



Complex Instruction Program:
Working together towards inclusive education

The case study of the Hejökerezstúr Primary School

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Research Report

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Introduction

IV. Béla Általános Iskola is a district primary school located in the Hejőkeresztúr village in the Northeastern part of Hungary. Despite its location in a rather remote corner of the country, this school attracts the attention of scholars, education professionals, as well as public representatives. There are several reasons why the school can rightly be considered to be interesting.

First of all, the school is located in a socially and economically very disadvantaged region. According to the school principal, out of 250 pupils 73% come from socially disadvantaged backgrounds, most of the parents not having a job at all. The bad economic situation in most cases overlaps with a minor ethnicity of the pupils. Approximately 60% of students are of Romani ethnicity, most of them living in settlements and commuting daily from two neighboring villages. Despite the fact that these kind of circumstances typically lead to so called "white flight" - the process in which socio-economically stable parents, typically non-Roma, take their children away from the school and enroll them into a "less diverse" school - this does not seem to be a case of Hejőkeresztúr. Basically all children living in the village visit the local school. The School Principal works closely with the Village Mayor and together they are trying to prove to the parents that their children are "*in a good place*" and are getting high quality education.

This strategy thus presupposes that the children are really getting a high quality education. In this respect the school tries to stay true to its promises and develops children not only intellectually, but also socially. After improving its results rapidly over the past sixteen years, currently its pupils score at the level of the national average, in some years even above average, in the PISA testing measured for the purposes of international comparison (Kovácsné Nagy 2015). Moreover, the internal statistics show, that the school has a zero percentage of school drop-out or grade repetition. According to the information provided by the School Deputy, 100% of the Hejőkeresztúr pupils further their education and enroll in high schools. Some 70% of these students successfully complete their education with school leaving exams and eventually continue to universities. Successful transition to secondary education is another fact that is not to be taken for granted given the starting line of the Hejőkeresztúr pupils.

But what is a key to the Hejőkeresztúr success? Why this particular school, as opposed to many others in a similar situation, succeeds in educating children with various educational needs coming from a wide range of backgrounds? How is it possible that a school attended by so many socio-economically disadvantaged children can perform so well?

In order to understand the school's success, we have to understand its context. 16 years ago, in 2000, the school management started to look for alternative teaching methods in order to boost its pupils learning performance - at the time significantly lagging behind the national average. As the School Principal admitted, they had been quite desperate, as "the children's behavior was very bad", "they were not interested in learning at all" and generally "the situation was quite hopeless". When searching for alternative methods they came across the Complex Instruction Program (CIP) and decided to add it to the school's pedagogical repertoire. In the eyes of the Hejőkeresztúr teachers, the major share of the school's success can be ascribed to this specific instructional system.

The aim of this research report is thus fourfold. Firstly, it briefly introduces the basic principles and philosophy of the Complex Instruction Program as reviewed in the scientific literature. Secondly, it introduces an experience of the IV. Béla Általános Iskola with the implementation and alternation of the program. Third, after taking a glimpse into the pot of school processes and visiting the classroom, we also zoom out to the wider educational context and take a brief look at the position of the Complex Instruction Program in the Hungarian educational system. The possibilities of spreading CIP as a good practice to other schools are discussed. Fourth, we elaborate on the applicability of CIP for specific context of the Slovak Republic.

I. Complex Instruction Program: an answer to the "broken elevator" in the education of low-status students?

The elevator metaphor is not an unknown one. The education is often symbolically compared to a lift going upwards through the layers of socio-economical stratification. In fact, the whole idea of schooling is carefully woven around a promise of brighter futures for school attendees. However, what if the elevator suddenly got stuck and the pupils could not get any further? What if the uppermost floors were to be seen through the glass ceiling but the cabin would under no circumstances move further up? And in the worst case, what if the imagined lift would not break for all passengers evenly? What if it was just a certain group of pupils standing down there and silently watching how precisely the same lift is taking their classmates to the rooftop terrace? This fantasy is less obscure than it might seem. In reality, most of the educational systems are not as just and open as we would like them to be and enrollment to school is not in itself a guarantee for upward mobility. Several research studies have shown that factors like the low socio-economical status of children, minority background or specific learning needs affect children's capacity to acquire a high-quality education (Friedman et al. 2009, Szalai 2011). Disparities of any kind tend to reproduce themselves through educational system quite well. The challenge thus remains to repair the flaws in the educational machine so that the elevator would work for all children as evenly as possible.

What is the Complex Instruction Program?

The Complex Instruction Program (CIP) is a teaching program developed in the 1970's at the Stanford University by Elizabeth G. Cohen and Rachel Lotan. Since the time of its formulation, it has been practiced as a specific pedagogical approach in thousands of classrooms in the United States and worldwide (Cohen and Lotan 2014). It aims to create more equitable classroom atmosphere in which status differences among pupils do not play a significant role and don't hinder their learning efforts (Cohen and Lotan 1995). It also radically changes the teaching perspective - it allows for appreciation and evaluation of a variety of intelligence forms and capacities and it makes children active actors of their own learning (Cohen and Lotan 1997). This pedagogical practice is thus successful in introducing high quality education to diverse classrooms, in which social backgrounds and intellectual capacities of pupils differ substantially.

