Tanoda-research 2012/13

Executive summary

Introduction

By the commission of the Roma Education Fund, T-Tudok Inc. kept track of the professional pedagogical work of 19 supported tanoda (study hall) during the 2012/2013 academic year. The program's effectiveness was examined by *students' competency tests*, by *analyzing data* gathered with the help of qualitative techniques throughout each fieldtrip, and by analyzing quantifiable *indicators* (e.g. tanoda presence, year-end and midterm ratings).

Measurements took place in three distinctive time periods: input measurements in October, interim measurements in February, and output measurements in May. Since developing new measuring tools and defining new competencies would have exceeded the given time frame, we decided to use downloadable tests from the SuliNova[1] databank, which were already tested on a large sample. In addition, gathering of pupils' demographic data was done by a so called student background questionnaire prepared by us. Input and output measurements were done in five schools and four settlements, while tanoda children's classmates served as natural control groups. The surveys resulted in a cleaned database including 342 tanoda children (69 percent), while the control group had 154 members (31 percent).

Based on the research plan we conducted monitoring visits in all 19 tanodas included in the program – in five cases visits were made by the colleagues of T-Tudok. Based on their experiences the qualitative research tool package was developed, and later used by two colleagues of the Roma Education Fund in fourteen other tanodas for data gathering. Furthermore, the aims of these visits were also to give a feedback to these tanodas about their work, in order to enable them to incorporate the preliminary findings into their program. During each visit we made interviews with tanoda leaders, activity leaders, and made focus groups with parents and children alike. We also conducted – with the help of the project development leader – several activity observations. Furthermore, during the project an online platform was developed, which enabled not only data gathering in the framework of the research, but also serves as an e-diary, which could and can be used by the tanodas to track their status and progress. In addition, the developmental work resulted also in a tanoda self-assessment toolkit package.

The database created throughout the program was accompanied by other sources to create additional control groups. We used aggregated institutional level data about absence from the KIR-STAT database (2011/12 school year), and institutional level data from the National Assessment of Basic Competencies from 2011.

The data and information gathered and analyzed during the research enabled the development leader of the monitoring-program to develop a new tanoda-model, which – supplemented by the monitoring-system of the present project – could serve as an institutional best practice.

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[1] http://www.sulinovaadatbank.hu/index.php?akt_menu=3721

Main results of the qualitative inquiry

Tanodas supported by REF are basically the initiatives of local NGOs. According to tanoda managers and local staff the main reason for the establishment of these institutions are the improperly functioning local social and educational services.

The main values of the tanoda program according to the interviewees are the following: acceptance, inclusion, provision of emotional security, relaxed, playful atmosphere, targeted attention to certain children, community creation, and homely atmosphere. In parallel to this, pupils highlighted mostly the playful, casual and relaxed atmosphere. They also think positively about the fact that play and learning can not be imagined only as two separate spheres, but these two approaches can meet in a tanoda. The tanoda atmosphere can thus enhance pupils' motivation to learn and contribute to their ability to become self-regulated learners.

Tanoda students unanimously stated in every location that they are happy to attend tanodas and spend their time there. In addition, they take their siblings with them, and go back even as secondary school students. Student initiatives made towards tanodas also show a self-organizing feature. Experience of accepting one another and similar phrases were recorded during focus groups, such as homeliness, informality and empathy. The respondent tanoda pupils emphasized that while at school they usually have to cope with isolation, tanodas offer an atmosphere filled with emotional security.

The most frequently mentioned value recorded during parent focus groups was the high level of attention their children receive during activities. According to all parents, self-esteem and self-confidence of their children has significantly risen after joining tanodas.

In underprivileged small regions and settlements tanodas are often the only access points of cultural events. According to the parents without these institutions their children would not have been able to attend theatres, go to camps and excursions. In many cases, due to the lack of public utilities in several Roma settlements, tanodas also play a hygienic role; they have a secondary socializing function. Several municipalities organize programs also for parents, including trainings, job search assistance, and they ca turn to tanoda employees also with their personal difficulties. Thus tanodas, especially in smaller settlements play a multifunctional – partly social, partly cultural – role, serve as special community-service centers, and a significant level of social capital arises in the wake of their activities.

The majority of the observed tanodas usually does not employ full-time employees. In most of the cases employees sign only an agency contract. And if there is a full-time employee, it is usually the professional leader. The main problem is, however, the lack of vocational teachers. For financial reasons the tanodas can not afford to employ a professional teacher for every subject. Thus several subjects are usually taught by teachers with other specialization, and sometimes teachers do not even have a formal professional background. However, we have to bear in mind, that the quality and effectiveness of the tanoda program is greatly affected by the employees' level of experience, their ability to provide adequate methodological and professional knowledge.

