish the recording by pressing the "Upload" button. The code needed to embed the video in a lesson on Edumodul can be obtained by clicking on the three dots that appear next to the recording and select the distribution option, then select the "Copy link" option. Insert this link in the following line of code: <iframe width="560" height="315" src="DELETE THIS AND INSERT HERE THE VIDEO LINK FROM YOUT-
TUBE!" frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe> Copy this line in the box under the textul „Video". After that, continue uploading the lesson by completing the following lines!

Implementation of elaborated contents

The implementation phase can also be defined as the stage in which following the steps described above, a prototype is created, which will be tested on a small group of users, in order to collect information to contribute to its improvement.

The recommended steps to follow at this stage are:
- ✓ prototype creation
- ✓ identifying the target group of users who will use the prototype
- ✓ collecting information following the use of the prototype by applying questionnaires, individual interviews or organizing focus groups
- ✓ modification of the prototype based on the information gathered

The creation of the prototype will follow the steps described in the previous chapters, namely: definition, analysis, design. It is recommended that the prototype be a module or learning unit that includes several lessons to provide the necessary basis for the collection of information as rich and varied as possible, thus ensuring the necessary material for a proper improvement.

The group of users who will test the prototype should be representative for the module, learning unit and thus ensuring to obtain a wide range of information that will later be used to complete the prototype.

The appendices are presenting proposed models for the collection of information following the use of the prototype by the control group. These methods can be used individually or in combination, depending on the target group, the time available and the amount of information gathered.

The last step in this stage is to finalize the prototype based on the experiences gained.

This is the model for developing further learning modules or units.

Evaluation

Evaluation, as the last component of the online support development process, must accompany each phase of the material development, thus providing the necessary feedback to improve the support and the framework necessary to achieve the set objectives; the way in which the objectives set, at both process.

The aspect targeted by any evaluation refers to:

Relevance, in a way in which the set objectives address the identified problems and the real needs, estimated in the needs assessment phase. This refers to the extent to which the online support of each module is suitable to the problems to be solved, when the intervention is designed and at the time of evaluation.

The **efficiency** criterion refers to the way in which this type of online support has results similar to those obtained through face-to-face intervention in terms of quantity, quality and time.

The extent to which the set goal, regarding the online support of the progress of children with atypical development, has been achieved, refers to its **effectiveness.** It needs to be clarified to what extent users have benefited from this type of support.

The **impact** concerns the level of long-term change that such an intervention brings, in terms of quantity and quality. But can this model reach a larger mass of beneficiaries? Is this a *best practice* model which will be used as a reference in the development of similar models? The **sustainability** criterion refers to the analysis of how the positive results brought by this online support are preserved in the long run.

There are several evaluation models presented in the specialty literature, most of them using the model developed by Kirkpatrick, which proposes evaluation at four levels:

✓ *Results* as in, was it achieved what was proposed? Does the developed online support provide the necessary support to specialists in completing the process of children's development? Have the identified needs been met?

✓ *Behavior* - by going through the modules, did the users change their behavior thanks to what they have learnt? For example, do those children who have completed the fine motor module do better in using the pencil?

✓ *Learning* - what knowledge did they acquire, what skills did they gain/ develop or how did their attitude change? For example: do those who have gone through the socialization module, do better in situations that previously created problems for them?

✓ *Feedback*- how satisfied are the users with using the online support or browsing the module? What is the degree of motivation for use? Do they complete the module or is there an increased tendency to give up? Do you recommend online support to other users?

The evaluation of the online support must be done both during the development process and at the end of it to see how it has achieved its goal. Each time the evaluation will be associated with the purpose and objectives proposed.

Regarding the users, the way in which they achieved their objectives can be appreciated both as they go through the lessons or learning units and at the end of the module.

When we refer to the evaluation of the course, we are talking about a *formative evaluation*, which purpose is to provide feedback on the process of developing modules and lessons in order to improve the final product in case of the evaluation of the entire online support and by mastering the contents, training or developing skills or changing attitudes, when we refer to users. This type of assessment is performed throughout the process, at time intervals defined according to the stages of development or completion of learning units.