The program mainly builds on three methodological pillars: **multiple ability assignments**, **group-work** and **status mitigation** (Cohen and Lotan 1997).

a) multiple ability assignments

The children are assigned tasks that are open-ended and require different approaches and skills in order to be completed successfully. These kind of tasks offer a chance for success and recognition also to those pupils, who are for instance more creative than exact or handier than verbal - latter qualities usually appreciated in the general school system. To provide an illustration, if a child has a difficulty to remember grammar exceptions, but at the same time has a strong visual memory and likes drawing, upon completion of a task that requires creating a crossword from the problematic words, they can be appraised for completing a task successfully and they get a chance to remember the grammar in a less-conventional way.

b) group-work

Most of the assignments are dealt with in the groups of four or five pupils. The group-work changes the atmosphere in the classroom from one of a competition to one of collaboration and it also alters power relations. It is no more just the teacher who is a source of knowledge, but the pupils become sources of knowledge for each other (Cohen, Lotan and Leechor 1989). As a consequence, the pupils begin to consult their classmates, they start to ask for help, but also to offer it, the communication increases (K. Nagy 2015). In this respect, CIP builds on the premise that the more children talk about the task and the more they collaborate, the more they learn. However, in order for the interaction to be productive, the group-work has to follow certain rules. The key to success of this program lies in the division of roles in the group - only when children know exactly what their responsibility is can they cooperate effectively. In this respect CIP differs from other kinds of group-work which, as other research show, do not always guarantee success (Cohen & Lotan 2014).

c) status mitigation

The open-ended tasks and group-work are means leading to the third pillar which is status mitigation, or suppressing status differences in the classroom. CIP builds on the presupposition that in any kind of a classroom setting, there are always children with higher and lower status. In this case "status" does not refer solely to the socio-economical status of children and their families, but is rather understood as a sum of socio-economical circumstances (such as e.g. class, ethnicity, family background...), peer status (mainly given by popularity) and intellectual capacities of a particular child. Even though the status of a child could vary in time and across subjects, research data show that children are always aware of their internal ranking and it is usually high-status pupils who get the most attention from their classmates as well as from the teachers (Cohen and Lotan 2014). It was further proved that status differences impede effective learning as the low-status students are cut out from the learning process (Cohen and Lotan 2014). Thus, the principal goal of CIP is to lessen status differences and allow all children to experience success in the classroom. This

is done primarily through the inclusion of children with lower status into group-work, appreciating their specific contributions, enhancing their self-confidence and through all of this strengthening their position in the classroom.

Practical implications of the program

Moving forth from the CIP's methodology, there are three rather practical implications of the program. These are defined with respect to pupils' **intellectual abilities**, their **social competencies** and classroom **management** (Cohen and Lotan 2014).

First of all, during CIP lessons, the children are obliged to cooperate and they spend more time in interaction with their peers than they would in a regular class setting. If we accept a premise that meaningful interaction over tasks helps to acquire a deeper understanding of the things learned and it enhances intellectual capacity, following research results might be interesting. As part of the research conducted in the Hejőkeresztúr school the level of a meaningful interaction during "normal" frontal classes and CIP classes was compared. If during a frontal lesson low status pupils interacted 0,33 times and high status 0,9 times, after introducing CIP the interaction of the low status children would increase nine-fold and of high status ones six-fold. The level of interaction thus not only significantly rose in both cases, but it also became more even between the low and high status students (Kovácsné Nagy 2015). This research thus contradicts the popular argument that education in heterogeneous classrooms harms the intellectual gains of the faster learners/ "clever children". Similar results were proposed also by other studies in different contexts (see e.g. Boaler 2006)

Secondly, group-work on open ended tasks requires cooperation and communication. This interaction does not only help pupils intellectually; it also enhances their social skills. When organized effectively, group-work helps to build friendships across status groups and ethnicity and reinforces empathy (Cohen & Lotan 2014). Through the development of communicative capacity and bridging status groups, CIP enhances social and cultural capital of pupils, lack of thereof often being identified to be at the roots of school malperformance (Bourdieu 1986).

Third, forming groups and assigning clear responsibilities to pupils help the teachers to manage heterogeneous classrooms more efficiently. It is no longer just the teacher who can provide answers to the questions, these are to be found among the peers engaged in the discussion in the first place. Introduction of the Complex Instruction Program into the teaching methods can thus help the teacher to address different learning needs and at least partially compensate for the lack of auxiliary team members, such as for instance teaching assistants. Given that missing capacities are often identified by teachers as a principal barrier

to inclusive education (Gallová Kriglerová et al. 2015), this last contribution of CIP is not to be underestimated.

CIP as a tool for social inclusion

In reaction to malperformance of children with special educational needs, many European countries have committed to pursue the principles of inclusive education. One of the general definitions introduces the inclusive education as “a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education” (UNESCO). In this respect we can see an overlap in the aims of inclusive education and the Complex Instruction Program, the former one being a more general philosophy while the latter one being more of a tool which can eventually lead towards greater inclusiveness of a particular school. All in all, the Complex Instruction Program helps to build more inclusive milieu on the classrooms level and serves the teachers who have decided to follow this aim. The Complex Instruction Program co-creates an atmosphere in which pupils can become active actors of their own learning.

II. The case of Hejőkeresztúr Primary School: what if a group-work really works?

On the following pages, we introduce the case study of the IV. Béla Általános Iskola in the Hungarian village of Hejőkeresztúr. The study trip to Hejőkeresztúr, which gave rise to this report, took place in March 2016 and entailed qualitative interviews with the Policy analyst, Village Mayor, School Principal, her Deputy and teachers, focus groups with children in fourth and seventh grade and classroom observation.

How it all began? Glimpsing into the school processes.

The primary school in Hejőkeresztúr is a rural school, which has been traditionally attended by children from three surrounding villages. 73% of pupils come from socially disadvantaged backgrounds and over 60% of children belong to Romani minority (by school estimates), 10 % have special education needs and 10% live in foster care. There are currently 215 pupils and 21 teachers.

The school decided to introduce CIP - in Hungarian referred to as Komplex Instrukciós Program (KIP) - already in 2000 in order to elevate the achievements of their pupils and make the school more attractive to children and their parents. This action proved to be successful, since none of the parents (except for two families who work in a different town) decided to take their children to another school, e.g. in Miskolc. Learning to live together, learn together and make friendships also appears to be a success. According to the teachers, the ethnicity of pupils gradually stopped to be important in social interactions. This example could be particularly encouraging for schools with different ethnic or socio-economic composition, although CIP works as much in homogenous schools.

