**Dr. Jakabné Zelei Erzsébet pedagogical psychologist: Talent Identification**

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Our school has a long history and a long tradition of nurturing talents. I was honored to have the opportunity to join my colleagues in the TaMPed project and to contribute to their successful talent management process through my work in talent identification.

After considering the professional aspects, I selected my assessment tools for the talent identification, informed the class teachers about the purpose of the survey, asked for their cooperation and agreed on the details of the implementation.

I then asked the former class teachers to complete the Williams scale.

I also fulfilled my obligation to send out and collect the returned parental consent forms.

When I was done with all this, the students completed the questionnaires during class teacher lessons. After taking the questionnaires in groups, I took the tests with the students individually.

After evaluating the questionnaires and tests, I recorded the results in an Excel spreadsheet.

Once everything was done, the results were discussed and action plans were made with the class teacher, parents and students.

Since then, I have been in constant contact with teachers who are interested and ask for help, I consult them and I am at their disposal for professional questions.

Since the handling of personal data is a huge responsibility, I have also placed great emphasis on data protection.

In compliance with GDPR, I first obtained parental consent forms. I only filled out the questionnaires and took the tests with children who had parental consent forms.

I recorded the results in an Excel spreadsheet, using codes instead of children's names.

I only provided decoding facilities for class teachers and deputy class teachers.

I shared only their own child's results with interested parents in an individual consultation format.

I discussed each child's results with them in a further individual meeting.

Since all products are considered sensitive data, I stored them in a locked cabinet.

I acted in accordance with psychologist ethics and confidentiality rules during the study.

I consider it essential for teachers to be aware not only of their students' cognitive abilities but also of their mental state. Therefore, I specifically designed testing instruments that not only identified gifted students, but also pointed to the mental state of individual students as well as the general atmosphere of the class as a whole.

Taking these aspects into consideration, I chose the Éva Szabó School Attachment Questionnaire, the Contemporary Identification Questionnaire in the field of Creativity, the Williams Scale for former classroom teachers, the Éva Gyarmathy Interest Map, the MAWGYI-R Intelligence Test, the RAVEN Progressive Matrix Nonverbal Intelligence Test.

The latter two were won by our school in the TaMPeD competition.

**I. Éva Szabó School Attachment Questionnaire**

School is the social space in which students nowadays spend most of their time, in addition to the home provided by their families. This is why the way students feel at school is not always the same, and why the role of school professionals in shaping young people's attitudes and behavior has become crucial in addition to the educational tasks they already have.

A growing body of research has shown that students' success at school is not only a function of grades and careers, but also of how well they feel at school, how successful they are in building relationships and how attached they are to their school.

International and then Hungarian research has also confirmed that school attachment is positively correlated with a number of important variables. For example, good self-esteem, lower levels of emotional distress, motivation to learn, better academic performance, activity in school, good academic performance, successful completion of school, and further education.

For all these reasons, I thought it was important to find out how much our students like to go to school, and I chose the School Attachment Questionnaire by Éva Szabó.

The questionnaire consists of 20 questions; which students could answer in four different ways.

* 1 – it is not typical of me at all
* 2 – it is mostly not typical of me
* 3 – it is mostly typical of me
* 4 – it is absolutely typical of me

The answers were grouped according to 5 factors, i.e. they provided 5 types of information about the student:

* their attitude to school in general
* about his/her relationship with peers
* his/her relationship with teachers
* his/her interest in the subjects
* his/her attitude towards the school environment.

I entered the results into an Excel spreadsheet, where I displayed the average scores of the class at the bottom of the columns, the highest and lowest scores, and the scores of the individual children in the rows.

I repeated the study in the same class in the following school year, so that I could compare the results in the Excel spreadsheet by factor, by overall score, by individual and by class. From the differences, direction and magnitude of changes that immediately appeared, I could draw conclusions for the individual and the whole class.

With the class teachers, I reviewed the individual and overall results for each child, and evaluated and analyzed the differences between the two years. We also analyzed the results of the whole class. The low attachment indicators prompted us to do more in-depth exploratory work to find the causes and the necessary interventions to improve the situation.

**II. Peer identification of talent in the field of creativity**

In the process of talent identification, it is also worth taking into account children's perceptionsof each other, because they can see each other's behavior in situations that teachers may not.

Often, in spontaneously organized, leisure situations, they are more courageous and free to show what they can do than in class. That is why I thought it would be important to use this questionnaire.

In this questionnaire, the children were asked to write down the names of the three classmates they thought would come up with the most unusual, unique or unique names for a puppy they had found. Who they think would design the most unique, most unusual collar. Who would teach the puppy the most tricks, who would write the most stories about it.