Formative assessment, if done properly, can mean returning to an earlier stage in the developing process of online support to intervene at this level and thus ensure the expected

efficiency or repetition of content when we talk about the user's completion of module lessons.

The above evaluation form refers to the way in which we involve users to use the e-learning interface, what are the materials used and on which instructions the use of the interface is made.[2] The evaluation of this type of online support interface must focus on its contents and use.

The formative evaluation can vary from completing questionnaires with concrete questions, through focus groups, to individual interviews, if we talk about the development of the online support platform, and in the case of users can be mentioned exercises or questions, respectively games.

Recently, methods of collecting interactive information have become increasingly popular, such as the mentimeter.[3] These are recommended if, for example, the situation requires the collection of information in the form of focus groups conducted online. Below we present the system proposed by Tressmer (2013) for conducting formative assessment.
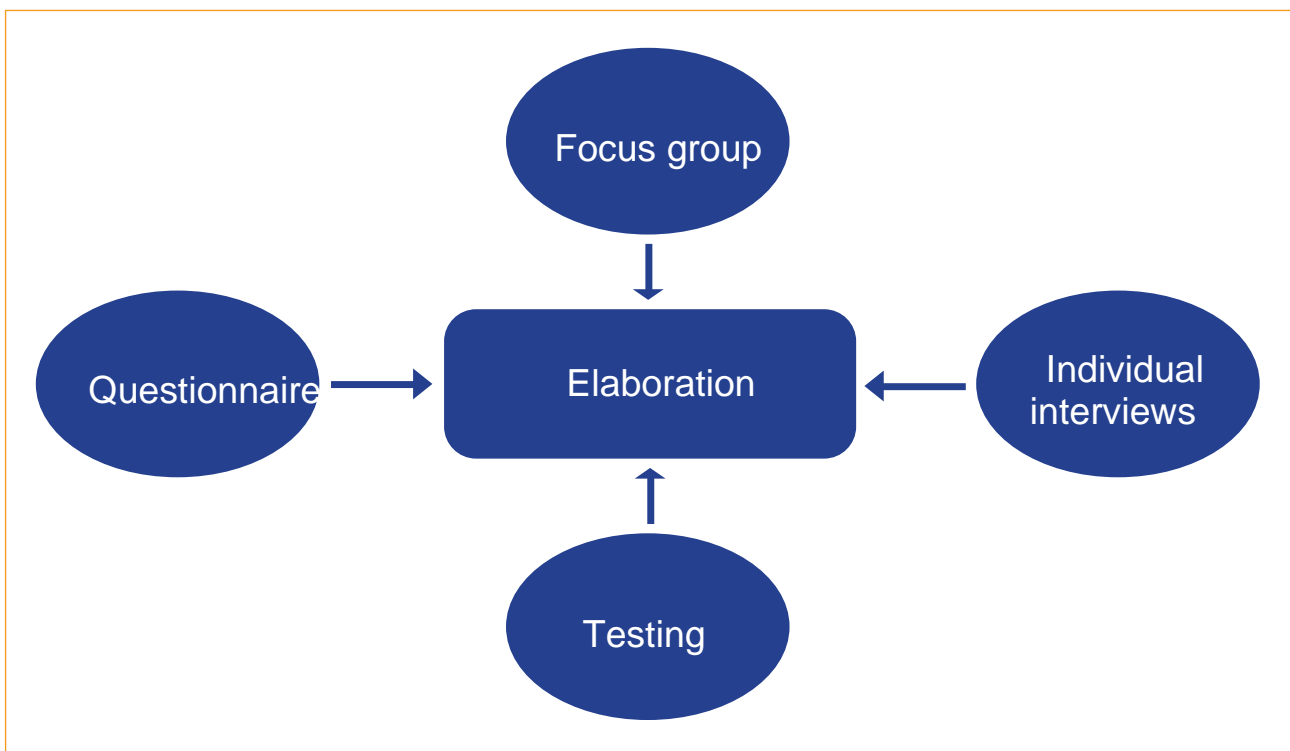
Formative assessment cycle (Tressmer, 2013)

The questions asked or the direction of the discussions, when looking at content issues, should take into account:
- ✓ Materials used
- ✓ degree of understanding of the instructions,

---

[2] Morrison et al., 2019

[3] https://play.google.com/store/apps/details?id=com.mentimeter.voting&hl=hu&gl=US

✓ degree of correspondence with the identified needs of the user

and if we talk about the use of the online surface, information will be collected about:
- ✓ accessing the page
- ✓ registration
- ✓ operating on the platform

Sample questionnaires regarding the content, the use of the online platform as well as the organization and development of focus groups can be found in the appendices.