As the Village Mayor states, in order to prevent the white-flight phenomenon, the Office of the Mayor constantly works on an awareness program through which they are trying to communicate with the higher status parents. They aim to show them, that even though there are many different children in the school, all children are “in a good place” and are getting high quality education.

As the mayor adds, *"we have to prove and communicate through all the available channels that this school is successful, because all pupils are able to develop their capacities and could experience success. This is a goal towards which the school offers multiple opportunities. Therefore, the children are not leaving the school. The basic is not to lose anyone when improving the school"*.

The main actor in introducing the program and its adaptation for a specific Hungarian education context is the director – Emese K. Nagy. Dr. Nagy is the main methodologist of

the program in Hungary (currently applied in over 40 schools in Hungary). She also works at the Corvinus University of Miskolc where she teaches CIP methodology and she authors several books on the program. Gradually, after some time, all teachers became gradually interested in the program, seeing immediate and long-term results in pupils' achievements, skills, and behavior. Currently, the whole school applies CIP in every grade and on every subject including physical education.

The transferability of the CIP program into everyday learning started at a slower pace – in 2000 when Emese Nagy became the director. At that time, she had to address huge problems with children's behavior and motivation to learn:

„Sixteen years ago we realized that the children's behavior was very bad, they were not interested in learning so the situation was quite hopeless. After that, I looked for different kind of methods.” (School Principal)

Teachers getting used to CIP

At the beginning, when the school started to use CIP, the attitude of teachers towards the new program was very diverse: some 1/3 were enthusiastic, 1/3 were waiting how it will go and 1/3 of the teachers thought there was no need for the program. After a while, however, the teachers started to talk to each other and shared their views on what the program had brought in the area of behavior and learning and they had realized the progress. According to the School Principal, it took about 4 years to get all the teachers on board. 16 years after, all teachers use the CIP method and advocate for it. Some of the teachers themselves have become experts on the program and provide advice and mentoring to new teachers interested in CIP or to other schools in Hungary.

The main advantage of the program in the context of Central European schooling system is that there is no need to change the official school curricula. In Hejőkeresztúr, they only transform **every 6th lesson** from a regular frontal class to a CIP group-work class:

“You know for CIP it isn't necessary for any kind of transformation in case of curriculum at all.... you know you can use the textbooks which belong to the plan.... we don't have to change anything, we have a national curriculum, we have a local curriculum and we follow them. Maybe we have a pedagogical program, in that program we signed that we pay attention on treating children socially to work together, that is all, and we do that with CIP.” (School Principal)

As the Deputy Principal further adds, with this frequency, they are able to achieve lasting results in terms of strengthening children's intellectual, social and affective skills. These are reflected also in the regular frontal classes as the children carry their skills acquired during

CIP lessons further with them. The 6th class system was thus a compromise acquired after some experimenting with the program during which they tried to take into account the capacities of the children and the teacher alike.

Children getting used to CIP

From the point of view of the children, it also takes some time to get used to group-work. The pace of progress in the introduction of this program depends on individual teachers – some like to go slowly with introducing CIP into classes, some prefer to go very quickly ("to throw them into the water"). However, in general, it takes children around a month to get used to the process.

The same actually goes also with the teachers – first, it takes days of planning and inventing the group-work tasks, but after some time, the teachers are used to make the CIP class within an hour.

“For me, it is easier because I have been using this method already for a long time. Now the preparations take just around an hour. It is still possible that when you use new tools or materials, it takes a little longer, but structuring and planning the class generally takes up to one hour. I’m already quite fast.”
(Special Pedagogue)

To conclude, at least in the initial stages of program implementation there is some additional work to be done when planning group-work and introducing the CIP program. Introduction of CIP thus presupposes motivated collective of teachers working together with the School Principal, who are willing to work on the program in a long-term way. It also needs teachers who do not give up after not seeing results of group-work very quickly. Last but not least, CIP is not only a methodological program of teaching – it presupposes a change of paradigm of how we look on pupils, especially the most disadvantaged ones, such as the Romani pupils from poor socio-economical background very often are. CIP philosophy regards every child as capable of learning and aiming high and being intrinsically skilled – it is only the role of the teacher to guide those special skills into life. This ideological turn into how we look on pupils might thus be the most challenging one for a lot of schools.

What happens inside of the classroom? CIP in practice.

As it follows from the program methodology, there are three key aspects of the Complex Instruction Program - **open ended differentiated tasks**, **group-work** with strictly divided roles and **status mitigation**. These all have to be present during a CIP class. Throughout the years, the teachers have already come up with a stable structure for the classes. The teacher first starts with an introduction of the activities prepared for the class. This is in itself important as the children can follow the whole process and they know what to expect.

After an introduction follows a short group warm-up activity that brings the pupils mentally back to the classroom after the break. The most important part of the CIP class is the group-work, for which the majority of time is allocated. During this time, the groups work individually on their tasks and are allowed to move throughout the classroom when needed. They follow their group-roles, each of them having a specific responsibility. The greater noise is also tolerated, as the dialogue between the pupils is expected. As soon as the time for group-work is over, the reporters from each group are asked to present the group-work in front of the class. This is an important moment as presentation skills talking in front of the group requires some courage. At the end of the class, if there is still some time, the children are also assigned individual tasks. If needed, they can, however, still consult their peers. Further details on the exact structure of the class and model exercises will be presented in the following chapter. For now, we focus on the dynamics between the teachers and the children.



CIP classes can be much busier than their frontal counterparts. The interaction, however, contributes to children's learning.