**Williams Scale III**

When screening the students in the fifth grade, I considered it essential to seek the opinion of the teachers who had monitored the students' progress every day for four years and who therefore presumably knew it best.

To this end, I used the Williams scale, which they completed to describe their former students along the items of fluency, flexibility, imagination, complexity and risk-taking, thus contributing to the process of identifying and nurturing their talents.

I also recorded the results of the latter two questionnaires in an Excel spreadsheet so that I could identify differences and similarities between them. This method offers a great opportunity to identify so-called hidden or underachieving talents.

**IV. Map of Interest (Éva Gyarmathy)**

I measured the students' interest with the questionnaire "Map of Interest" by Eva Gyarmathy.

I consider the exploration of interest necessary not only for the purpose of talent identification, but also later on during the talent management process. It is important to monitor it, because it allows us to plan the talent management process in a more targeted way. Interest is a good indicator of ability structure, it can be a starting point for development, and it can indicate areas of stronger development and areas for improvement.

This questionnaire is also very useful because, in addition to revealing interests, it also points to the learning style that will make the student's learning effective.

1. The learning method is beneficial for those students who prefer **language activities,** verbal learning, explanations, reading texts, note-taking, story-telling.

2. For students who indicated logical-mathematical activities as their preferred activity, interpreting material, finding connections, organizing, grouping helps their learning.

3. For students with a **spatial-visual interest**, viewing pictures, films, using and making maps, using diagrams, graphs, i.e. visualization is recommended.

4. For those who prefer **physical-movement** activities, it is advisable to act out the material to be recorded, to learn by walking, i.e. to link the learning to movement.

5. For those with a **musical** interest, auditory learning is recommended, i.e. learning through songs, speaking aloud, reading aloud, listening to the material repeatedly.

6. Students who prefer **peer-leadership** (interpersonal) activities should learn in a study group or by teaching the material to others, discussing a topic with their teacher or mentor.

7. Students who indicated in the questionnaire that they are mainly interested in activities that correspond to their **internal** (intrapersonal) interests, they value independent learning in a quiet, calm place. Their learning is more effective when they can do research or adapt the learning material to their own needs.

When evaluating, it is important to look at how strong their preferred areas of interest are. It is also important to know which areas are rejected, because these in turn need to be developed so that they do not become barriers to excellence.

Particular attention should be paid to whether there are inconsistencies in the same activity. For example, if there are high scores in both the positive and negative directions, i.e. there is a contradiction in interest, this may be due to a partial lack of ability or a bad experience, a negative experience, which may discourage interest.

**V. MAWGYI-R intelligence test**

This test, although it quantifies a child's **IQ** (intelligence quotient), **VQ** (verbal quotient), **PQ** (practical quotient), is not primarily used to determine these, but to build up an ability profile. The results of the ability profile can be used to better target and plan the child's giftedness, because it gives a good indication of the student's strengths and weaknesses in comparison to himself. This means as well as identifying his or her areas of talent, it is also a good way of mapping out the areas for development.

The test gives a sub-score in 10 areas, which can be used to build up an ability profile:

- general knowledge,

- general understanding,

- numerical reasoning,

- vocabulary,

- short-term memory,

- main concept retrieval,

- spatial reasoning,

- understanding cause and effect,

- part-whole perception,

- monotony tolerance.

**VI. RAVEN Progressive Matrix**

This is a non-verbal test that measures visual-perceptual skills, logical thinking.

The test consists of 60 items, geometric figures, and is therefore culture- and language-independent and can be used anywhere in the world. It is therefore one of the most widely used procedures in talent assessment. It can be taken individually or in groups.

I believe in the principle that one test is not a test, so I used two intelligence tests. So, if the results of the MAWGYI-R intelligence test and the results of the RAVEN Progressive Matrix coincided, I could take the measured intellect for granted, ruling out false results.

**Kiss Emőke: Talent Identification**

The Deák Ferenc Elementary School of the University of Pécs is an important place for talent education, making use of its resources. Thanks to the joint work of the well-prepared teaching staff and the professionals who support the teachers, talent identification plays a key role in the institution.

**The primary objective** is to test the children who participate in the project. In total, 63 children were tested, from the following classes: 5.a. - 24, 5.b. - 23, 6.b. - 3, 7.a. - 10, 7.b. - 3.

We also took questionnaires from the teachers teaching the children and from the parents of the children.

