Research Paper



The Method of Theme-Centred Interaction (TCI) at Hungarian Schools: a Theoretical and Practical Overview

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Abstract

Theme-centred Interaction (TCI) is a complex, integrative program that develops social competency and was created by Ruth Cohn (1974). Its axioms and regulatory system make this method different from other educational concepts. These are based on the four-factored model of I-We-Theme-Globe, which is balanced by the teacher in the interactions. The TCI model can be part of the school's analytical processes, it can enhance innovation (Klein, 1997) and can contribute to holistic learning (Evert, 2008). According to the latest research into teaching (Hattie, 2012), we consider learning effective when teachers' work exerts a measurable effect on the pupils. Therefore we applied TCI in classroom environment, and in our pre-, and in-service teacher training schools. Our research included quantitative and partly longitudinal examination in 2016 and 2017 (N=162) with the same pupils at Kossuth Secondary Grammar and Primary School in grades 5-8 in a group. We conducted research in three groups: Control group I: not learning with TCI; group II: using TCI method for 1-2 years; group III: using TCI for 4 years in Hungarian literature and grammar classes), as well as in a control-group not employing TCI, using electronic questionnaires. The other questionnaire created by us focused on open-ended questions relating to the film Everybody directed by Kristof Deak (2016), filled in by both the TCI group and the control-group. The method of TCI leads to more motivated students and teachers. This method also develops the social competency of the students and promotes enhanced self-knowledge of the teacher. The method can establish open communication, co-operation and mutual trust, which all can bring about democracy at the school. If students can experience this at their school, then they can use and apply these experiences as adults. These will help them become

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autonomous citizens, who can take ownership and responsibility for their own actions, decisions and lives.

Keywords: Theme-centred Interaction, teacher efficacy, didactics

Introduction

Teachers and educationalists aim to develop several skills apart from the cognitive ones at today's schools. Based on pedagogical research, researchers and practitioners are seeking effective methods to improve social competencies, responsibilities, co-operative and intercultural competencies. Their primary goal is social learning and development of the person as a whole. In addition to knowledge-transfer, problem-solving skills have become crucially important as well as the learner autonomy, similarly to the ability to co-operate with peers. Today's pupils will be expected to have to work in teams. In order to teach and improve the necessary skills, adequate communication and interaction is indispensable. These skills and elements belong to the realm of social competency and cannot always be acquired by conventional means. This article focuses on unconventional yet crucially important methodology approaches, particularly the method of TCI. The authors of the articles aim to provide a general and global overview of the method, while integrating their own professional experiences as well.

The theoretical characteristics of TCI

TCI is the abbreviation for Theme-centred interaction, which is a widely known and employed method and phenomenon for group-work. The approach of TCI improves the affective and cognitive abilities, communication and social competencies. It aims to enhance social learning and to promote the development of the person. Its underpinning theories stem from the socio-cultural constructivism of Vygotskij (1971) and the humanistic personality-centred approach of Rogers (1980). The theory has also been elaborated and established by Ruth Cohn (1975) and other significant researchers from humanistic psychology. The TCI method matches two education-theoretical models: the pedagogy of learning by doing and the constructivist theory (see Table 1). Furthermore, the 'New School' and Montessori reformed pedagogy have been influential in its theory. The more liberal structure of the alternative schools and the common characteristics determine the general description of the TCI method. It follows:

The teacher's roles are:

- a facilitator rather than simply transferring knowledge,
- remains in the background, withdraws from directing and controlling, becomes a participant in the creative processes,
- lays down the rules of communication together with the pupils,
- ceases to be a lecturer,
- keeps away from authority.

A further characteristic of TCI is that it builds upon making doing.

Table 1: Learning theories/models (Falus, 1998; Nahalka, 2003; Siemens, 2008)

	Behaviourism	Cognitive	Pedagogy of doing	Constructivism	Connectivism
Way of learning	observant, behaviour- centred	structuring, modelling	make do	social construction	networking
Knowledge- basis	implementing the processed reality	objectivist	analytical, elementary	constructivist	connectivism
Influencing factors	praise-punish	present schemes and experiences	Interest	commitment, social, cultural participation	Depth and strength of network
Pedagogical principle	deductive	inductive	inductive	deduction	atypical, spontaneous
Main tenet	text memorisation	make think	make do	builds on existing knowledge	recognition of patterns
Who is in the centre of the learning process	author of the text	teacher	active student	active student	student
Role of memory	repetition	coding, storing, evoking	elements of knowledge by doing	remembering existing knowledge	adaptive pattern
Transfer	stimulus- response	knowledge duplication	autonomous individual	socialisation	connecting to existing points
Typical learning form, method	frontal	argumentation, problem- solving, questioning	exploration	open questions, tasks essay	maps of terms and concepts, summarizing studies

