Promoting Self-Competences and Life Skills of Children Coming from Vulnerable Groups: Research-Based Development of an Inclusive Education Program

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Abstract
The presented paper combines research and development in the area of cultural diversity and inclusive education. It addresses the improvement of self-competences and life skills of Roma and non-Roma children in Romania by specific teaching and learning programs. The presented study and program “FACE - Families and Children in Education” focuses on promoting the pre-existing competences of primary school children through various elements on a didactical, methodological as well as transcultural level. The research element in FACE includes quantitative and qualitative results. The self-concepts of children coming from a vulnerable group were gathered through a pre-post-design using the Tennessee Self-concept Scale: 2 (TSCS:2) before the intervention and after a one-year-trial period. The results show the changes of self-concept in different age groups over the course of the second trial year. The qualitative analysis includes the coded and categorized qualitative feedback of teachers who worked with FACE over one school year. Interpretation of the results was done through traditional content analysis using grounded theory as a methodical framework. The paper discusses these results aiming at a useful development and adaptation of teaching material and in-service training programs. Following this, key factors are addressed. Through this inclusive school development program the perspectives are changed from a deficit-orientation towards a competence-orientation in a multi-ethnic setting. All interpretations and suggestions are made from a transcultural perspective taking into account the specific cultural context of Romania.

Keywords: minorities, vulnerable groups, teacher in-service training, teaching material, multi-cultural classrooms
The situation of children coming from vulnerable groups in the Romanian educational system

The most vulnerable group in Romania are children coming from the Roma communities. The integration and education of these children is still facing big challenges. The number of school drop-outs among Roma children is high; children are occupied with household tasks or have to take small jobs to contribute to the family’s life. Apart from the economic situation of Roma, Roma (and also non-Roma) children from a very poor socio-economic background show a rather low self-concept and belief in their own self-competences and life skills. Due to the low attendance of school and the difficulties these students face in class, the belief in own competences as well as in education as a value is decreased furthermore. Results of a research study within a project called TERNO (Teachers’ Education for Roma New Opportunities in School) identified the educational needs of these children (Vajda 2013): Even though a positive approach towards the social integration of Roma children could be observed (ibid), teachers and representatives of the school system wish for additional school personnel such as social workers, speech therapists, mediators etc. as well as multicultural and intercultural approaches for teaching and learning. Moreover, curricular adaptations and a focus also on teaching Romani language, culture and history are seen as missing and important measures for supporting the education of Roma children (ibid). Raising the school attendance, especially at the entry point into the educational system – nursery, kindergarten and preschool – is a further point for improvement for the situation of Roma children (Surdu et al. 2011). In the past decade various projects have been carried out in order to improve the situation. A collection of best-practice examples compiled by UNICEF delivers important information for further developing these initiatives (UNICEF 2007a). Apart from systematic approaches and changes on a structural level, also some practical tools have been developed in order to guide and support mediators, teachers, social workers and educators (Nemenyi & Vajda 2014; Rus & Zatreanu 2009).

Introducing a project approach: FACE – Families and children in Education

The project “Families and Children in Education” (FACE) of the Centre for International Projects in Education (IPE) at the Zurich University of Teacher Education aims at improving the self-competences and life skills for Roma and non-Roma children as well as the quality of living and learning together in a multi-cultural and multi-ethnic environment. Through developing and introducing a series of teaching material Roma and non-Roma children work together with their teachers and their parents on various topics related to issues of identity, skills, talents and interests, emotions and heritage. The material consists of three booklets for students and teachers which are jointly developed with experts and teachers in Romania. The FACE booklets start at Kindergarten age (4-6) and follow up in primary (7-9; 10-12). Apart from students and teachers also communities, authorities and parents are involved in the project trying to raise their awareness for education and the future perspective of the children. Through a series of training sessions together with the teachers and local project coordinators the FACE program and materials were tested through an accompanying research component in two regions of Romania. The presented research results stem from the second year of piloting and are a follow-up of the results of the first year (2015). By the end of the 4-year long project a total number of 1’675 students, 220 teachers, 1’675 parents and 40
communities will have been in direct contact with the material. All teaching and learning material is now translated and prepared for (electronical) use in Kosovo and Macedonia.