Testing is a special form of conducting the *formative assessment*. This type of assessment involves developing a module or just a part of a module, also called a *test module* and offering it for use to a small group of users, in order to obtain useful information on how the content, ease of access, understanding of instructions, etc. namely of those aspects listed in the previous paragraph, which are necessary to make a material as efficient as possible.

The final summative evaluation has as main purpose the identification of the strong and weak points of the online support as content and process It is done at the end of the development process of the online support and together with the formative evaluation, along the way it contributes to ensuring the information necessary for the general evaluation based on the five recommended criteria.

REJTETT KINCSEK DOWN EGYESÜLET

APPENDIX NO. 1

FRAMEWORK SYSTEM MODEL

(What aspects should the specialist consider while loading materials on Edumodul?)

EDUMODUL-
Development of children with atypical development through online support

PROTOKOLL,
GUIDE FOR SPECIALISTS
Practical guide for creating an online support platform and developing specialized content

Appendices

Appendix no. 1-Framework system model (What aspects should the specialist consider while loading some materials on Edumodul?)

General considerations

Basic requirements for developing a simple and efficient module

When developing a module, the following aspects must be taken into account:

✓ *The language used* should be simple and easy to understand for parents. Let's avoid specialized terms, even if many parents know their child's diagnosis by heart. This is also important because we do not meet with all parents and children face to face, we do not know who, at what level of understanding is on the issue of his child. Every parent has different knowledge, skills and experiences. To ensure that the language you use is appropriate, it is recommended that you test it with one or both parents.

✓ In the case of modules that include lessons based on each other, *the principle of graduality* must be observed. Tasks to rely on each other, to start with the easiest and to continue with more and more difficult ones. Here we must consider not only the difficulty of tasks, but also the age and development age of the child. Let's specify in each case the level of development of the child to whom that task is recommended, and age should not be the main criteria!

✓ As this online platform is primarily intended for parents who do not have or have limited access to early intervention activities, it is useful that the materials and tools used to perform the tasks comply with the *"easy to make" principle,* meaning it can be done even together with the child, from materials found in the household. In addition, if they deteriorate or wear out, recommend easy-to-replace tools for use. In each case, give the parent ideas on how to alternate the task with other materials and tools. Ideally, add 2-3 more ideas for each task. The materials become more attractive to the child if they are made with him, he appreciates them more, and the parent feels even more that he contributes to the development and progress of his child. It is also a good opportunity for the child to spend time with the parent.

✓ It can be useful for the parent to describe the environment and the situation in which to carry out the task with the child. It is good to think not only about practice tasks, but also about situations in everyday life, in which the child can perform that task. The essence of this aspect is to give the child as many opportunities as possible *to practice the new things* and at the same time the parent should not be like a therapist for the child, but a person who plays with him in a targeted and controlled way, while he can learn new things and both can enjoy the game together. Children can always be better motivated to perform a task with more pleasure, when it takes place in the form of a game and with the parent.

✓ The duration and number of repetitions of a task are also related to this. It is known that the formation *of attention, patience and perseverance* necessary to accomplish a task goes through a process of development, similar to the development of walking or speech.

✓ Due to *developing deviations,* of the disease, there are characteristic aspects that should be included in the description. In the case of a child with intellectual disabilities, regular repetition of those already acquired is a basic requirement for success and development support. For children with autism, the basic requirement is consistency, that is, we exercise the task in the same way as before.

Module and lesson, structure of the learning unit

Description - The description of the module should include: the topic addressed, how it relates to other areas of development, who is recommended, what he will achieve, what he will learn, what skills will be formed in the child if he completes the module, what expectations can the parents have, what will they see. It must also include how many lessons the module has, in what structure, what is the type of lesson (training, fixation), what is the purpose of each lesson and how it relates to the other lessons.