Based on the primary knowledge-centred feature (Table 1), TCI belongs to the constructivist pedagogy, since it can be characterised by interest, social participation and commitment. Pedagogical practices underline that both the inductive and the deductive thinking are apparent in TCI, as well as the spontaneous learning. Its basic tenet is learning by doing, which means experienced learning and thus it promotes the recognition and understanding of patterns. The method focuses on the active pupil in the learning processes. Memory plays a pivotal role in the operation of TCI: the elements of knowledge are used by doing and by experiencing and by evoking previous knowledge. When constructing knowledge, the learner uses their own processes formed by their socialisation, open questions and exploration. We believe that the method of TCI affects learning strategies and knowledge construction in a highly positive way.

Productive learning with TCI method

Productive learning puts the emphasis on co-operation. When it comes to organising learning, teamwork and co-operation seem the most effective forms of learning to share the tasks and duties with mutual and common responsibility. The eventual success leads to enhanced work and attainment, the participants demand increasing amount of workload, while appropriate social contact will be established. However, failure can have completely different effects (Juknat, 1937). Bruner (1971) claims that success

largely depends on exploring effective learning alternatives. These aspects are as follows: activity, which covers curiosity, maintaining that refers to gaining benefit from the memorized and learnt material, and finally directing, which ensures understanding the goal of the task.

In the process of learning we need to establish motivational situations (Lazar, 1980): e.g. competition, game and control situations that increase performance. These contexts activate the intrinsic motivational factors by generating a demand for performance and for achievement, such as the desire to be outstanding, the need for satisfaction, the craving for success. All these develop the efficacy of the learning processes (Lazar, 1980).

Human learning can be defined by the cognitive feature as well as by acquiring the emotional-motivational system, thus it can be stated the learning is not exclusively reduced to cognitive competencies, but it presupposes a more far-reaching definition of learning both in space and life-phases. Caring, becoming engaged and committed, encouragement and support in a constructive social relationship are important elements so productive children should become healthy and productive adults (Johnson, 1984). Children can learn relations by experiencing and doing activities. These characteristics describe the dimensions of productive learning (Bohm-Schneider, 1993). According to Bohm-Schneider, we can differentiate between the following aspects:

Personal

Pupils get to know themselves, they discover their own values, skills, abilities and they actively participate to improve these. They will be able to plan, to make decisions, to realise plans, to evaluate independently and in co-operation as well. Learning becomes a personal, life-long act.

Institutional

Teachers unite theoretical, practical and experimenting forms of learning. They organise the process of learning by taking the individual preferences, motivation and interest into consideration.

Social

They also learn to set goals and to control their own life-situations. Culture is reflected in learning: this describes one's relation to reality and to existence.

Bardossy (1986) claims that this method enables the teacher to participate holistically in the development of the whole personality. The individual is free, independent, cooperative and committed. Meanwhile students can learn from their failure, from their environment, from their peers and from the co-operating adults as well. This results in the enhancement of their competency and responsibility. The relationship between

students and teacher is direct in the form of learning based on co-operation. The teacher understands the needs of the students, recognises their abilities, their skills and helps them improve these with a positive mutuality. Hungarian education needs more productive teaching methods based on co-operation.

Theme-centred interaction (TCI)

This method does not allow for the group to depend on the group leader. Interaction within the groups focus on the work related to the topic. Members accept each other, their opinions and they develop their knowledge and personality with the help of free co-operation and communication in a helpful team working climate. The term TCI was coined by Ruth Cohn (1975).

When applying this method, the teacher works with content-based issues and they delegate tasks while appreciating the needs of the group. The teacher directs the individual demands, leads the interrelationship of the members and supervises the development and the environment of the group.

The four factors: the I, the WE and the TOPIC are intertwined. It is illustrated with a transparent, multi-layered globe with a straight-sided triangle in the middle. These factors need to be balanced and harmonised in a dynamic way, improved and maintained by TCI teamwork.

I refers to the individual subject. *We* refers to the interaction and the interrelationship among the members. *It* illustrates the topic and the content, while the *Globe* refers to the Earth and the environment. The operation of the group is influenced by the four factors. This is symbolised by a triangle, and a circle, where the symbols indicate that balance is needed between the factors.