2.1 Self-competences and life skills of children coming from vulnerable groups

Self-concept in the context of this project and research follows the general idea of self-concept as “the individuals’ knowledge and beliefs about themselves – their ideas, feelings, attitudes and expectations” (Pajares & Schunk 2001). Self-concept as understood in this context can be subdivided into self-concept categories. Or it can follow even more detailed subdivisions like non-academic areas (such as physical appearance, popularity, trustworthiness, relations with parents, emotional stability) or academic areas (verbal, mathematics, problem solving, art etc.) (Marsh & Ayotte 2003; Marsh et al. 2006). Self-concept is strongly connected to achievement and to self-esteem. However, self-concept can be described as a cognitive structure, a belief about who you are. Self-esteem is more an overall, general feeling of self-worth that incorporates self-concepts in all areas of life. In the context of the FACE program we use the model of self-concept (O’Mara et al. 2006). Self-esteem is also very much influenced by the culture around a person and by how this culture values the particular characteristics of the person (Bandura 1997; Schunk et al. 2008). This cultural influence is reinforced when children grow up in poor socio-economic circumstances. A positive self-concept is decisive for the satisfaction of children and their social and emotional well-being, as well as their academic achievement. Children with negative feelings towards themselves tend to also have negative feelings towards others (Weidinger 2013a, 2013b). Life skills as a key word used in this project and paper refers to the definition introduced by the World Health Organisation: “Life skills are abilities for adaptive behavior that enable individuals to deal effectively with the demands and challenges of everyday life” (World Health Organisation 2001). WHO describes 10 core skills: decision-making, problem-solving, creative thinking, critical thinking, effective communication, interpersonal relationship skills, self-awareness, empathy, coping with emotions, coping with stress. Life skills therefore, can also be defined as the competences that an individual needs for sustaining and enriching his or her life.

2.2 Using pre-existing competences

Children coming from minorities or vulnerable groups within a society are often not only disadvantaged because of their ethnic backgrounds and difference to the others but also because of a limited access and attendance to school (UNICEF 2007b), (Surdu et al. 2011). However, this does not mean that these children start school as a tabula rasa with no prior acquired competences and skills. On the contrary, children who grew up in socio-economically weak situations often have to contribute to the survival of the family. Within the group of the Roma children this phenomenon is present. They enter the schools with competences and skills that they have acquired in non-formal educational settings, in their families, in the peer-group, on the streets etc. It is the educational system that misses to perceive, measure and value these pre-existing competences. Schools do not offer opportunities where these pre-existing competences and skills can be applied, tested, further developed and transferred into a way that they become useful and accepted by the institution and its requirements. These pre-existing competences often encompass the described life skills but they also include purely subject-related competences such as calculating, verbal
communication skills (when selling things), technical skills (repairing, agricultural work, handicrafts) as well as knowledge about their environment and its materials (agricultural work, weather forecasts etc.). In schools children with such pre-existing or pre-acquired competences cannot show and prove them as they are not asked for in school tasks, tests or other forms of summative assessment procedures. This is also the reason why Roma children – when placed in mixed groups with non-Roma children – quickly become stigmatised. Their perceived lack of cognitive skills becomes visible in the context of the classroom also to their colleagues. The FACE program tries to make pre-existing competences and skills more visible to both groups: to the Roma children and families as well as to the non-Roma families and children in the classroom. Only when both groups and the school itself start to see and value skills and competences that have been acquired elsewhere, the potential of it can be used and learning opportunities can be created in class where these skills can be transferred into useful competences, skills and strategies for the specific learning context in school.