Children

* cognitive profile test
* interest map
* motivation questionnaire

Teachers

* questionnaire about problems that may be signs of giftedness

Parents

* questionnaire about observation criteria for identifying talents in areas of interest

*The following criteria were taken into account in the selection of the tests:*

* they should be accessible to us - they should not require a major financial investment
* computer-based completion - most of the tests were completed by the children on the computer. This was due to financial considerations and ease of processing. The cognitive profile and interest map collects children's results in a database, so this is an advantage for processing. Also, the interest map provides a graphical representation of the personalized structure of interest areas.
* temporal factors - We had to choose tests that could be taken within a well-defined time frame.
* group administration - given the large sample size (63 children), the use of tests that could be taken in groups was almost unavoidable.
* choosing tests appropriate to the age group.
* children should be given interesting and novel tasks, as this is also a very important aspect for persistent task completion.
* use tests that are already in use and tried and tested.

A **secondary aim** of the talent identification assessment is to provide feedback to children, parents and teachers after the test administration.

Feedback is the cornerstone of talent identification. Several questions arise in this context.

* language of feedback - The use of jargon is excluded, as not everyone understands it. You may lose interest after reading a few lines.
* Do not write lengthy remarks.
* Do not use words that are overly condemnatory, as this may trigger negative feelings in the parent and the child may suffer as a result.

Providing feedback is not an easy task, because of the large sample size and the variety of tests and results. We have tried to make our sentences as clear as possible. A **tertiary goal** of our team is to apply these results to new talent management programs and courses in addition to the existing ones. We also want to place a strong emphasis on EQ development in group sessions.

**Tests**

One of the tests chosen was the Cognitive Profile Test, which reveals the unique patterns and characteristics of an individual's abilities. The test consists of tasks around cognitive ability, information processing and academic skills. The emergence of strengths and areas for development will greatly assist teachers in their further work with children. This process provides a guide for the preparation of teaching and development plans for children who are different from the average. The Hungarian adaptation of the cognitive profile test is by Éva Gyarmathy. The test was completed by children on a computer (<https://kognitivprofil.hu/> )

The following tasks were chosen:

* figures
* visual memory
* observation time
* word interpretation
* image recognition
* "go no go"

In addition to the cognitive profile test, we also took an interest map with the children. This test shows the child's areas of interest, the domains in which they are most engaged. The seven domains of the interest map, identified by Gardner, correspond to the domains of language; logical-mathematical; social; self-reflective; bodily-motoric; musical; spatial-visual. This test was also designed by Éva Gyarmathy, who also chose the online computer version for the children, as they were able to complete it in a short time after the cognitive profile test. The test is available at <http://erdeklodesterkepe.tehetseg.hu/> .

The motivation questionnaire describes the goals and factors that are important to children in nine areas. The nine areas are: competition, power, praise, feedback, reward, peer caring, peer dependence, effort, task orientation.

The child is asked to indicate in 36 statements how much each sentence is specific to him or her. They can rate the sentences on a scale of 1 to 5. Each area has four statements and is scored according to these statements (<https://www.tehetsegkapu.hu/tehetsegazonositoKerdoivek> ).

The questionnaire *"Problems that may be signs of giftedness"* was completed by both the children's current and previous class teachers. Across 11 pairs of traits, teachers write one name at a time on the questionnaire. These show how teachers feel about their students and can also help identify underachieving children. When the results are summarized, each person surveyed has a socially positive and negative score. (This questionnaire is part of the selection system of the Kőbánya Talent Support Strategy.)

The parents of the children were asked to fill in a questionnaire entitled "*Observational criteria for identifying talent in terms of interest directions".* An online version of this questionnaire was sent to parents' email addresses. The test measures students' interests in eight ability areas, and each statement can be rated on a scale of 1 to 5, depending on how true it is for the child (<https://www.tehetsegkapu.hu/tehetsegazonositoKerdoivek> )

At the end of the talent assessment, the most important thing is to analyze the results achieved by each individual. This is the best way to identify the child's strengths and areas for development.

**Fóti Nóra: English language storytelling project**

I designed the sessions for the talent group with a storytelling focus. The students were from the year 7 (13 year olds). The main reason for choosing this age group was, that they were the children who were already confident in using the past tense in English, which was an essential grammatical requirement for the creative storytelling project. We started working with the group in October 2020 for eight months.

Below you can find a description of the whole project:

In the first two months, the sessions introduced the participants to different forms of storytelling. We explored different forms of storytelling (fairy tale, newspaper story, TV news, joke, etc.). In these sessions, we worked on and created stories using a variety of methods:

* We analyzed a series of pictures or guessed from one picture when, why, how the picture was taken, who the characters were, etc.
* Similar to the previous one, and perhaps one of the most popular ways of working out a story was when students made up a story based on noises (see resources).
* They also created a story, based on an opening sentence and a final sentence.
* We played a game where the group was divided into two smaller teams. One group stayed in the classroom while the other group left the room or came back to the room one by one. I told the first player a short story, which he passed on to the next player who entered the room. Since they could not pass on the original story word for word, it was constantly changed and simplified. The most absurd stories came out at the end of the game.
* We also used storycubes (see resources). A set contains nine different cubes, with six different pictures on six sides. In groups, they rolled each dice and had to make up a story, based on the nine pictures.