The target group of these institutions is upper grade school children, while those who have been tanoda students for many years come back regularly even as secondary school students.

The operating system of each tanoda is usually designed in September, in the beginning of the school year, and it is adjusted to the children's school timetable. In the majority of the cases children spend 2-3, but sometimes even 4-5 hours in the tanoda after the school had ended. Participation is regulated in two third of the cases, but the remaining tanodas have an open policy, children do not have a special timetable, and they can attend all the classes they wish to.

In general, we can say that in most places activities follow the school curriculum. The majority of these activities focus on tutoring and reproducing the classes at school, believing that if children learn once again about the core teaching material, they will understand it better and remember it much more easily. Usually the learning takes place in small groups, which enables a better involvement for each student, but in spite of organizing small groups, frontal teaching is the most common method. Only few tanodas use a different method from this very traditional methodological culture, which usually reflects the local pedagogical solutions.

There are individual developing programs in nearly all tanodas. In several places these programs are designed by the development teacher. They are based on the input measurement results, and are followed by individually designed programs which serve also as a basis for the tanoda schedule. Where there is no input measurement and no developmental teacher, there the individual developing program is based on the daily activity experiences.

The majority of tanodas has an atmosphere where teachers and parents trust each other. Besides, they cooperate with the local schools regarding the tanoda program. However, this cooperation is sometimes restricted only to the actual project. In addition, it can be also said, that most of the tanodas cooperate with the local governments, minority governments, civilians, associations promoting sports or preserving traditions, but in exceptional cases – in line with the "Biztos Kezdet" program or similar projects – they cooperate with other organizations, educational institutions from other settlements, professional organizations and networks. This cooperation can be connected primarily to specific programs with a certain goal and predefined time period. On the other hand, long-term strategic partnerships can be rarely identified. It is also typical, that the cooperation between local primary schools and tanodas are restricted to the tanoda program, and there is no cooperation in any other projects and programs. Some have strategic partnerships with family day care programs, and some maintain relationships with the other tanodas or local cultural centers. In some cases they work together also with family support centres and transit homes.

Based on the focus groups nor the students, neither their parents would encourage significant changes in the tanodas' operation. Student do not desire fundamental substantive changes, but in several cases they would prefer bigger physical spaces and courtyard. They also had some suggestions regarding infrastructural supply and would wish to reconstruct the tanoda buildings.

Professional and activity leaders formulated suggestions mainly about the subject teacher supply. They would like to expand their capacity, and see a more professional educational structure with more activity, sometimes hire a specialist of teaching techniques or drama pedagogy in order to improve quality and effectiveness. They also consider it necessary to employ more male teachers, and according to some it is also desirable to achieve that every person employed as a temporary staff should become a full-time tanoda teacher. With appropriate financial resources more leisure activities and camps could be organized, and they

would be able to expand their equipments and buy even some new computers. In addition, professional and activity leaders and the children alike wish for extended opening hours, including weekends and the long summer holiday.

Main results of the quantitative inquiry

The majority of tanoda students are underprivileged Roma children. However, there are several resemblances between tanoda students and the control group: on average the students' are 12.5 years old, so tanoda students and students in the control groups do not differ in terms of age[2]. Gender distribution is also similar in these two groups: the tanoda group included 50-50, and the control group included 45-50 percent girls and boys. The proportion of class repeaters in these two groups does not differ significantly either: 17 percent of the tanoda children have repeated a class during their school career, while this ratio is13 percent in the control group.

In the tanodas 90 percent of the students considered themselves Roma, while in the control group only slightly more than the quarter of respondents did so (27 percent)[3]. Among the tanoda children not only the ratio of Roma children is predominantly higher, but they are less likely in possession of such essential learning tools as books, desk and computer. In addition, it is more typical for tanoda children to not attend schools in their residence. While more than third of tanoda students commute daily between their home and school (37 percent), it is true only for every tenth children in the control group[4].

Children in both groups consider themselves average students, and while the difference between the tanoda students' average of 3.3 and the control groups' 3.4 is statistically significant, this is not a meaningful difference in practice[5].

The level of motivation is different between tanoda and non-tanoda students. During the input measurement members of the control group appeared to be more persistent about difficult tasks and willing to invest more time to solve their assignments. They seemed to have more social skills, partly because they avoid other peoples' presence less likely. Furthermore these kids considered themselves more talented and skillful than the tanoda students. Accordingly, they seem to have more experience of success after solving their assignments correctly.