Research design and results

The FACE program including the trainings for teachers, the involvement of the families and the development of teaching materials are based on an applied research component on how self-concepts of children can be supported by these different elements and how the pre-existing competences of children coming from vulnerable groups can be made visible also in a school context. The research component of FACE includes a pre-post-test design and follows a mixed-method approach (Caracelli & Greene 1993). The FACE research component involves research activities on different levels:

Self-concepts and their development of participating children (quantitative)
Self-concepts and developmental age (qualitative)
Adoption of FACE program (teachers - qualitative)

The qualitative research activity, using children’s drawings of a human figure (self) as a way of explaining developmental age and self-concept through projective tests is still in the process of analysis DAP:SPED (Naglieri et al. 1991) and traditional HTP (House-Tree-Person) (Wenck 1977; Machover 1949). Analysis and interpretation of all results was done using the framework of grounded theory.

3.1 Self-concept development

3.1.1 The Tennessee Self-Concept Scale (TSCS:2)

For the analysis of the present self-concept of the participating children the Tennessee Self-Concept Scale (TSCS:2) was applied (Caracelli & Greene 1993). The TSCS is broadly applicable and multidimensional in its description of self-concept as well as validated for different ethnic groups (Fitts & Warren 2003). The TSCS:2 short form of 20 questions was applied with all participating children from age 9 up to 13 (n = 160). The analysis of the self-concept of Roma children is based on the total self-concept scales given for the ages and compared to the post-test results of the same children. The TSCS:2 gives information about the range of the total self-concept scores (TOT) which falls between 40 and 60 for most individuals. This indicates that there is no disturbance or only mild disturbance in self-
concept. High scores of the TSCS:2 between 60 and 70 indicate areas of particular strength. Children with high TOT scores (> 60) tend to define themselves as generally competent, to like themselves and have self-confidence. Specific disturbances in self-concept are indicated by low scores below 40. These individuals are doubtful about their own worth. Children who score below 40 are less likely to say positive things about themselves. They may be anxious, depressed and exhibit little self-confidence. These may also be children or adolescents who have a self-concept that varies from one set of circumstances to another. What is the case for most children with a low self-concept score is the fact that their self-concept does not reflect good fit between their abilities and their goals. As a result, these children do not take any risks, they avoid situations where they might experience failure or rejection.

Results

The self-concepts of the participating children (n=160) as recorded by the TSCS:2 can be described as very low in both pilot regions. 58% of the tested children show a total self-concept score that is lower than 40 before the beginning of the program. 39 % of the participating children show a self-concept between 40 and 60. Only 1.8% of the tested children show an extremely high score of over 60. 25% of the students show a TOT score less than 30 which is alarming. After a year of working in the FACE program the picture changes in the positive way, however with great variance between the groups. Only 28% now show a total self-concept score below 40, and 68 % show a “normal” self-concept score between 40 and 60. 4% of the questioned participants now show an extremely high self-concept score of over 60.

![Figure 1: TOT Scores before and after the intervention](image)

It is significant to note that there is great variance between schools located near cities and schools located in pure rural areas, even if the rather urban schools host solely Roma children. From among the children tested in the rural area only 34% show a “normal” self-concept even after one year and still 66 % still range below 40. No child in the rural pilot region shows an extremely high TOT score.
Looking at the self-concept of the participating children a year after they had started the program, 74% show an improvement in their self-concept and the perception of their person. 18% show that their self-concept has not been improved, in some cases it even decreased (8%), but only in rural areas. What is evident when looking at the age groups, is the fact that the majority of strongly decreased self-concepts can be seen in older children. The reasons for this phenomenon could lie in the developmental stages of the children or adolescents and their changing view of themselves (Stipek 1981; Wigfield et al. 1996). As children mature, they become more realistic and may not be accurate judges of their own abilities (Paris & Cunningham 1996). Some adolescents suffer from “illusions of incompetence” – they seriously underestimate their own competence (Phillips & Zimmermann 1990). Looking at the special group of minority children this could also lie in the starting perception of future perspectives in a country where the chances are still limited like in Romania.