These exercises were completed in pairs, in groups of up to 3, or in front-of -class -teaching.

To make the sessions more interesting, at the beginning of the lesson each student threw one of the "emotion dice". This dice contained six different emotions: happy, sad, angry, scared, surprised and tired. The emotion that the students threw was the emotion they had to respond to the lesson with, throughout the whole session.

Next, we discussed the characters, settings and main story lines (warfare, love, treasure hunting, etc.) of the students' favorite stories.

In the second phase (next two months), we chose the characters of a future common story and the setting for the story. For this, we used a wheel of fortune (see resources). Each student came up with a name and a location. The names were entered in the wheel of fortune, together with the occupation associated with the name. By spinning it four times, we got the four main characters of the story: Joe (the hunter), Hawkins (the doctor), David (the drug dealer) and Bell (the dentist). We did the same with the location. The students wrote a scene, which we entered into the wheel of fortune and spun it. The wheel stopped at the "park" location, so that became the starting point for the first episode.

Now that we had the characters and the starting location, the students worked in pairs to write the first episode of the story. The pairs were randomly selected using an online group generator. As the pairs worked on their essays, I kept reading their writing and correcting their work where necessary. In most cases, I had to help with grammatical structures.

When each pair had finished, they read out the episode they had written. As a next step we voted on which pair's opening episode we liked best. In subsequent lessons, the children wrote the second, third and final, fourth episodes in pairs, as described above. Special emphasis was placed on having different pupils pair up each time, to eliminate the possibility of always having the most skillful or same-sex pairs or best friends working together.

The third step (another two months) was to work on the story that had already been written in groups. The groups were now formed by the children themselves. The pupils formulated texts and dialogues in order to give their stories a final shape in the fourth phase. Unfortunately, this phase of the project was now distance learning due to the closure of the project in Spring 2021 due to the Corona virus, so students had to work online within their groups and send in their dialogue for each episode, which was then corrected and returned to them.

In the last sessions after the lockdown, students planned the scenes and learned the dialogues. Unfortunately, the three-month closure put a stamp on the work. The recordings were made at the last minute, almost in the last week of classes. Unfortunately, this meant that, contrary to the plans, we were unable to conjure up the right sets, locations and costumes for the films, which were therefore less spectacular and a little short.

Despite this, the children enjoyed working together and tried to find the best way to make the films, given the circumstances. The films were also made in groups. The pupils themselves were the actors, directors and cameramen. Three films were made, two of them were feature films and one was a newsreel. All three films were based on a story that had been conceived and written during the school year, but the end result was different.

In addition to the films, the story was also the subject of a newspaper article, which was finalised with the help of a newspaper article creation site on the Internet (see resources).



We concluded our work together by viewing and evaluating the films. The students were then presented with their prizes: chocolate, a "Black Stories" card game (see Resources) and certificates.

In my experience, the students loved the project and benefited a lot. According to them, the most enjoyable thing was that they got to work a lot in pairs and groups. Not only because of the peer bonding that comes with their age, but also because they learned a lot from each other: creative solutions, new words, grammatical structures. They all took an active part in the eight months of work and had the opportunity not only to show off their linguistic talents but also to develop their skills in other areas (creative writing, video editing, etc.).

**Resources:**

Black stories: <https://www.geekyhobbies.com/black-stories-card-game-review-and-rules/> (seen 16/09/2020)

Group maker: <https://www.randomlists.com/team-generator> (seen 16/09/2020)

Random Wheel : [www.wheeldecide.com](http://www.wheeldecide.com) (seen 16/09/2020)

Storycubes <https://www.storycubes.com/en/> (seen 16/09/2020)

A sound based story: <https://www.youtube.com/watch?v=D_cnxFGaBy4&t=1s>

(seen 16/09/2020)

Newspaper generator: <https://www.101planners.com/borders/newspaper-generator/>

(seen 16/09/2020)

**Tóth Ildikó: SpeedEnglish Kids – managing talent course for ESL students**

**Starter Level**

The syllabus is for students in Grade 5 according to the Hungarian education system who are at the beginning of their first foreign language studies. The topics were chosen for students coming from three different classes. The selection was made by their class teacher and former English language teacher who took not only their language skills but also motivation into consideration.