The school's motto is „*Everyone is good at something*”. Following this idea, the teachers try to recognize special skills in all of their pupils and support them. The recognition of special skills creates a basis for status enhancement in the peer group. This is how the Deputy Principal describes the difference between the frontal learning and CIP learning:

“Instead of passive reception [of information], children are involved in creative activities and they work. And they love it. There is no bad child, but only that one which is bored. Therefore, we have this quote here saying that one is not as smart as all of us together.”

As was already mentioned in the previous chapters, since the school introduced CIP, the intellectual capacities of children improved significantly. This is documented by an increase in PISA score as well as by the subjective assessment of the teachers.

“From my point of view yes [they improved]. Because at any given moment of the group-work the child has to deal with the topic of the class. The group-work provides no possibility for not paying attention or getting out of the class rhythm. The topic of the class becomes the most important. Simply, the pupils don't get bored. There are always many children with good intellectual abilities who wouldn't pay attention under normal circumstances unless the class was organized according to the Complex Instruction Program.” (Special Pedagogue)



The group-work brings everyone on the board.

Addressing the status is not always an easy task, but the teachers are trying to come up with such exercises, that provide a possibility for pupils to excel in different fields. This is how one of the teachers answered our question on how she dealt with status differences in her classroom.

“Group-work provides a solution to this [problem with status differences]. Because also those children, who have very good practical skills, but they are not good students, they may still say something or suggest a good solution. We do not have to deal with this artificially, the group-work itself brings the solution. Though sometimes we fail in designing such a group-task, in which the children would have an opportunity to discuss the solution... As for instance on this Grammar lesson. Sometimes it works better on the Reading class, they have more space for discussion. So yes, it largely also depends on the subject.”
(Hungarian teacher)

As highlighted by the teacher in the preceding quote, despite there are some subject-specific differences when it comes to designing the group-tasks sometimes a teacher simply fails to engage all the pupils even though he/she would have liked to. Despite these situations exist, group-work is still considered to be a very effective tool in addressing the diverse talents of the pupils. As the teacher adds, working with CIP is generally also more interesting for the teachers.

“This method also protects teachers from burning-out, because me as a teacher, I also have to be creative and innovative. It is nice to see the children working enthusiastically in groups for themselves, for teachers, for the whole class and for the school.” (Hungarian language Teacher)

Improving relationships in and out of classroom.

Speaking about social skills, the group-work encourages pupils to work with their classmates and be more empathic and helpful towards the others and the whole class. This does not last only in the classroom, but overarches to the break time, too.

“... [the children], they are friends, all of them. Because of their products, when leaving the classroom, during break time they are friends as well. They don't harm each other, maybe without CIP, it would happen. Because of CIP, it is okay. We have two new kids here, we asked them to speak about the difference between this school and their previous school, and both of them told me that the teachers here are much nicer. And I think it means that we don't harm them verbally in any way. Maybe it is an outstanding difference, and that's why the relationship between the teacher part and children part is very harmonic. If you could see the break, you realize that all of them speak to each other, there aren't violent, all of these methods [applied at the school] influence the relationships among them.” (School Principal)

This is how the children perceive their relationships in the classroom. They were asked if they build friendship easier during the regular class or during the Complex Instruction lesson.

“On CIP lessons, we get to know each other better because we can also talk.”

“If we had just individual tasks, we would also be friends.”

“Yes, but while working in the group it goes faster.” (Focus group with 7th graders)

The children generally like the group-work. As the focus group with fourth-graders and seventh-graders revealed, they mostly like about it that they can seek advice when they are not sure about the solution.

“I really like it, because if we don’t know something, the others can help us.” (7th grader)

There are, however, also situations in which a group-work can be difficult for children. This is mainly when someone in the group wants to be too dominant, does not listen to the others or simply does not understand the task.

“It is bad when someone in the group does not understand the task and that has a bad effect on the whole group.”

“We also don’t like if someone forcibly takes over the role of the small teacher and does his job. When they don’t accept the division of roles in the group.” (Focus group with 4th graders)



Children discussing the task on the Chemistry class.

The children are, however, expected to solve the majority of these group conflicts themselves and don’t ask the teacher to intervene on every occasion. They are thus required to take the responsibility not only for their own learning but also for the cooperation in the group. Through this, they are learning to cooperate, to voice their needs, expectations and to listen

to each other. If there are situations in which they still prefer to work alone instead of in the group, the teachers usually let them do that.

R: "Do you have children who don't want to work with the others?"

T: "Yes, of course. In every grade, there are such children, 1 or 2. Usually, they are the children with greater abilities who think they can do everything on their own."

R: "So what do you do in that case?"

T: "I just let them work alone. They will see for themselves that the group-task is interesting and then they become jealous. And then they come back to the group. I don't force them." (Hungarian language teacher)

Who is in charge? Power relations in the classroom.

Another important aspect of the program implementation on the classroom level is the issue of power. The question of who is in charge in the classroom remains critical. As Cohen and Lotan (2014) observe, when teachers are in a position of central authority, the pupils are constantly aware of their presence, try to attract their attention and they formulate their answers in a way they expect to be desirable. This prevents them from focusing on the process and searching for creative solutions. Only after the teacher delegates part of their authority, the children start to focus on their own intellectual thinking, stop searching for desirable answers and a group-work becomes fully functional. This dynamic was clearly observable during the Hejökerezstúr CIP classes.

"The teacher initiated a lesson by introducing its structure, so that all the pupils could easily follow the process. At that time, she had a full attention of the children. However, after assigning tasks to the groups, the position of the teacher instantly changed. Despite the fact that she was closely observing the process, walking among the groups and eventually counseling, she was not anymore in the center of attention and children became fully immersed in their own working process, posing questions and finding answers among their peers in the group. The teacher would just occasionally stop at the working tables and check if everything was going fine and if there were no problems with solving the tasks." (Classroom observation, Chemistry class)

The supremacy of the system or the children's needs?