The axioms of the TCI conception based upon the tenets of Schneider-Landolf-Spielmann-Zitterbarth (2017)

- 1. Existential-anthropological: Everybody is an autonomous individual, at the same time one is part of the whole. Nobody can exist on alone, only in a mutual dependency. Every personality is a unity of a psychosomatic wholeness, perception, sensation, thinking and activity. However, as people depend mutually on each other, the interdependency is constantly increasing.
- 2. Ethical-social appreciation: Man represents a value. Respect life, growth and living beings! Inhumanity is a destructive force.
- 3. Pragmatic-political: A human being makes free decisions within a defined framework. The inner and outer boundaries can be broadened constantly by educating attention. The mutual interdependency enables humans to be take responsibility. One's autonomy is even bigger when they take the inner and outer determination into consideration more consciously. Free decisions happen within the given inner and outer boundaries.

Autonomy and interdependency characterise it at the same time. The three axioms have an interrelationship and are each other's pre-requisites.

The brief history of the concept

The group dynamic method of TCI was created and coined by Ruth Cohn (1975). Cohn was born in 1912 in Berlin and pursued studies in psychoanalysis then she emigrated to America. It was there that she worked on this method and published its tenets in 1955, where she wrote about the advantages and techniques of group psychotherapy and how these can be applied to healthy human groups. Its main focus was to promote and help experience-based learning. The roots of the method are the following: psychoanalyses, humanistic psychology, group dynamics, different learning and communicative methods.

The international centre for TCI, the Ruth Cohn Institute for TCI International is to be found in Basel, but it has a widespread organisation in the Netherlands, in Germany, in Rumania and in Luxemburg. This method can make group-work effective and it develops personality and social competence. It also challenges the responsibilities of the leader and authority. TCI is taught by members of the Ruth Cohn Institute, an international association. the training consists of two parts: basic and diploma training. It contains elements of supervision, working with peers, in workshops.

Terminology

The concept of TCI is based on three axioms leading to two important postulates:

- a) Be your own chair person, the chairperson of yourself. You have to see yourself, other people and the environment in their possibilities and limits. You also have to accept every situation as a proposition for your own decision. You must be your own boss and listen to your 'inner voice'.
- b) Disturbances and passionate involvements take precedence. This is also part of the group dynamics. These disruptions and violent feelings do have priorities as these can disturb communication within a group. One always needs to pay attention to what hinders communication inside a group. Effective work and growth can only be achieved if these obstacles are recognised and removed.

With this method we reduce one-way communication to the maximum. Furthermore, it only plays any roles if the group is in a preparatory phase.

Communication in a TCI group

The fundamental principles underpinning the communication of the method follow:

- Always speak for yourself, it should never be us, but straightforward and personal way of talking.
- Authentic and selective communication.

- Analyse what you think, how you feel and then decide. Never focus on others' expectations.
- If you talk, also explain why you ask questions. Tell only your own interpretation.
- Do not react to others' talk, do no interpret others. You should talk about your feelings. One person speaks at a time.
- Pay attention to your own emotions and to others' emotions as well. Emotions and feelings are not always good, but they are.

The autonomy of the group members will assist the forming of the group itself. The leader is always a participant in the processes. They are always authentic, selectively authentic, and they always tell the truth, yet they do not always inform about everything. They refrain themselves from manipulating. The functions of the leader in the group are the following: choosing and introducing the themes, structures and methods. They are also responsible for establishing and maintaining group dynamics and work.

The following section will include a description and illustration of a practical implementation of the theory.

TCI in practice

When it comes to making a decision, the following list of criteria and questions are crucially important:

- 1. The mechanism of the mutual decision: what should be the theme? The teacher/leader offers theme possibilities. Then it will be clarified what will affect the final decision:
- What do I want?
- What do the others want?
- What does the environment offer?

Figure 1: The structure of TCI



I have to accept the consequences of my decision even if these are positive or negative. Students need to be taught to be able think consciously. They will then have their own decisions. If we integrate this fundamental principle into the system of TCI, it will be obvious how behaviour becomes part of it.

It is advisable to avoid the interview form. Opinions should be voiced. The person (I) and the community (we) are just as important as the Theme. Meanwhile one has to pay attention to the environment (Globe). This process sees the teacher as a facilitator.

The aim of the research

We have set the goal of measuring students' change in learning attitudes, social competencies by teaching TCI. This is a pilot study to examine the use of TCI method, furthermore it is not an impact assessment, but a methodology-based testing focusing on the changes of the elements of social competency, which is partly a longitudinal study.