The length of the course: 35 weeks, 90 minutes per week

Main topic is based on the graded reader:

H.Q. Mitchell Lisa Goes to London

MM Publications

Starter Level

**Objectives**

The course is aimed at developing English language knowledge, building learners’ confidence in speaking, making them able to communicate their ideas fluently and accurately at their language level.

Activities enhance attaining the goals as follows:

* vocabulary extension – in case of a group of students with different level of language and background knowledge it’s important to set up a common basic vocabulary which all of them are able to use for communication during the classes. The aim of the first sessions is to provide the students with that. that.   
  We must choose words and expressions which can be a challenge for those with a bit higher level of knowledge and also doesn’t put too heavy burden on those who have smaller vocabulary. The topics enable modelling real-life situations, practising dialogues connected to them.
* acquisition of grammatical structures, evolving their automatical use – depending on the number of lessons in the school curriculum students have different frequency of opportunities for oral communication. They speak in very short sentences, usually respond to questions with one word. At this level the goal is to make them acquire how to build and expand a sentence, how to make their speech more interesting.
* reducing language inhibition - activities based on common vocabulary acquired during the sessions also make those students more confident who are more inhibited, afraid of failure, and may feel disadvantaged by those who spend or have already spent some time in an environment that promotes the acquisition of a foreign language. Success is what motivates students who are more difficult to speak to get involved in communication.
* expanding knowledge of the country - the topic of the graded reader on which the theme of the syllabus is based provides an opportunity not only to read and process the story, but also to expand on it. Any country-related information related to the capital of the target language country can be shared with the pupils.   
  Learning about British culture can strengthen the pupils' connection to the English language, stimulate their interest and motivate them to search for further information to study and understand the traditions and behaviour of British people.
* developing digital literacy: online education has forced all schools to create their own common platform, creating online classrooms. The organisation of a classroom group is also facilitated by creating the possibility of online communication in addition to face-to-face meetings. It strengthens the community, we can material of the sessions can be shared not only by the teacher but also by the learners, it is also an interface for collaborative work. During the sessions, learners are introduced to applications that support independent learning not only in foreign languages but also in other subjects. Examples of these are given in the themes of the course.
* developing social competence - acting out situations and dialogues provides an opportunity to give feedback on the behaviour of students in a given situation, on the correct use of words. Drama pedagogy can be used to promote acceptance of each other, the interests of the group and the learning of the expected behaviour in each situation.
* independent learning: in the course of the story, students worked in groups on guided research using brochures and websites. This also introduces them to the methodology of how to learn independently, how to find the relevant information they need. The matching tasks and puzzles help to develop logical and critical thinking.

**Themes**

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| **Period 1** | Ráhangoló foglalkozás –   * introduction * team building drama games * language games | Ideas from  *Julie Meighan:Drama Start*  *Jane Revell: Energising your classroom* |
| Let’s be a Team!   * choosing name for the course * designing a logo * setting up online classroom * test on knowledge and vocabulary | [Nyelvi játékok](https://www.eslcafe.com/resources/lesson-plans/ice-breakers)    [A Ghent Egyetem word testje szókincs  felmérésére](http://vocabulary.ugent.be/) |
| How do you feel?   * vocabulary extension * tasks for practice * word cloud for new words | [Bomb Squad Game](https://www.flippity.net/sm.php?k=14Zh3Q4DTbsHdv04UmayhjQCeYceAxP7PcH_99iHUr8Q)  [Grouping](https://www.flippity.net/ma.php?k=1yKIfuHlSCEoE6cevTwAz7Rwauc6ydlNfMqE8Exmw_V4)  The exercises are available at <https://flippity.net/>. The website is an excellent resource for vocabulary development and practice exercises, both online and in printable form.  <https://wordart.com/> |
| Grammatical structures   * playfully reviewing verb tenses and basic grammatical structures in the reading | [Present Continuous](https://youtu.be/XAFS43NKFag)    *Joanna Zaranška: Grammar Rhymes* |

In the first phase, we need to put a lot of emphasis on building the group into a community, creating a good atmosphere and motivation. The use of drama pedagogical tools is a regular feature of the sessions and their motivational effect is undeniable. It is a character-building and socialising activity, develops communication and reduces language barriers. The games introduced at this stage are a recurrent element of the sessions.

A personal identity: a common name, a logo, a motto, a folder with a specialised logo, all express a sense of belonging to a team, and strengthen the link between the pupils and each other and with the work of the specialised group.