Taking into account the diversity of the classroom when it comes to the socio-economical status of the family and working conditions, the school follows the rule that the educational process should take place mainly within the school walls. The children are thus not assigned homework very often. In this respect, the teachers acknowledge the limits of their pupils' background and they adjust their teaching style accordingly.

"The problem is that for example in winter we are not able to give homework because when they [the pupils] go home they don't want to deal with a homework, they don't have tables, maybe just beds... that's

why it isn't an option. We give homework just voluntary. You know... and it works. Without homework, we can build their knowledge. Maybe the homework isn't so important." (Deputy Principal)

To conclude, on the classroom level the Complex Instruction Programs represents an effective teaching approach that helps to enhance the learning motivation of the children, positively affects their intellectual capacities and encourage building friendships. All of this happens across the status groups. Through using the Complex Instruction Program, the teacher can address the specific learning needs of the pupils more directly and rely also on peer learning.

A model class

(Chemistry class, Tuesdays 10.00-10.45)

Hejökerezstúr primary school uses CIP classes on every subject (including Math, Biology, Physical Education, Hungarian language, or Arts) and on approximately every 6th class. As was noted already earlier in this report, thanks to this frequency the school did not need to change the curricula, just the method of its teaching on every 6th class. Moreover, they are able to achieve lasting results in terms of pupils' study performance also with this frequency.

Model time plan for a class

One CIP class in Hejökerezstúr takes 45 minutes, which is the same amount of time as allocated for an ordinary class.

10.00 – 10.05: the teacher tells the class what is the plan for today's lesson

(e.g. *repetition of the Periodic table of elements*)

10.05 – 10.20: group-work (e.g. *6 different tasks concerning the elements*)

10.25 – 10.30: presentation of the results to other classmates

10.30 – 10.40: individual work (work on individual questions in the books)

+ presentation (voluntarily)

10.40 – 10.45: common reflection on the class, what worked, what could be done better next time, applause to individual students for e.g. helping others.



A group working on a task to create profiles of two elements.

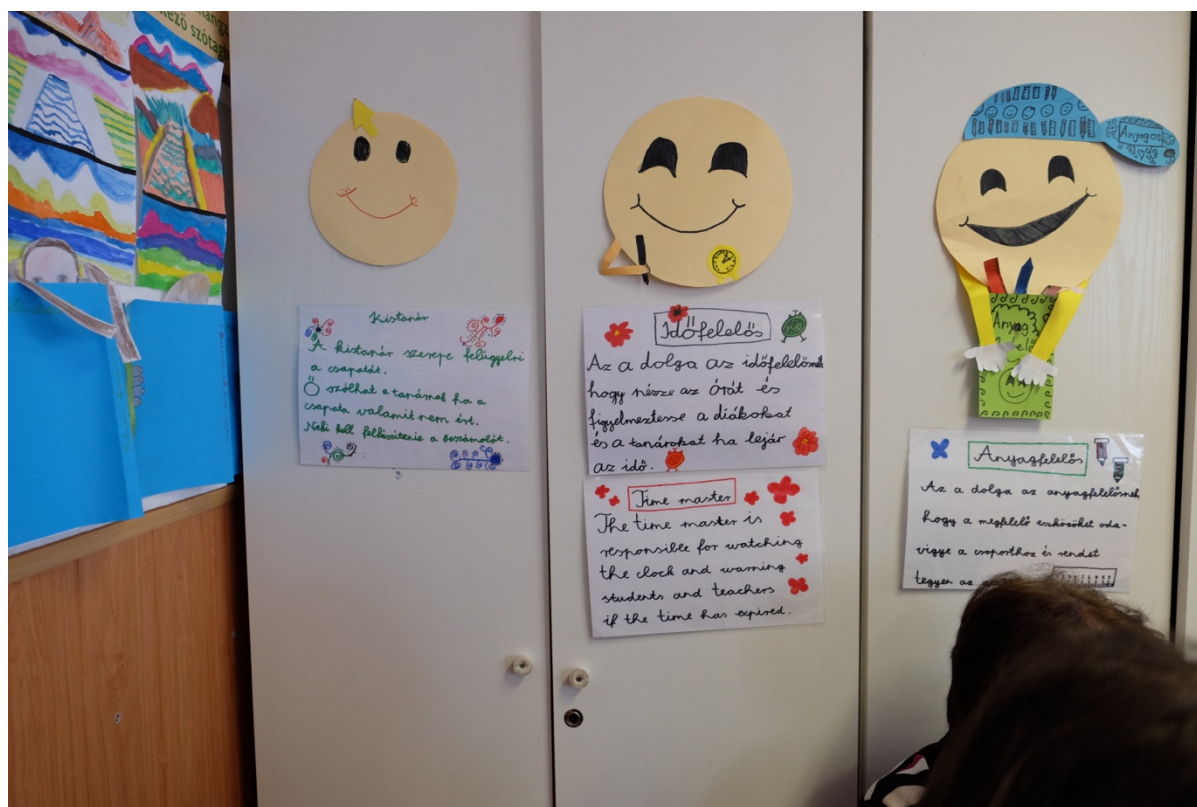
Group-roles

Children get to know the different group-roles well with the time and thus they easily understand what they are supposed to do in the group. Some teachers report it takes few weeks until they get familiar with the roles, some prefer to start with group-work at a slower pace. In each classroom, there are pictures describing each of the roles written in Hungarian and English (which itself can be made in an Arts class as a form of group-work). The model class of 24 students is divided into groups of 6x4 pupils. Groups are heterogeneous (with respect to the skills and status roles of the children). There are 5 (4) roles that are assigned to the pupils, or divided among the students themselves. The only rule is that each of the pupils in the group has to go through all of the roles at least once. Therefore, one group consisting of 4 students will work together on 4 CIP classes and then the students may change the groups.

