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Evaluation

of the "Participatory and Active Pedagogy" (PAP)

run by the

National Bureau of Protestant Teaching of the Protestant Council of Rwanda

Final report

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Content

Preface

The National Bureau of Protestant Teaching (Bureau National d'Enseignement Protestant, BNEP) of the Protestant Council of Rwanda (Conceil Protestant du Rwanda, CPR) commissioned us with the scientific evaluation of their teacher training program in participatory and active pedagogy (Pédagogie active et participative, PAP).

During this evaluation the colleagues of the National Bureau of Protestant Teaching granted us deep insight into their work. We heartily thank them for commissioning us with this interesting survey and for the trustful cooperation. We are particularly obliged to François Rwambonera (director of the BNEP) and his team: Pasteur Pierre Claver Bisanze, Elie Hagenimana, Immaculée Mukantabana, Pasteur Samuel Mutabazi, Jean Baptiste Ndamukunda, Monique Nyirandikumana, Jean de Dieu Rukezamihigo, Athanase Rutayisire, and Zacharie Zikama.

We thank the general secretaries of the CPR, Rev. Richard Murigande and Dr. Tharcisse Gatwa for their commitment and benevolent advice on this project.

An evaluation is only as good as the participating schools. The schools are kept confidential in the survey. We express our thanks to the school administrations, the teaching staff and the participating students who took part in the survey with high personal commitment and involvement.

We would like to express our sincere thanks to Esther and Dr. Christian Grêt, who willingly allowed us an insight into their educational work and explained the PAP training program to us.

This evaluation has been intensively accompanied by a consultative council. Its members critically and constructively accompanied the problem and the methodological approach, as well as the data collection and the discussion of the results. We sincerely thank them! By name we thank: Dr Tharcisse Gatwa, general secretary of the CPR (chairperson), Mgr Augustin Mvunabandi, member of the commission for education of the CPR, Mgr Alphonse Rutaganda, director of the National Secretariat of Catholic Teaching (Secrétariat National de l'Enseignement Catholique, SNEC), Rev. Dr Elisée Musemakweli, president of the EPR (Eglise presbyterienne au Rwanda) and president of the commission for education of the CPR, Dr Erasme Rwanamiza, general director of education at the Ministry of Education (Ministère de l'Education, MINEDUC), Dr Faustin Habineza, professor at the Kigali Institute of Educa-

0   Summary

Since 1998, the National Bureau of Protestant Teaching (BNEP) of the Protestant Council of Rwanda (CPR) has been running an in-service teacher training on participatory and active pedagogy (PAP) with the financial support of the German Church Development Service (EED). About 1,500 teachers of Protestant schools all across Rwanda have been trained in student-centered classroom-management since then. In 2010, an internationally renowned team, led by Prof. Dr. Annette Scheunpflug from the University of Erlangen-Nuremberg in Germany, conducted a scientific evaluation of the program, measuring its outcome on teacher- and student-level. The study was realized in a control-group design (comparing schools whose teachers have been trained with schools whose teachers have not been trained), using instruments of international school performance research and reaching 116 teachers and 976 students.

The scientific survey shows that this program has an impact on teacher- and student-level alike and that it makes a difference to school life whether or not the teachers have participated in the PAP-training. Students in PAP-schools (schools whose teachers have participated in the training) feel less afraid in class and understand better the structure of the lesson, which enables them to show a better participation in class. Teachers are less oriented towards egoistic competition in class and use more student-centered learning activities than teachers who have not been trained in PAP (non-PAP-teachers). The PAP-training also improves the teachers' professionalism and leads to a more positive interaction in class: PAP-teachers succeed in dealing with conflicts constructively better than teacher without PAP-training; students in PAP-schools experience less violence by teachers than students in non-PAP-schools. The program also changes the attitudes of teachers regarding for example their implicit theory of capability.

All this improves the students' learning environment and shows an impact on the motivational structures of the students: Students in PAP-schools have a higher self-esteem and a higher school-related expected self-efficacy than students from non-PAP-schools. Both aspects are not only important to improve the learning outcome but to support an autonomous personality as well.

Apart from its success, there is still potential for further development. Important didactical aspects, such as positive dealing with mistakes, strengthening the students' self-efficacy regarding social demands, or adopting different perspectives could be further developed.

1 Participatory and Active Pedagogy (PAP) in Protestant Schools in Rwanda

1.1 Student-centered learning as an educational need

The central aim of PAP is to increase the quality of the lessons through a student-activating design. A lesson design which activates students as well as their cognitive abilities leads to a better performance or rather a higher acquisition of competencies – the reason for which is on the one hand a better acquirement of learning matters and on the other hand a higher expected self-efficacy, which influences learning positively.

Student-centered learning and school performance
One of the main challenges concerning the improvement of school quality is the improvement of the lessons and thereby the interaction between teachers and learners (cf.for Africa Yu 2007; Stanat et al 2010). As the learner has to be in the focus of all efforts, social competencies of teachers are indispensable. Teachers have to learn to pay attention to students individually; they have to learn to deal with the heterogeneity of a learning situation adequately (e.g. World Bank 2006; Ginsberg & Wlodkowski 2000). Besides subject-based and diagnostical competencies, social competencies are required to create a comfortable learning and school climate, competencies to deal with conflicts and those to promote the sense of self-esteem (cf. Leroy et al 2007;Schnebel 2003).

Conditions of motivation
Learning as the most basic objective of all educational efforts depends on the interaction of multiple factors (see fig. 1). A positive school and classroom climate and the trust in the potential change of one's own competencies are conditions for reaching the aim to strengthen especially the self-esteem. At the same time, a positive sense of self-esteem positively influences learning. Failure hinders learning, whereas success always stimulates learning.