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| **Period  2** | Before reading   * Who, where, why? * Pre-reading exercises, arousing interest | In the session, I used the illustration on the cover of the book to stimulate interest. We were looking for the answer to how Lisa came to be in London. |
| While Reading | The vocabulary of the book and the additional video material used goes beyond the curriculum requirements. We have expanded the vocabulary of the students through written and online exercises. We have learnt phrases and expressions for situations related to the locations in the book. |
| Vocabulary extension |
| Reading skill | The work on the book was first done in frontal work and then in small groups. Each chapter was worked through in separate sessions. Reading comprehension exercises were used to help the pupils understand the text, as well as exercises to check their understanding. |
| Speaking skill | The pupils gave a brief description of the places related to the book based on what they had read. Short role-plays were devised and acted out together for each location. |
| Listening skill | Students were given audio material related to the topic to listen to at home, with related exercises. |
| After reading  Challenge in the online classroom | Pupils worked in pairs on tasks based on the content of theprevious sessions. e.g.  [Puzzle](https://www.jigsawplanet.com/?rc=play&pid=3d94215b10c1)  [Scavenger Hunt](https://www.flippity.net/sh.php?k=1FiprJKDJL6u4Ao1EYlA00RqXFFN-q21_h30CwIEVxbI)  [Group the words](https://www.flippity.net/sh.php?k=1FiprJKDJL6u4Ao1EYlA00RqXFFN-q21_h30CwIEVxbI) |

The second phase took more time than had been planned as the students were interested in the topic we got to know the sights in more detail. The amount of time spent on Period 2 depends on the interest of the group and how motivated they are by the topic. The focus should be on activities that the children enjoy doing, whether it is research, writing a dialogue or even setting up tasks. The knowledge gained from the activities they are into will be the most memorable.

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| **3. szakasz** | Creating interactive presentation wit the content as follows   * About Myself * Me and my School * My City | The vocabulary related to the topics of the final product  words and phrases related to the themes of our book, based on the reading previously covered. We have learnt to use grammatical structures previously unknown to the topic of the introduction at a lexical level.  We extended their grammatical knowledge by using the past tense.  For the topics, we worked first with a lighter text and then with the original English text.  Using the grammatical structures they had learnt, the pupils formulated a coherent introductory text about themselves, which was then audio-recorded.  We learned about the applications needed to create the final product.  <https://www.thinglink.com/o/creator>  <https://bookcreator.com/>  These are English language applications, which helped us to develop our vocabulary for using the internet and online tools. |
| **Period 4** | We Are Poets –   * a setting of Roger McGough's poem The Sound Collector * writing poetry about the sounds of the city | We worked on Roger McGough's poem The Sound Collector, and the children solved comprehension tasks related to the content.  The poem was dramatised and performed by the children in groups, concentrating on stress and pronunciation of the imitative words.  Using the literary work, the children wrote a poem about the sounds of the city.  The sessions were complemented by listening to and interpreting short poems appropriate to the age group of the pupils. |
| Closing session   * evaluation | Both teacher and pupils reflected on their development during the sessions. |

**Ott Gábor: A summary of the activities carried out so far within the framework of the TaMPeD robotics project**

*The aim of the sessions:*

* to introduce students to the basics of programming and 3D modelling
* to acquire user-level skills in the software listed below
* to link and use the systems learnt, developing project-based thinking
* to learn about the benefits of goal-oriented thinking
* develop the ability to optimize design and production processes
* detect errors, correct errors, modify designs

*Methods used in the sessions:*

* individual project-based activities
* online collaboration
* online project work / online collaborative project work
* playful use of tools
* individual and group competition

*Expected outcomes:*

* programming and modelling independently using the most popular development tools
* use of tools, development of motoric skills
* development of creative and logical thinking.
* Learning project-based and product development methods

identifying links between ICT areas, using them at skill level

* opinion forming, reflection, self-reflection

*ICT tools used for development:*

* computer, tablet, mobile phone
* LEGO Mindstorms EV3 Educational robot
* DJI Tello programmable drone
* Craftbot Plus 3D printer

*Coding software:*

* Scratch
* Timber Sketchup
* Adobe TinkerCad
* Craftware Slicer
* Tello Edu app
* Microsoft Makecode
* LEGO Mindstorms EDU