Means, materials - In order for the parent, or the child, under the direct guidance of the parent, to be able to go through the various lessons (for example, in the feeding module), they need to know what tools they need, where they can get them, or from what and how he can achieve them. The tools can be videos, online or offline tasks, concrete toys, tasks, task sets illustrated with photos, toys that can be made, worksheets.

Task situation - If there are tasks that require special conditions, they should be described in an appropriate and simple way that is easy for the parent to understand, such as the positioning of the child during feeding to facilitate the swallowing of food, or for a child with autism the performance of tasks may involve arranging an isolated corner in which he will not be disturbed by external stimuli. If there are no special requirements for the performance of the task, it is also advisable to describe the conditions that must be ensured in order to perform that task in optimal conditions.

If videos are used to present the learning task, they must be specifically related to the task, not too long and the recording should be made with a child like the one for which the module is intended.

Time interval and regularity - In this chapter, the parent's attention should be drawn to things such as: how many times a day, for how long, when (if there is such an expectation) to exercise the tasks with the child, including details that come from the child's problem (see those described in the general considerations).

Precondition for starting the module - Each module is assigned an initial minimum development level, without which the module cannot be started. Having a minimum initial level set is essential for starting the module. The tool for determining the level of development should assess the essential skills needed for the child to start the first lesson (for example, for the word recognition module, it is essential to match pairs of abstract images).

Monitoring and documenting progress and development - This chapter covers how the parent and child will know how and how much progress they have made. To do this, there should be an assessment section at the end of each lesson, which could be a test consisting of one or more sets of tasks, a questionnaire completed by the parent based on his observations (for example, in feeding module), an online assessment worksheet, the completion of which allows the child to move on to the next level. Each child should have their own module profile which illustrates their progress. The elements needed to complete the profile should be provided by the module developer based on what the child has learned in the various lessons (for example, the word recognition module would have a scale whose levels would be given by the words learned by at the end of each lesson). Based on this, the parent could find out where his child stands and what the next step is.

Assessment at the end of the module - A set of tasks that the child must do (here we refer primarily to the feeding module, but not only) or tests, questionnaires that the parent must complete and that serve the purpose to assess and confirm the knowledge and skills acquired during the lessons. The result of this final assessment after completing the module must show the parent that they have succeeded in achieving the set goal, or they must repeat the module, or repeat the learning process but with a different content (for example, the word recognition module can be restarted as a process in order to learn new words). For such cases, parents should receive guidance.

Feedback and assistance system - At the end of each module, the parent should be able to provide feedback on his / her experience of the module, or at the end of each lesson they should be able to ask for help if he / she encounter difficulties.

APPENDIX NO. 2
FOCUS GROUP METHODOLOGY

EDUMODUL-
Development of children with atypical development through online support

PROTOKOLL,
GUIDE FOR SPECIALISTS
Practical guide for creating an online support platform and developing specialized content

What are our objectives with focus groups?

The focus group is used to obtain qualitative information about the test module. This is a complementary tool that provides additional data to obtain a final module that can be used based on the practical experiences of those who have gone through the test module, respectively gives us the opportunity to develop the rest of the modules included in the project based on it. At the end of each lesson in the test module, users had the opportunity to provide feedback on the lessons, so that the information obtained through focus groups is complementary. It is very important to remember that these groups are especially suitable for collecting quality data.

How to form focus groups?

Let's strive to make each focus group representative, that is, to include all types of users.

- ✓ Involve parents who:
- ✓ have easily passed the test module without encountering any special problems
- ✓ had difficulties in creating the auxiliary materials, with the online interface or
- ✓ had difficulty cooperating with their child in carrying out tasks or
- ✓ had problems with the contents - in terms of use, understanding or
- ✓ failed to go through it, did not even start.

Organizational conditions

We are looking for a room that allows a staff of 8 people to carry out comfortably, so that the work of the participants during the interview is not disturbed by external factors. Parents participating in the interview should come unaccompanied by their children so that they can actively participate in the conversation. It is important to create an atmosphere that ensures open communication, mutual attention. We personally invite parents to this focus group, making them feel the importance of their presence there and the added value through it. In the room, we arrange the chairs so that the participants sit in the circle as much as possible and everyone has enough space to see both the moderator of the interview and the other participants.