Applied methods

Our research included quantitative and partly longitudinal research methods in 2016 and 2017 (N=162) with the same pupils at Kossuth Secondary Grammar and Primary School in grades 5-8 as a group. We conducted our research in three groups: *Control group I:* not learning with TCI; *group II:* using TCI method for 1-2 years; *group III:* using TCI for 4 years in Hungarian literature and grammar classes, using electronic questionnaires. The items of the questionnaires (except for the Supplementary data questionnaire) applied the Likert-scale. The other questionnaire created by us focused on open-ended questions relating to the film Everybody directed by Kristof Deak(2016), which were filled in by both the TCI group and the non-TCI group. We applied Mann-Whitney probe, with the help of SPSS 13.0.

In two occasions (2016, 2017) we had our questionnaires completed by the same pupils: Learning style questionnaire has been in use and validated by Bernath–N. Kollar–Nemeth (2015: 67–69), while the questionnaire focusing on decision-making, debating skills, cooperation and self-knowledge was created by Revakne (2013: 86–88.). We employed 20 items from the original 90 items of the questionnaire focusing on Self and peer-evaluation, Friends and peer questionnaire from Kosane (1998). The pupils answered the questions in the presence of the researcher and the class-teacher. They had 2x45 minutes available for the questions of the quantitative questionnaire and the open-cloze questions regarding the film (25 minutes).

We analysed the results with SPSS 22.0 and with content-analysis. In this research however, the family background, the parental education, the attitude and motivation of learning, and other sociological variables could not further elaborate the findings as the school is the teacher-trainee school of the university. We examined the correlation between TCI and sex with a variance analysis. As the sex variable was not significant, we re-examined the relationship of the variables with TCI. As well as the reliability of the questionnaires focusing on the dominance of the learning style and the social competency factors. In the Who do you learn from dimension we carried out a factor analysis, as well as we examined the reliability of the questionnaires. For this we ran the

test-retest examination along the Cronbach-alpha values, and we examined the itemtotal correlations. We could establish that the scales are balanced and there are not extremely strong or weak items.

The findings of the research

Who do you learn from?

The answers regarding the parents and the teachers are very similar, but the relatives (69%) and the friends (58%) cannot be neglected either. Girls had a significant difference in their answers to this question learning from friends. This finding is used by colleagues when applying co-operative methods, when the wish to embrace the possibility of learning from each other and want to encourage it. It has been established that the Information and Communications Technology tools and the internet have not been identified as a means of learning in this age-group, which is supported by 23% in the question learning from others. We firmly believe that the pupils regard these tools (smartphones, computer) as entertainment and these serve the purpose of communication and chatting. We should not prohibit these tools from education, but rather include them. Schools play a pivotal role in educating safe internet use. We can establish that nowadays pupils in grades 5-8 learn not only from their teachers but from their parents, siblings, friends and relatives.

However, this age-group does not involve Internet as a source of knowledge in this dimension.

Social competency variables

Debating skill

Our research supports the hypothesis that the TCI method develops the communicating and debating skills of the social competency, which could serve as the basis for interpersonal relationships and cooperation. The factor time is highly important since the debating skill and other social competencies do correlate with the timing of the employment of the method.

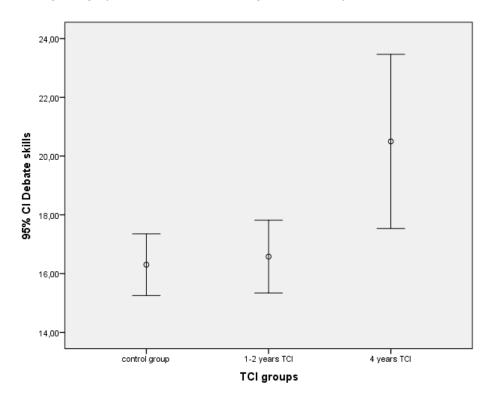


Figure 2. The increasing average of the Emotions variable with regard to the level of TCI

The fact that in other parts of social competency – decision-making, cooperation, self-knowledge, handling emotions, aggression and stress – we did not receive the expected results can be explained by the circumstances that the pupils were exposed to other methodological effects apart from TCI. In our lessons we use only 15% of the method. We also believe that the used time was insufficient for improving indirectly several parts of social competency only by TCI.

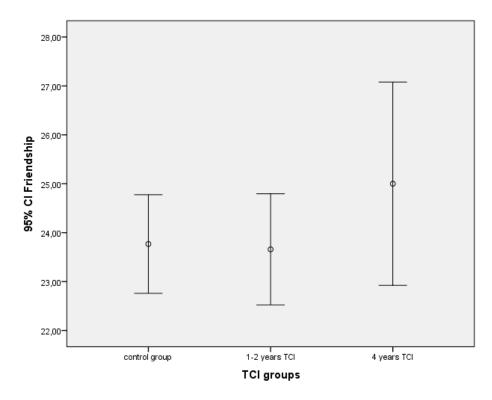
Emotions

We examined pupils taught with TCI in the variable of emotions the attributes of recognising emotions, understanding emotions, verbalising emotions, coping with anger and fear.