**Adoption of trainings and teaching material**

The method used for the analysis of the FACE teaching and learning program was traditional qualitative content analysis according to Mayring of the oral and written feedback given by the teachers and local co-ordinators (Mayring 1983). All feedbacks were documented in personal portfolios by each teacher of the pilot collected by the co-ordinators. The analysis of the FACE teaching experiences and material was done along three major dimensions including four subcategories for coding. For computerised processing of the coded texts and documents the MAXQDA 11 tool was used (MAXQDA 2014). The following table gives an overview of the coding dimensions and sub-categories:

<table>
<thead>
<tr>
<th>General dimension</th>
<th>Didactical dimension</th>
<th>Teaching material dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>Self-directed learning</td>
<td>Complexity</td>
</tr>
<tr>
<td>Challenges</td>
<td>Creativity</td>
<td>Language and wording</td>
</tr>
<tr>
<td>Favourite tasks</td>
<td>Classroom organisation</td>
<td>Gender</td>
</tr>
</tbody>
</table>
Feedback was given by all participating teachers who worked with the material and the students (n = 40). Feedback of the teachers was triggered by questions along the three major dimensions listed above. However, feedback was also given orally in group discussions during the workshops, translated and coded for the interpretation via qualitative content analysis. Out of the interpretation of the feedback along the two given dimensions several key factors were extracted by using grounded theory for designing programs like FACE. General understanding and perspective of learning – pedagogical dimension
Use of approaches and methods – didactical dimension

The following collection of key factors represents in short the main aspects which made FACE a successful implementation program in the context of the Romanian educational system.

**Key factors on a pedagogical and didactical dimension**

**Pedagogical key factors: Teaching and learning perspectives**

4.1.1 Learner centeredness

Teaching and learning in multi-cultural and multi-ethnic schools that want to support life skills and self-competences of students have to be learner-centred. It is based on the assumption that the structure, choice of content and organisation of all teaching must be tuned to the students’ needs. Student-centred teaching means that the focus of attention is on the learner’s individuality, i.e. students are recognized as individuals with an independent personality (Helmke 2012). In student-centred education students are taken seriously and valued as personalities, regardless of their learning performance or success. Children are perceived as acting and active subjects and not as mere objects of the teacher or of the educational program. A key requirement of student-centred education is, therefore, to stimulate children in a holistic way to become active. As a result, this educational concept does not foresee the teacher at the centre of teaching but the learners. Learner-centred teaching means planning and structuring a lesson from the learners’ point of view, in cooperation with them and geared to their needs (Wiater 2012). Or, as Andreas Helmke (2012) puts it: learner-centred education is characterized by a high degree of student participation and activity. As opposed to teacher-centred education, the variant experienced in most countries of South Eastern Europe, learner-centred education asks for a radically different role of the teacher. FACE tries to make this shift in teaching and learning culture through the design of the teaching materials but also through the training seminars themselves.

**Learning from and for life**

Any teaching must take students’ actual everyday lives and future conditions into account when choosing learning contents. This becomes even more necessary when dealing with children coming from poor socio-economic situations or have a short and unsuccessful school
biography. This means that topics must be chosen so as to be life-relevant and actual for learners. 50 years ago, Wolfgang Klafki expressed this pointedly in the following question: “How relevant is the content or topic in question in the cognitive development of the children in my class? Or more precisely, what experience, ability or skill are they meant to acquire by its means? How relevant is the content from the pedagogical point of view?” (Klafki 1958). However, not only the relevance of the content for the students’ present needs to be taken into account, but also for their future. Life-relevant learning means that the interests, the biography and background, the living conditions (life situation) and the specific needs of learners are perceived and respected – and represented also in the teaching material. This is also reflected by the feedback of the teachers: Overall, the children enjoyed working with the teaching and learning material. This was pointed out several times by the teachers. When grouping the tasks the children liked best it becomes evident that they lie in two different areas: a) tasks that are closely related to objects, people or experiences in their lives and b) tasks that are very closely related to the individual identity.