The output measurements included a self-regulatory segment. From these items differences between tanoda and non-tanoda students appeared in the case of 10 questions. Thus children in the control group prefer tasks suitable for their interest (even if these are more difficult), and at the same time they do not succumb to the more boring tasks, if they have to solve such assignments as well. Similarly, it is more characteristic to the control group that they persistently seek for the solution of more complex tasks and they ask also for help. These children consider their hobbies important, so they try to formulate their timetable in

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[2] Tanoda students are 12.6 years old and students in the control group are 12.3 years old in average. Although the difference between these two averages is significant, this result does not have any practical meaning in terms of the research.

[3] We classified those respondents Roma, who considered themselves Roma.
Chi2: 201.52; sig.: 0.000

[4] Chi2: 37.53; sig.: 0.000

[5] T: -1.88; sig.: 0.03

accordance with these preferences. Lastly, it is more characteristic of them to stay calm in stressful situations.

Considering all the items, there is a significant difference "in favor of" the control group in three cases. The members of the control group are willing to invest more time into solving school assignments. Similarly, if they face with a complicated problem, they are more likely to find a solution than the tanoda children. There is also a significant difference between the sense of satisfaction after solving a problem: this is feeling is more present in the control group.

We can see rather contradictory results, when we compare levels of motivation and the actual performance. While in the control group motivated students have usually better test results, than those, who are not motivated. In case of the tanoda students there is a negative correlation, thus motivation does not necessarily entail better results.

There is a significant development of mathematical skills among the tanoda students, but their mathematical knowledge is still rather weak. Tanoda children's input data from mathematics[6] was in average significantly 3 point less than the members' of the control group[7]. The output difference was only 1.85 points, which did not prove to be a significant difference at the 5% level.[8] (Tanoda students performed worse during the first measurement than the control group members. Compared to this the difference between them in mathematics has disappeared by the end of the year.)

Among the sixth graders tanoda students showed better improvement regarding fractions and percentage calculations than the control group members based on the second survey. Declining performance measured by the control group and the noticeable improvement measured in the tanodas clearly shows that children can achieve better results when they have constant help. However, certain solutions show that a number of students do not have a solution the tasks. It is impossible to incorporate the new learning material if the mathematical rudiments are missing or inappropriate. In our opinion it is not the case that children have forgotten what they had learned before; rather they were and are not in possession of the methods which could have helped them to solve these problems.

Majority of the children is only aware of the fundamental concepts, and they are not able to prescind and apply their already acquired knowledge when solving problems. This happens not only in connection with mathematical problems, but also reading comprehension and interpretation, which also shows the complete lack of practice. They do not reach the level of solving more complex problems even in the seventh and eighth grade. Therefore it is suggestive to set the tanoda-entry age at an earlier year. This would enable a successful competency development: those skills needed in solving such problems could have been acquired earlier.

Based on the input survey tanoda students performed worse than the control group also in inductive-deductive thinking. This leeway has shrunk a bit according to the output measurement. The input and output performance based on the induction-deduction test is

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[6] The result is based on the data collected from 171 tanoda and 99 control group members.
[7] t: -3.19; sig.: 0.000
[8] t: -1.50; sig.: 0.067

basically the same: tanoda students achieved on average 1 and the control group members 0.6 point higher results compared to their input results. Since this relatively slow development is significant by the upper graders, higher rate of development of lesser extent measured in the tanodas should not be disdained.

Students' mathematical and inductive-deductive skills are influenced fundamentally by their reading comprehension competencies and the time spent in tanodas. Positive effect of the time spent in tanodas for learning seems to be significant in the case of mathematics. So those students who attended tanodas achieved higher results than those who spent less time on learning.

Girls achieved weaker results in both tests than boys. The difference between their results from mathematics was nearly 4.5 and they received nearly 3 points less on the test measuring inductive-deductive thinking. Continuous (without class repetition) school career path and social attitudes had a positive effect on the results of the inductive-deductive test as well.

Test results of those students have improved in a much bigger extent that performed worse in the input tests (there is a negative connection between input and output measurements). Mathematical results have improved all the more as they spent more time on going to the tanoda. Although this connection can be considered weak, it is still significant. There is a positive correlation between the changes in inductive-deductive thinking and social attitudes, ownership of computers at home and commuting, but here is no relationship with tanoda presence.

The negative correlation between input measurements and test result changes shows that students with better input results can achieve a slight improvement compared to those who had weaker initial results. Thus tanodas can indeed catch up the somewhat weaker students. However, it is important to note that this improvement can be seen mostly in case of simple tasks trained regularly. In case of the problems requiring more complex skills, methods different from daily tutoring should be implemented. Tanodas had originally a more comprehensive goal. Real catching-up and integration would have required other and more effective methods, and the majority of the tanodas is still not in possession of them.