Moderator or coordinator of the focus group

The role of the moderator is to provide the framework for the conversation, to help the group go through the aspects included in the interview sketch, so that the conversation reaches its purpose. If necessary, he gets involved in the conversation, asks things if they are not understood, clarifies and summarizes.

If the parents are shy, they involve them in the conversations, they encourage the participants to express their opinions. Let the conversation flow naturally. The moderator discreetly directs and supervises the group. If the parents deviate from the topic during the

conversation, it is the moderator's responsibility to return the conversation to the original goal. It is important to maintain the enthusiasm and interest of the participants on the subject. Before changing the topic, it summarizes the answers of the participants given to that question and facilitates the transition to the topic addressed by the next question. It is good to have two people leading the same focus group, one taking on the role of moderator and the other as an observer, taking notes.

Interview sketch

The task of sketching the interview is to determine the direction of the conversation. The outline of the interview is not identical to the oral version of the questionnaire, it is less structured, and it only contains questions and does not suggest possible answers. It is not necessary for each participant to answer all the interview questions, they only provide a framework for conversation, a guide for the moderator.

The outline of the interview begins with a short introduction that explains the purpose of the meeting and the setting in which it takes place. In the introductory part, let us also emphasize, that there are no good and bad answers in the focus group, there are only individual opinions and no one should feel stressed if their opinions are different from others. Everyone had different experiences with the test module, so their opinions may be different.

The next step is to introduce the participants. This is important because it helps connect group members and allows speakers to be identified, especially if they do not know each other. It is good to present themselves even if they have met before.

After the parents met, let's briefly present the project, then the test module and finally the reason why they were selected to participate in this focus group. Then, let's move on to the questions, but keep in mind that the interview outline is just an outline of the course planned for the conversation. We can leave room for divergence, but let's not let the conversation get too distracted, because it's important for us to get as much information as possible. We close the focus group with a summary of the conclusions! It is important to give 5-10 minutes at the end to ask each participant for a final comment or suggestion. At the beginning of this section, let's tell them that we need their help to make a short report about the group work and mention only the most important points.

Questions

It is good to start with a concrete question, through which we want to find out why the participants offered to go through the test module. *"Please introduce yourself and say a few words about why you volunteered to take this module!"*

The following questions already cover the topic:
  1. *What difficulties did you have with the textual description and the instructions?*
  2. *How do you rate the usefulness of videos?*
  3. *How did you manage to prepare the tools and auxiliary materials?*
  4. *To what extent have you managed to involve your child in the process?*

5. How do you rate suggested ideas for practice options?
It would also be good to discuss during the conversation how accessible this program was to the parents (we are thinking here about technical difficulties) and if they consider it useful to have the option of online practice!

The moderator briefly summarizes what was said, then asks the participants if they have anything to add to what was said.

At the end, the moderator will ask the participants if something important is missing from the summary made in the focus group. "*Is something important missing from the meeting summary?"*

Let's always leave enough time for the final questions!

Conducting the interview

The first part tries to create an atmosphere that must be confidential, accepting, in which everyone has the freedom to express their opinion. This introduction of a few minutes will largely determine the success of the interview. Throughout the meeting, we should use neutral gestures and responses, so as not to influence participants in their responses. The goal is to get as much information as possible. The questions do not necessarily have to be read aloud, but the introduction to the topic should focus on getting an answer to the question.

We can change the order of questions, we can manage them flexibly, depending on the situation, but let's try to get answers to each question. Let's make sure we respect the time limits of the meeting, so that it is not too long, because the parents lose their patience and interest. For each question, let's give about 10 minutes. The introductory and final sections should also last 10-10 minutes, so that the conversation lasts a maximum of an hour and a half.