Description of group-roles

1. *Assistant (small teacher)* – manages the whole process of the group-work and controls his/her small group. Their role is to be indeed a „small teacher“, as the group is supposed to resolve problems and come up with the result all by themselves. Only when there is a problem with which the group cannot cope, the small teacher contacts the teacher.

2. *Material master* – takes care of all the material needs of the group – decides what materials will be needed to fulfill the task (such as a textbook, paper, ruler, writing tools, calculator...) and brings it to the table. In Hejökerezstúr, children bring their tools in small baskets to keep order in their work.
3. *Time master* – a time manager, keeps track of progress and reminds the classmates how much time is left for the task. In case there are only 4 pupils in a group, time management can be conjoined with another role.
4. *Writer* – She/he writes down the result of the task (usually on a big piece of paper) and should also record the whole process of problem solving, including cases in which the group argued about something and how they decided to pursue the task.
5. *Reporter* – Presents the task and its results to the other classmates. He/she brings the materials created (e.g. crosswords on a big piece of paper or profiles of the elements) and tells everyone else what is the result of their task. In case the group created something to work on with the rest of the class (e.g. crosswords/puzzle), he/she presents it and engages the classmates in discussion.



The detailed description of the group-roles is present in every classroom.

The tasks themselves are always well defined and touch upon a greater topic (such as e.g. *elements*). They are, however, open-ended, so the group can come up with their own creative answers/result. At the same time, the task cannot be completed, if all pupils in the group do not participate.

Examples of the group tasks (as observed in the Chemistry class on elements)

- ♦ Making a puzzle with questions concerning elements, to be given to other classmates during the presentation part
- ♦ Making a Facebook profile of Magnesium (including element friends that it likes, which group it belongs to, its profile picture with its features)
- ♦ Making a profile of two elements explaining their symbols, atomic number and mass...

Note: In accord with the CIP methodology, tasks are differentiated by their difficulty and tailored to the needs of individual students. They are, however, still challenging enough, so that each student can succeed according to their current specific skills, but at the same time can have access to complicated and challenging curricula. The same applies for individual work, where the teacher distributes question on a paper to each student – a task customized to every student.



Results of group-work presented to the rest of the class by reporters

Last but not least, it is important to note, that the **assessment** of students in a CIP class is only **verbal** and always **positive**. The important aspect of a CIP class is to encourage students and praise different skills each of the student has, as an important and necessary part of the group. This directly undervalues the idea that only students that do well in Languages and Math are worthy of appreciation and gives space to applaud students for different and multiple skills they have (e.g. constructing, drawing, managing teams, being

empathic and kind, presenting). Special appreciation is given to students that helped others during the group-work at the end of the class. Therefore 5 minutes' reflection time at the end of the class is important in order to evaluate these special skills in order to, inter alia, elevate the status role of student that might be under-appreciated by their classmates, but has individual skills that should be praised for.

„After a while, they perform in quite a good way. I mean acceptable way. It is quite easy to praise them and to give positive feedback. And that's why children here feel themselves safely here. They aren't afraid of the lessons at all, they are waiting for CIP lessons because they know that something good will happen there." (School Principal)

The philosophy of CIP class is used also in ordinary classes – if a student knows how to resolve a problem in CIP class, they should be able to do so in an ordinary class as well. Also, the school **does not use derogatory comments** on their pupils and any racist/humiliating/vulgar comments by both students and teachers towards anyone else are not tolerated. The school thus creates an atmosphere that values each student and does not divide the school ethnically or socio-economically. The students, used to work with everyone in class during the CIP classes from their early age also do not tend to divide or hierarchize themselves according to ethnicity or wealth.



The teacher is always ready to help although the pupils are expected to solve the problems primarily in the group.

III. Can a good practice become a common practice? Possibilities of wider implementation of the Complex Instruction Program.

The Hungarian case clearly shows, that one of the strongest assets of the Complex Instruction Program is its transferability to different cultural and institutional contexts. This capacity to adapt the exact “know-how” of the program, while still staying firm in the program’s philosophy and main methodological principles, makes it a powerful method applicable in a wide range of schools across different educational contexts. Even though the educational achievements might vary depending on how many CIP classes the school introduces, the achievements of the Hejökerezstúr school show that the model of every sixth lesson can be functional. This is how the Hejökerezstúr principal described why and how they modified the original Stanford model:

“In the USA, they have a special national curriculum for them [CIP lessons] and I didn't think it would work in Hungary because we wanted it to match our lessons, our curriculum. They [in the USA] use project method, they work on a certain topic for 8-10 weeks, but you know, we want to follow [Hungarian] curriculum and that's why, when we formed CIP, we realized that when we organize every 6th lesson [as a CIP lesson] we still have resulted in pupils' behavior and their motivation.”

The School Principal further adds that they did not change the name of the Complex Instruction Program, they just added the name of the village in front of it, so that the distinction between the American and the Hungarian models are clear. The teachers in Hungary thus follow and acquire a certification in the Hejökerezstúr Komplex Instrukciós Program, the name of the school being the “guarantee of a Hejökerezstúr quality”.

As it follows, in terms of adaptability to different educational contexts the Complex Instruction Program is relatively low demanding when compared to other more complex programs such as e.g. project teaching. As was highlighted in the former chapters, **CIP can be applied at any school¹ without major changes in its organizational structure, funding or even teaching curricula.**

The main two preconditions for the successful adaptation of the program, as identified by the Hejökerezstúr School Principal, are participation at the CIP teachers’ training and willingness to change teaching philosophy from the one focused on achievement to the one acknowledging multiple abilities. In the upcoming lines, we elaborate on both of these points more in detail. When talking about applying CIP as a good practice in another school, we further identify one more important factor and that is the wider institutional cooperation.

¹ Given that the school does not follow a different instructional program which would be contradictory to CIP principles, such as e.g. ability grouping.