**Orientation towards competences**

Teaching and learning in multi-cultural and multi-ethnic classrooms has to be competence-based in order to leave behind a deficit-oriented pedagogy. Instructional science has produced various definitions of everything belonging to “competences”. The definition most commonly used in the German speaking countries is Franz E. Weinert’s: “Competences are the cognitive skills and abilities available to individuals or acquired by them to solve specific problems as well as the motivational, volitional and social readiness and abilities associated therewith to apply problem-solving successfully and responsibly to variable situations.” (Weinert 2001). Teaching methodology distinguishes two kinds of competences, namely subject-specific and transferable competences. Subject-specific competences are all the skills closely connected to one particular school subject. Transferable competences are skills and abilities necessary to be able to cope in life and not specifically linked to a school subject. These could be, for example, personal competences (self-reliance, reflection etc.), social (cooperation skills, conflict resolution skills etc.), but also methodical skills (communication skills, problem-solving skills etc.).

The developed teaching and learning resources of FACE lead the children and young people to discover and become aware of their own pre-existing competences and focus on these transferable competences. Furthermore, the resources aim to further the self-concept and self-confidence of the students, their cooperative work with each other, the development of a healthy culture of learning from mistakes, the intrinsic motivation for self-directed learning, the evaluation competence of their own learning as well as the competence to be able to make decisions and carry the consequences for these decisions (Weidinger 2013a, 2013b). The interpreted data and feedback given by the teachers suggests a strong focus on conflict resolution, co-operation competence and taking responsibility. Leaving behind a deficit-oriented perspective means a huge shift also when it comes to assessment practice of teachers – especially when dealing with children from a vulnerable group. Furthermore, the teachers point out the importance of making the mentioned pre-existing competences visible also in a school context. The FACE program made them discover unseen talents and skills the children and the families have. With an emphasis on self-reflecting tasks that promote self-awareness
and a positive view of themselves, the students made great progress towards a more positive self-concept.

**Changing the teacher’s role**

For students competence-oriented teaching means being highly active. In order for this to happen, the teacher must plan suitable learning activities, supervise the students along the way and give them active support if needed. More and more, teachers take on the role of “learning coaches”, i.e. of initiator, supporter or evaluator of learning processes; they exert their role as a traditional lecturer less and less. The FACE program and the teaching materials stress this shift in the teacher’s role. To be able to fulfil this new role, the teacher must be able to assess the learning needs and the prerequisites of each student. Other tasks entail planning challenging lessons with regard to content and methodology, developing learning paths, choosing exercises, observing and supervising the learning process and, if problems arise, intervening in an adequate way. During and at the end of a learning sequence it is also necessary to analyse the learning success by personal feedback. Another important aspect, is the ability to gain insights through the conversations with students, to reflect upon their learning and record the results. Within the FACE program the teaching and learning materials are built up in a portfolio-oriented way and represent a yearlong learning journal for the students. Thus, also the relationship and the cooperation between teachers and students is different, i.e. much more equal and intense than in a more traditional kind of education.

**Didactical key factors: Approaches and methods**

4.2.1 Supporting task-based learning

In the FACE program students learn via task-based-learning which means that the students work on the task, it is not the teacher who works on them. The FACE materials are designed in a way that students solve problems that lead to something useful and meaningful. In the process of solving these tasks they will explore many ways to the solution. This way the students will acquire the necessary competences and skills. Therefore, working on a task itself already means that the students learn something. It is recommended in the trainings also to give students the freedom for trying out different ways for problem-solving and limit the time of explanations given by the teacher to five minutes maximum. FACE is based on focussing on the students and their activity during the lessons and on integrating their pre-existing competences as well as their family backgrounds into the given tasks. Task-based learning focuses on asking students to do meaningful tasks aiming for the competence the teacher wants them to acquire. Such tasks not only include a possible solution but also reflecting one’s own ways of solving conflicts, making short surveys, conducting interviews, exchanging opinions with others, creating a role play etc. Assessment is primarily based on task outcome (in other words the appropriate completion of tasks) rather than on accuracy of language forms (Ellis 2003).