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| *Number* | *topic* | *activity* |
| 1. | Introduction | Administrative tasks and accident prevention. Discussing the tasks of the talent workshop, group formation. Familiarization with the tools used in the session. |
| 2. | Basics of programming | How, what and with what do we program? Introduction to development systems. Classification of development systems by function and target group. Introduction to instructions, mathematical functions through programming interfaces (Scratch, Makecode). Algorithmization, program design. Programming structures, example programs. Creating simple programs, debugging, debugging. Program testing, optimization. |
| 3. | Basics of robotics | What makes a robot a robot? Introduction to the components of programmable robots - control unit, motors, sensors (Lego Mindstorms, Keyestudio - Micro:bit, DJI Tello). Robot design from different points of view. Task specific robot building. Robot programming: object detection, obstacle avoidance, pathfinding. Competition task: finding a colour-coded target within a given area (time). |
| 4. | Robotics and 3D modelling | Familiarization with three-dimensional design systems (Sketchup, Inventor). Introduction and familiarization with special hardware tools (3D printer, drawing board).  Using a Craftbot printer. Introduction to printable materials. Creating a model, converting a finished model for printing (slicing).  Moving an object made with a 3D printer using a pre-programmed robot (Lego Mindstorms with a lifting arm).  Design and manufacture of plastic components, custom - task specific - robot parts. |
| 5. | Designing of robots | Reversing the process - build a robot for a given task! Group design tasks, complex building and programming challenges. Pathfollowing solutions using different sensors. What a good robot is - stability and reliable operation. Steps of program and robot development - how to make a good tool even better? Debugging, troubleshooting, generations of hardware and software development. |
| 6. | Prototype design with a 3D printer | Learning the steps of 3D printing: designing, converting, slicing, routing, printing. Types of materials suitable for printing, their properties and applications (ABS, PLA, Nylon, PETG). Learning how to use software for printing. Operation and use of the CraftBot printer. Errors and pitfalls of 3D printing (incorrect choice of materials, insufficient preparation, incorrect settings, modeling and slicing deficiencies). Refinement of the finished model, post-processing. |
| 7. | Blockprogramming | Learning about other programming interfaces: Scratch, Makecode. The theory of block programming. Transferring the program to other programming interfaces (Javascript, Python, C++). Block programming tutorial games (Blockly, Disney Infinity). Sharing the program online. Program development, program optimization. Task: create a simple game program. |
| 8. | Programming of drones | Learn how programmable drones work. Accident prevention measures. Installing and operating DJI tello control software and firmware. Getting familiar with Droneblocks. Programming drone for complex movements. (Tello Edu) Control using drone camera. |
| 9. | Summary | Evaluation of the work we have done. An improvised exhibition of the completed models and robots. Self and peer evaluation. Robot beauty contest. |

*Activities following the sessions:*

* preparation of materials for proposal documentation, sorting and labelling of completed robots and 3D printed models.
* preparation of methodological material

*Difficulties in carrying out the session:*

Building on existing foundations, it was possible to work on the curriculum, although the conditions were not ideal:

* traditional teaching was replaced by digital teaching by the end of the year 🡪
* however, traditional teaching methods were not used to the full
* the projects originally planned were integrated into the traditional classroom teaching.

Despite the difficulties, the main points of the curriculum were addressed, the principle of *"from task to product"* was implemented through different tasks and excellent products were produced.

*Projects completed during the sessions:*

program design, game creation through a block programming interface

creating 3D models of festive events

* creating and printing 3D printable models
* building a Lego robot using a preliminary design
* building a 3D Lego Lego Lego Lego 3D printer
* creating, programming and optimizing a Lego robot of your own design
* competition of robots, drones

**Telek István: Report of the Movement Development Talent Group (MOFET)**

The group started with seven participants. All seven children are certified players of the PMFC Football Academy.

The composition of the group is five fifth-grade and two sixth-grade students.

The selection was based on the one hand on the pupils, who had been selected for the academy's talent programme, and on the other hand on written tests in mathematics and Hungarian according to the admission procedure of the PTE Deák Ferenc Practising Primary School and Secondary School. Those who fulfilled these two conditions, were admitted to the talent programme.

Subjects: **The curriculum of the training-based association type includes the following subjects:** sports physiology, training theory and methodology, sports anatomy, biomechanics and psychological and pedagogical fields related to sports.

**Guiding principles: skills can only be developed to their optimum level if they are subjected to the right adaptive stresses.**

**Quality learning = quality sport**

What we have already implemented: at the PTE ETK Sports Science Laboratory, all students have had a 3D laser body scan and their body composition has been assessed with the latest inbody machine, which is repeated every three months.

With the help of ETK physiotherapy students and the head physiotherapist, we measured the students' anthropometry and mapped areas for improvement. We have developed a development plan for each pupil, which is carried out every Friday during physical education lessons with the physiotherapists.

**By the end of the programme, I expect the group to have increased joint range of motion/reduced injuries/ high levels of muscle laxity, sport-specific coordination and conditioning skills and, last but not least, cognitive development.**

In September the group started with seven participants. Three 6th-graders and four 5th-graders.