Data analysis and interpretation

Because we ask open-ended questions, participants decide for themselves how to answer, given the opportunity to change their minds after listening to others. The members of the group can influence each other, their opinions can change, new aspects can appear during the conversation. Participants learn from each other and these new things shape their attitudes, opinions. In order for the moderator to keep the framework, it is recommended to follow the outline of the interview, which includes the semi-structured questions, the planned start and end tasks. Immediately after the interview, the moderator and his assistant (observer) will have to make a brief assessment and record the results. The assessment must also include the attitudes of the participants, the involvement of the group members, respectively the motivation for dialogue and participation in the group. The analysis will be provided by the answers given to the established questions, respectively the evaluation made by the moderator and assistant.

Drawing up the report

Issues on which the report should be based: the report should focus on the answers given to the questions, but should also include the issues raised during the discussion, which are not closely related to the questions. Should be short and precise, should pursue the proposed objective, namely to obtain qualitative information about the use of the test module, information that must be incorporated in the process of developing an easy-to-use online support tool.

Tools to use:
- ✓ List of participants
- ✓ interview structure
- ✓ report template.

Online questionnaire for the evaluation of the test module

Dear Parents,

we invite you to answer the following questions, based on your experiences related to word recognition module testing!
How many lessons did you complete?
☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 ☐8

What difficulties did you encounter regarding the descriptions, instructions?

_____

_____

_____

How do you rate the usefulness of videos?

_____

_____

_____

How did you manage to make the tools, the auxiliary materials?

_____

_____

_____

How much did you manage to involve the child in the process?

_____

_____

_____

How do you appreciate the recommended ideas for practice?

_____

_____

Do you ask for online practice ideas?

☐Yes ☐No ☐I don't know

Did you encounter technical difficulties? If so, please detail what they consisted of!

_____

_____

If you have other comments, please share them here!

_____

_____

Thank you for taking the time to complete this questionnaire and the fact that through it you have contributed to the improvement of the Edumodul interface, so that it is more useful and more accessible to both parents and specialists.

Bibliography

http://www.anyanyelv-pedagogia.hu/cikkek.php?id=588

https://www.jisc.ac.uk/guides/transforming-assessment-and-feedback/assessment-design

https://blendingforengagement.wordpress.com/2017/08/28/designing-your-blended-learning-course/

https://educationaltechnology.net/the-addie-model-instructional-design/

http://www.nwlink.com/~donclark/hrd/isd/types_of_evaluations.html

https://blog.continu.co/instructional-design-evaluation/

https://core.ac.uk/download/pdf/80495718.pdf http://www.click4it.org/index.php/E-Learning_Repository https://resourced.prometheanworld.com/types-of-summative-formative-assessment/

https://edtechbooks.org/id/instructional_design_evaluation

https://www.sciencedirect.com/science/article/pii/B9780080448947011970

https://www.mfinante.gov.ro/static/10/Mfp/evaluare/Ghid_pt_elab_ToR1.pdf

https://www.unodc.org/documents/evaluation/Guidelines/Evaluation_criteria_definitions_and_sample_questions.pdf

https://resourced.prometheanworld.com/types-of-summative-formative-assessment/

https://learningsolutionsmag.com/articles/2535/each-phase-of-addie-encompasses-core-tasks-for-ids

https://www.dsrf.org/programs-&-resources/our-resources/

https://blendingforengagement.wordpress.com/2017/10/01/developing-a-blended-learning-course/

https://www.youtube.com/watch?v=d2aqG9PzXB0

https://www.youtube.com/watch?v=VzYDNWhQWYA

http://www.skagit.com/~donclark/hrd/isd/list_activity.html

http://www.skagit.com/~donclark/hrd/sat4.html

https://www.frontiersin.org/articles/10.3389/fpubh.2018.00113/full

https://www.youtube.com/watch?v=unKKz2Fe5hc

https://www.education.vic.gov.au/parents/learning/Pages/literacy-birth-year-2.aspx

https://blendingforengagement.wordpress.com/2017/06/11/blended-learning-design-the-daddie-model/

https://blendingforengagement.wordpress.com/2016/09/25/shifting-the-paradigm-making-digital-learning-the-norm/ https://www.ispringsolutions.com/blog/training-need-assessment-analysis

https://www.ispringsolutions.com/blog/how-to-create-online-course

Contact: www.rejtettkincsek.hu/www.edumodul.com,info@rejtettkincsek.hu