The one-pointed variance analyses almost proved to be significant (p=0.06). Based on the group-average it can be stated that those pupils improved the most who have participated in the TCI classes for 4 years. The pair-comparison shows that there is a significant difference between the control-group and the TCI group (using TCI for 4 years) (p<0.047). Furthermore, there is also a significance if the two first groups are compared with the last one with a contrast examination (p=0.024). This result proves the hypothesis that time spent with TCI affects the improvement of the emotional part of social competency: pupils taught with the TCI method showed an increased development with regard to their emotions. It points at the possibility that prolonged use of the TCI method can lead to positive changes. Our research can be affected by this result in the future.

Making friends

Figure 3: The increasing average of the Friendship variable



The dimension of making friends is composed of initiating communication, following the rules, providing help, sharing things, being able to say sorry and appreciation. Our evaluation led to a similar result to that of the variable of emotions. We found that the level of TCI, that the relationship between the time spent on TCI and friendship was significant (p=0.045), furthermore the pattern is the same as in the case of the variable of emotions. The pair-comparison shows that there is a significant difference between the control-group and the 4-year-long TCI group (p<0.037). Furthermore, following the comparison of the first two groups with the last one, we also receive significant differences (p=0.026). If we could conduct further research, then we can presume that time spent on TCI longer than 4 in lessons will lead to significant differences in the variable of making friends. The development and the pattern of the average regarding TCI and the variable of making friends will most likely result in positive changes in the future.

Learning style variable

As TCI is characterised by pair and groupwork, we can see in our findings that pupils taught with the TCI method display the characteristics of the cooperative learning style, as compared to pupils not taught by TCI. There is a correlation between the time spent on TCI and cooperative learning. With the help of TCI, teachers can provide help in promoting and establishing cooperation for pupils who are inadequate social skills. The social competency of the pupils will be enhanced, and a positive self-image will thus be

created, the social sensitivity of the pupils will be improved. TCI will develop the cooperation, forming opinion and cognitive skills. The scale of the visual text shows a lower score of the TCI pupils (p<0,009) than the control-group. TCI pupils do not prefer the intuitive learning style, they tend to use analytical thinking, with a different learning orientation. Since the sensible learning scale is an indicator of the quality learning (with reference to analytical thinking), the difference between TCI pupils and the control-group is significant (p<0,008). This highlights the fact the TCI pupils tend to use sensible learning style.

Other researches have focused on discrimination analysis, where the scale of sensible learning highlighted the fact that this learning style is characteristic of university students. We believe that the pupils taught with TCI will employ learning styles similarly to university students.

The findings regarding the artistic short film

Everybody, a film by Kirstof Deak (2016) is included in the research: pupils were to ask to fill out a questionnaire following the film. The TCI pupils found it obvious that one is responsible for their own problems and solutions. To achieve a goal, not everything is allowed. The relationship between practice and improvement was clear to TCI pupils ((p<0,037). TCI pupils could score higher in the dimensions of identifying individual and community goals, of recognising emotions, and in interpreting the film.

Our empirical research is a novelty, as the German literature has proven the efficiency of TCI the qualitative method with regard to cooperation, tackling conflicts and communication (Freitag, 2011; Ewert, 2008; Arndt, 2017). We attempted to prove the same aspects with quantitative method, with the help of adapted questionnaires. We have to highlight however that not every aspect and variable can be improved. The reason is the low number of TCI pupils and the 15% of indirect methodology. We also need to take the positive and improving effects of the traditional teaching methods as well.

Summary

The method of TCI leads to more motivated students and teachers. This method also develops the social competency of the students and promotes enhanced self-knowledge of the teacher. The method can establish open communication, co-operation and mutual trust, which all can bring about democracy at the school. If students can experience this at their school, then they can use and apply these experiences as adults. These will help them become an autonomous citizen who can take ownership and responsibility for their own actions, decisions and lives. We have to point out that our TCI statistical results in this school are not representative. Further research and data collection is needed in different socio-economic regions and schools, and we plan to extend our research to highly different schools in villages as well. Learner efficiency depends on

various factors, and teaching is only one of these. Teachers can provide help for pupils with learning difficulties by applying their group-dynamic knowledge and expertise.

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