During the second week of September, diagnostic measurements were carried out with the pupils at the ETK Sports Science and Exercise Diagnostics Centre. Our aim was twofold. The first one was to detect various deformities that occurred during football training and problems that had not yet been detected. Therefore, we put the children under a 3D laser body scanning. The second was to take a series of anthropometric measurements to identify the children's weaknesses, e.g. muscle strength, mobilisation, for which I prepared a development plan for each of them. I was assisted by physiotherapy students from the College of Health Sciences. Each of our children had 2-3 students. We also assessed their body composition with a special machine.

The sessions progressed at a very good pace, with only one or two quarantine periods to interrupt the flow.

At the beginning of December all measurements were followed by control measurements. The results show a significant progress in all segments in the light of the improvements.

Related to the results of the measurements, a new development plan was developed for each child.

The development tools we requested have arrived and have contributed to the quality of work and our improved results, for which I thank the leaders.

In the second half of the year, we continued with the improvements. Each pupil now has three development plans tocompleteat home. The exercises were set up in collaboration with the physiotherapists. The next control test will take place in mid-May at the ETK Sports Diagnostic Centre. So far, based on the load indicators, it can be concluded that this programme is largely serving the further development of the gifted children. The developmental toolbox could be further expanded to produce 360-degree coverage in the cognitive, affective and motoric areas.

**Reflection:**

In connection with the above, I would like to share two thoughts.

I could divide the criteria for identifying sporting talents in the following ways and take them into account when making the selection:

* We talk about a general motoric talent when a child learns movements remarkably quickly and efficiently and has a very colorful repertoire of movements that he or she can recall easily and use well.
* Specific motoric talent. Such a child is above average in all sports movements.
* Children who excel in a particular sport are special sport talents. For example, a slim, rabbit-like child who at first glance looks no different from others, but whose water position, centre of gravity and flexibility allow him to swim effortlessly, which shows us a very different person in the water.
* Outstanding performance of certain qualities and abilities shows trait-specific talent.

Inheritance and environment science attributes 70:30 importance to both areas in relation to sport performance. Factors influencing heredity are somatotype, or body composition, at 75 percent. Muscle fiber is 70-90 per cent due to family ancestry. Speed of movement is 65-72 percent inherited. Reaction time is inherited 86 percent, maximum muscle strength 99 percent, endurance 93 percent, and flexibility 70-90 percent. Training, socio-environment, nutrition and hydration affect 30 percent of sport performance.

Other factors that coaches and trainers cannot influence are age, gender, weather and genetics are independent of us and are the basis for performance.

However, health and motivation can be influenced to optimize physical ability. In general, talent potential can be assessed in a systematic way based on the following indicators:

1. state of health 2. optimal physique characteristics 3. level of motoric skills 4. rate of development of motoric performance 5. stability of solid motoric performance 6. level of trainability (better performance) 7. level of resilience (remains positive attitude) 8. resistance to competitive stress 9. low vulnerability 10. high motivation level 11. social factors

**What characterizes a talented athlete?**

* develops physically and mentally as a result of training,
* performs better than their peers under the same load,
* tolerates workload well, responds favorably to its increase,
* learns faster and applies what he has learned more successfully,
* applies what has been learnt effectively and economically in unexpected situations,
* tenacious, persistent, hard-working, ambitious,
* entrepreneurial, courageous, lower fear of failure.

With the development of science and technology, ways of identifying talent have changed.

**Selection forms:**

1. natural,
2. indirect,
3. success-based,
4. scientific.

Today, scientific selection is the most legitimate form of selection, although a "good eye" can identify talent by knowing the athlete's abilities and circumstances.

**The latest benefit of the programme is that I have started to use the so-called bio-banding coaching on the basis of the measurement results:**

There can be significant differences between chronological (calendar age) and biological (the body's level of development) age during human development. The biggest differences can be in the age of puberty (12-16 years), with differences of up to two or three years. The difference can be divided into accelerated and retarded children. Their pairs will be completely unequal in an age range (with a 2-4-year difference), with unrealistic results. This can result in several anomalies: - accelerated will be proclaimed as gifted too early, - retarded/late maturing will not get the chance, - accelerated will stagnate over time and not develop further - disappointment, - retarded, if persevered and allowed to develop in good hands, will outperform his peers.

So everyone gets the exercise loadsand cognitive skill building exercises according to their biological age!

**Conclusion:**

Early identification of talents, appropriate selection, pedagogical nurturing, communication and motivation, supportive action by the environment and commitment, all combine to nurture talents and helps to success. Talent = treasure Talent management = opportunity and responsibility Talent is characterized by above-average abilities in other areas of life besides sport. Above-average performance is a social and societal value. In addition to professional development, the role of a PE teacher is also to shape the personalities of the young people entrusted to him or her, so that they become useful members of society in civil life*.* In order to shape society everyone has the opportunity and therefore the responsibility to provide the necessary environment for the development of talents.