Teacher trainings

In Hungary, there are multiple options to undergo a training in the Complex Instruction Program. One of these options is secured by the NGO H2O - Hátrányos Helyzetű Oktatásáért Program. The organization was established by the Hejőkeresztúr School Principal Emese Nagy based on their experience with the program and it sets itself a goal to promote CIP altogether with other three programs currently running at the school². H2O offers a 30 hours training for schools with disadvantaged indicators that are willing to start following the program. The training draws on Hejőkeresztúr experience and includes study trips to the school.

“There is hardly any primary school that managed to turn into an advantaged school from disadvantaged school. However, our base school in Hejőkeresztúr in Borsod country is such a school. The H2O program has been organized to disseminate the educational method of our base school.” (official statement on the H2O webpage)

What seems to be crucial in successful dissemination of the program is that the training includes a follow-up mentorship. This is done by pairing one of the Hejőkeresztúr teachers with one of the new CIP schools. This practice helps teachers to adapt to the new method, to consult activities designed for the CIP lessons and to seek support in case of complications. Even though there are many materials for CIP lessons available on the H2O website, part of the mentorship lies in guiding the teachers through the preparation of their own materials - as the School Deputy says - the key is not to let them transfer but to start to think in terms of complex instruction.

Another important fact highlighted by the School Principal is that the whole school team has to take part in the training, not just one or two teachers. Adopting CIP requires a certain change of teaching perspective and that can be done only when the experience from the training is shared. Independent visionaries are usually not successful in spreading the message and schools' attempts to implement CIP in those cases typically end up with a partial or no victory.

“I teach [a course on CIP] not only at the University of Miskolc, but also in ELTE... and the problem with ELTE is, that the students there are external students and they come from different types of schools and there is only one teacher from each school. I teach them the CIP, they go home, and they don't do

² This includes the ACE Gymnastics - Logic board games Program, Dialogue between generations Program and Tabello Language Program.

anything without me... this is the problem, that 's why it is important to mentor them. That 's why it is useful to train the whole staff and to follow their work."

The School Principal also emphasizes necessity of the school's own motivation in entering the program. They trained also schools that were forced to take part in the training through the project of the Miskolc authority but did not have a good experience with that. When the teachers are not really willing to change the way they teach, then training them in CIP is not really useful. But what could motivate the other schools to get involved in the program? According to the School Principal the most powerful motivation usually lies within local problems. The pupils might not want to learn, they might not be motivated, their behavior might be problematic... these kind of reasons usually lead to school's enrollment in the training cycle. As the Hejőkeresztúr case shows, the Complex Instruction Program can help the schools to address them more efficiently.



The School Principal is showing us the supervision chart - the experienced teachers from Hejőkeresztúr supervise their colleagues in new CIP schools.

Change of the teaching perspective

The second precondition for the successful implementation of CIP, as identified by the Hejőkeresztúr School Principal, is teachers' willingness to change their educational perspective. As the Principal puts it, working with CIP requires a change in pedagogues' understanding of their role as teachers, as well as a different approach to the assessment of

their pupils' capacities and abilities. Qualities recognized in the general school system are typically performance oriented; a successful pupil is the one who can meet the criteria set by the school curriculum and perform well in tests. As opposed to this, Complex Instruction Program calls for acknowledgment of multiple talents and abilities. Such a perspective, first of all, requires teachers to create a working milieu, in which multiple talents can be manifested. Secondly, it requires teachers to recognize those talents and to provide positive feedback. Third, teachers are required to step back and provide more space for creative solutions. As it follows, in order to start working with CIP many mental shifts have to be done on the side of the teachers.

Institutional cooperation

Aside from the two preconditions of CIP transferability identified by the School Principal, our research brought up one more significant observation. In spreading Complex Instruction Program as a good practice the wider institutional cooperation plays a major role. It is not anymore just the school alone that follows the program and is open to sharing it. The involvement of the scholars and civic actors makes the program accessible for the future teachers through the university courses, for the current teachers through the training, but also for the other stakeholders as a part of the dissemination and advocacy activities. In this sense, the cooperation between the three institutions, the school, the university and the non-governmental organization is rather vital and it creates an effective platform that is successful in spreading CIP to different schools.

IV. Applicability of the Complex Instruction Program in Slovakia

There are several documents binding Slovakia to pursue inclusive education, such as the United Nations Convention on the Rights of the Child (1989) or UN Convention on the Rights of Persons with Disabilities (2008). Although the government has taken several measures to improve educational opportunities for children coming from disadvantaged backgrounds, such as introducing teaching assistants, zero grades or even complex national projects aimed at marginalized Roma communities, the selectiveness of the Slovak schooling rather grows (Gallová Kriglerová et al. 2015). This is the fact acknowledged by the NGO representatives active within the field of minority rights, external experts, and even public officials alike. Several research studies document that segregated schools, schools with segregated classes and schools grouping pupils according to their ability in high performing and low performing classes remain a common practice across the state (Friedman et al. 2009, Kancelária verejného ochrancu práv 2014, UNDP 2012).

Ability grouping is in different forms present also in the schools that otherwise show a significant progress in terms of inclusiveness in access to education or teaching approach³ (Gallová Kriglerová et al. 2015). The Slovak educational system thus remains highly selective. The latest PISA testing, which took place in 2012, showed that in Slovak educational context **the socio-economic status has the strongest impact** on the school performance of all the tested countries (Gažovičová 2013). A different mother tongue, in case of Slovakia, mainly Hungarian and Roma languages, also significantly alters pupils' capacity to achieve good results. The scores of pupils who claimed to speak a different language at home were generally lower by 97 to 123 points (out of app. 470) in respective subjects (Gažovičová 2013). In the Eastern part of the country, where the population of children coming from disadvantaged backgrounds is the highest, many schools educate those children separately. Although Roma children are generally the most affected group by the two track system, the Slovak educational system systematically fails the children with specific learning needs in general. Coming back to the elevator metaphor introduced at the beginning of this study, the Slovak educational lift is rather a broken one.