**Enabling co-operative learning**

In the light of the different areas of self-competences individuals learn about themselves also by interacting with others. FACE encourages the concept of co-operative learning. Co-
operative learning focuses on developing openness when working together, on communication and on discussion. When working together, task content can be understood in more depth and students can develop greater self-confidence. When working in groups, students experience being accepted by others and valued as team members and can share their knowledge more freely. Cooperation can be encouraged by group games, group activities and group discussions. Teachers should take care to offer individual work periods and group work periods in a balanced ratio. Co-operative learning means that after the students engage in solving a task individually they will have the chance to discuss differences with a partner. Only then the discussion takes place in the plenary with the teacher. The teaching material of the FACE program uses variations spread over the different units. Feedback of the teachers of all pilot classes suggests that they themselves gained a lot in terms of applying co-operative learning methods, getting to know more and other sides as well as competences of their students through group work and being able to understand emotions of their students in a better way. Furthermore, the teachers note that FACE not only contributed to co-operation among the students but also to co-operation among their own colleagues.

**Orientation towards goals**

Every booklet, every day and every task in the FACE program includes descriptions of goals that should be reached by task-based learning. When explaining a task and giving oral instructions to the students it will still be very important to communicate the objectives (Brophy 2000). Only then will students understand why they are doing what they are doing. Students tend to adopt the goal orientations that are stressed in their classrooms. Given that the research is clear that approach mastery goal orientations are related to better motivational and cognitive outcomes, Schunk and Pintrich make suggestions such as focussing on meaningful aspects of learning activities, making evaluations private, designing tasks for novelty, using heterogeneous co-operative groups, helping students see mistakes as opportunities for learning and not failures etc. (2010). The FACE program does integrate these recommendations. The FACE booklets for students consist of a clear description of goals, methods and group organisation information. Writing is reduced to its minimum. For the training sessions a teacher training booklet was developed that gives more detailed information about pedagogical and didactical aspects as well as assessment recommendations. According to the pilot teachers’ feedbacks orientation towards goals does not only give guidelines for the students but also contributes to a better time management and to the flexibility of adapting times according to individual needs. Orientation towards goals in the FACE pilot study was associated with organisational aspects of classroom management by the teachers most of the times.

**Differentiating for different needs**

Differentiated instruction is simply providing instruction in a variety of ways to meet the needs of a variety of learners. In multi-cultural and multi-ethnic classes differentiation becomes an even more important issue as the levels of academic achievement often differ to a great extent. When working through the FACE program students receive tasks in the teaching and learning material. Often, they can choose how to solve these tasks, by choosing the way they want to work, the pace they want to work and which product they want to produce. The experience shows that especially in groups with a very high percentage of children with low
literacy skills not necessarily the seemingly easiest way of drawing is chosen (Weidinger 2014). The pilot teachers of FACE state that the differentiated approach of FACE contributes most to getting to know the different individual needs of their students in terms of learning processes. For them, the program helped with re-setting the learning situation and enabling students to work at their own pace and rhythm. Furthermore, FACE seems to really stimulate different learning types and incorporates all senses and competence areas in the given tasks. It is hardly impossible, so the teachers formulate, to fail at everything in FACE. This fact represents the most important aspect for them – that it promotes self-awareness, self-efficacy and a positive self-concept of the students.

**Conclusion**

The research-based extraction of key factors on a pedagogical and didactical level delivered important information for the further planning, developing and realising of the FACE program or similar inclusive education programs. The pedagogical and didactical key factors serve as the basis for future trainings and adapting the FACE teaching and learning material for the use in the context of teaching vulnerable groups. Following up the participating children and the development of their self-concepts showed that programs like FACE do have an impact on self-competences and life-skills when based on theoretical pedagogical and didactical ideas and concepts. However, rural and remote areas have to be considered especially in the design of implementation programs. The research study will continue in the coming years in Macedonia and Kosovo. What will be dealt as a separate subject of research and development is the impact that programs like FACE have on the involved families. The research in this context revolves around the question how the view on education in general and the view on the learning processes of their own children can be influenced. It is one of the declared goals of FACE to raise the awareness for education among Roma families and to improve the relationship between school and home by making pre-existing competences of children (and families) visible in the school context. Besides the ongoing implementation of the trainings for kindergarten, primary school and upper primary school formal integration into the school system will be the major objective for FACE in the project countries.
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