The up to date research done in the field of inclusive education in Slovakia shows, that there are multiple hindrances that need to be addressed during the transition towards inclusive schooling (Gallová Kriglerová et al. 2015, Hapalová and Gallová Kriglerová 2013). Some of them are institutional and call for a systemic reform of the educational system, some of them are financial and need increased budget for education, but some of them are also

³ The research School for Everyone: Learn to Live Together in Democracy conducted by CVEK between 2014 and 2015 shows that even the schools that were identified as good examples of inclusive attempts perform some kind of ability grouping creating elite and special need classes. More about this research on the project website <http://schoolforeveryone.org>.

psychological and require an open dialogue and quality training for the teachers. The discussion about the major educational change has been on-going for at least a couple of years by now, has however failed so far to bring significant outcomes. Despite several pilot projects introduced by the government, the teachers from a great part still lack effective instruments and supporting mechanism that would help them to address diversity in the classroom. Up to this date, the political representation has not come up with an educational proposal sufficiently addressing the needs of the children, the teachers and the wider society in terms of social inclusion.

The Hejőkeresztúr model of Complex Instruction Program has been identified as a good practice of inclusive approach on the classroom level. It entails many important aspects of inclusive education philosophy: recognition of different talents and capabilities of children, active encouragement and support of low status pupils, evaluation based on individual progress, and emphasis on cooperation instead of competition. As it follows from the expert literature, as well as from the Hejőkeresztúr case study, the Complex Instruction Program is a good fit for heterogeneous classrooms attended by children with a wide range of educational needs and coming from differentiated socio-economical backgrounds. Moreover, with respect to Slovak situation, it can help to address one of the significant inclusive educational barriers identified by the Slovak teachers: a lack of auxiliary team members (Gallová Kriglerová et al. 2015). While offering tools to manage heterogeneous classrooms more effectively - with the active involvement of the children themselves - CIP can offer one of the possible answers for Slovak teachers seeking an effective way of teaching more inclusively. Furthermore, as adaptation of the program into the school's teaching repertoire does not require any systemic change on the school level and can be fully compatible with the national curricula, the Complex Instruction Program can be transferable into the Slovak educational context.

Application of CIP at schools in no way offers a desired complex solution to the deficiencies of the Slovak educational system. It is no more than a practical tool that can be used on the classroom level. The Complex Instruction itself also bears no guarantee in terms of a changed approach to teaching, quite on the contrary, motivation and openness on the side of the teachers are important pre-requisites for successful implementation of the program. However, as the case study shows, its impacts on the inclusiveness of the classroom milieu can be significant. CIP can thus best serve those teachers, who already started to think about their classrooms in more inclusive terms, but still lack training and support in addressing the diverse needs of their pupils. Exactly to this group of teachers the program could be the most helpful.

In Slovakia, there are up to this date neither organizations specializing on CIP training, nor any school with expertise on CIP, although there are some schools that have implemented certain aspects of the program⁴. The lack of sufficient methodological support in Slovakia makes the program currently more accessible for Slovak-Hungarian schools, whose teachers can eventually undergo the training led in Hungarian and access literature and methodological materials. According to the information provided by the Hejőkeresztúr School Principal, in the past, there was a cooperation between her and the Association of Hungarian teachers in Slovakia. The Slovak-Hungarian schools could thus serve as potential mediators in the program implementation. Although a lack of formal and informal educational possibilities in the Complex Instruction undoubtedly is one of the implementation barriers, we find it important to note that thanks to the extensive number of English publications devoted to the program philosophy and methodology, the English speaking school principals and teachers should be able to access the basic information about the program.

All in all, the Complex Instruction Program is an inclusion supporting teaching program which is fully adaptable for the Slovak educational context. It can be best capitalized by the teachers working at schools with diverse classrooms who are searching for a tool to address the variety of needs of their pupils. Due to the accessibility of Hungarian methodological materials and possibility to undergo a training in Hungary, the program is currently more accessible for Slovak-Hungarian schools or teachers speaking Hungarian. Despite this fact, application of CIP can be suggested to any school willing to change their teaching perspective, become more inclusive and strengthen intellectual and social skills of all the pupils regardless of their background.

⁴ We were informed about this fact by one of the participants on the seminar we organized about CIP in Komárno. She was, however, not able to identify the schools and assess the level of program implementation.

Conclusion

In this report, we introduced the basic theoretical principles of the Complex Instruction Program and offered a glimpse into how this program is practiced in the primary school in the Hungarian village of Hejökerezstúr. We highlighted the requirements and implications of the program for the school, for the teachers and for the children. We also elaborated on the possibilities of CIP application in the other schools, and specifically in Slovak educational context.

The lack of education inclusive enough to address different needs of children remains a palpable problem in many countries. Even when the teachers are open to diversity in the classrooms, they are often lacking the instruments to address the diverse needs of their pupils and encourage the variety of their talents. This problem is yet concerning all the children, not only those coming from disadvantaged backgrounds. Although low socio-economical status of children, especially when combined with ethnic stigmatization or lack of knowledge of the language of instruction, are still among the strongest factors leading to mal-performance at school, the inclusive education paradigm calls upon overcoming the categorization and accepting multiplicity of children's talents and skills in general. Though there are hardly any children who fully fall within the standardized expectations laid by the formal educational system. In light of this philosophical shift it is no longer just the teachers of socio-economically and ethnically diverse classes who can benefit from CIP, but teachers in any educational context in general. The group-work helps to address also issues like shyness, speech difficulties or lack of popularity in the peer group - problems that are not specifically connected to the disadvantaged background. The Complex Instruction Program thus offers one of the possible tools leading to more effective and equitable learning for all.

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