Learning mostly takes place in social groups. This is the reason why situations of comparison can easily come up. A social comparison – "Where do I as a student stand in my class in comparison to my fellow students?" – is only useful for those students who are in front place regarding their achievement. All other students will run the risk of getting frustrated and demotivated. However, the "criteral comparison" meaning "How am I doing in view of the demands of a given task?" and the individual comparison, giving answers to questions such as "How did I do in regard to a particular task two weeks ago and how am I doing today?", is highly productive. Student-centered learning is aware of these challenges and gives recom-

mendations to teachers on how to organize lessons in order to create a positive learning climate.

Fig. 1   Learning and psychological processes

„Learning Engine"

Positive school climate

Belief in change

Good quality teaching

Self-esteem

Emotions:
- Failure
-Success

Comparisons:
- individual
- social
- criterial
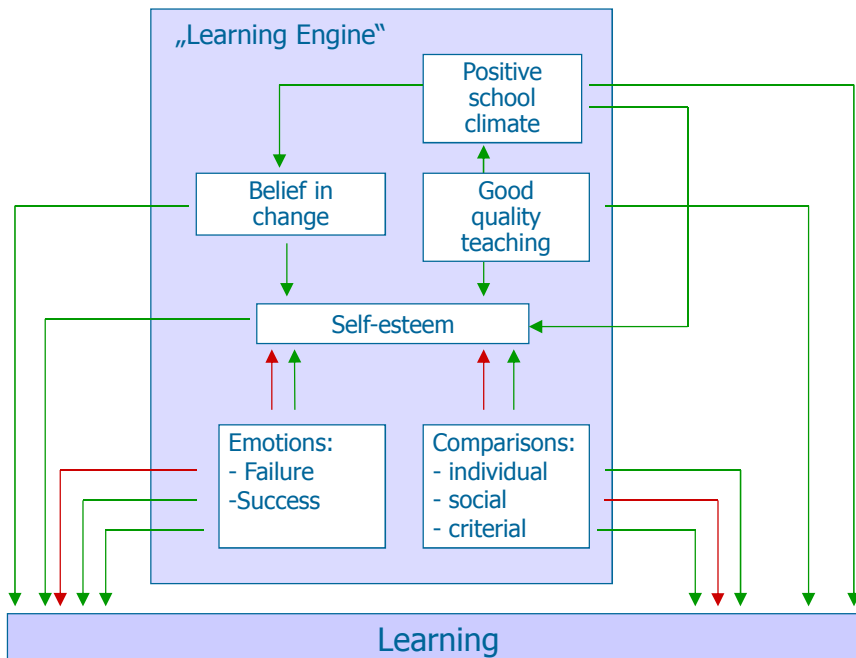
Learning

(cf. Zeinz & Scheunpflug 2010)

The demand of training for teachers

Teachers have to learn learner-oriented teaching (cf. Tschannen-Moran et al 1998). Teaching and learning are social activities and based on patterns of self-understanding and social roles. Social learning constitutes an indispensable necessity for students as well. In addition to the family, school passes on the necessary social competencies which are of great importance for a successful life concerning work, societal participation and private life style. Expectations concerning self-efficacy, independence, and the ability to cooperate as well as skills for self-regulation signify core attitudes and psychological patterns which need to be promoted (cf. Wang et al 1993; Delors 1996; Rychen & Salganik 2001). They outline the necessity of "interacting in heterogeneous groups" (Rychen & Salganik 2001/OECD) as well as "learning to live together" (Delor 1996). These attitudes are not only supported by the content of school subjects but in particular by the organization of school life itself (cf. Gillies 2007). In the way the social climate of a school is organized expectations towards societal demanded behavior are implicitly communicated and passed on. Therefore, those social competencies are essential and closely linked to the behavior of teachers. Quality of education is highly bound to the dimension of social interaction in school life.

PAP as a contribution to a learner-centered education

In order to realize these ideals, a variety of pedagogical changes is required:

- The teaching methodology needs to be changed from an interrogatively developing teacher-class dialog towards participatory learning.

- The teacher-student communication needs to be changed towards an appreciative communication.

- Teachers need to intensively and cognitively penetrate the teaching matters in order to permit an individual grow in learning.

1.2 Education after the genocide – participatory and student-activating education as a peace educational approach

Peace education as objective

In 1994, the Rwandese society was shaken by a terrible genocide, in which the lives of hundreds of thousands of people were taken and millions were left with physical and psychological injuries. The social life of Rwanda has been lastingly disturbed. The genocide itself in its causes and effects has become the object of a wide range of international research (cf. concerning its historic roots Mamdani 2001; Prunier 2008; its consequences Clark & Kaufman 2001; the role of the church Gatwa 1999; 2005).

In this historical situation there is the question about the role of schools and education. In „Education After Auschwitz" (1966) Theodor W. Adorno expresses this groundbreakingly, being disappointed by how little this question was being addressed in post-war Germany: „The premier demand upon all education is that Auschwitz not happen again. Its priority before any other requirement is such that I believe I need not and should not justify it. I cannot understand why it has been given so little concern until now. To justify it would be monstrous in the face of the monstrosity that took place." The first duty of educational action is to make its contribution so that such a tragedy can never happen again. This does not mean that education alone should deal with this question – it is certainly helpful to also realize the limits of education. But it should be its foremost task to rise to this challenge (cf. concerning the tasks and problems of school education in societal fields of conflict Aedo-Richmond & Retamal 1998; Arnold et al 1998; Bush & Saltarelli 2000; Schell-Faucon 2002; Smith & Vaux 2003; Tawil & Harley 2004; Seitz 2004; Lenhardt 2009).

Different priorities can be established for educational action regarding peace educational intentions (cf. on conceptual questions for an overview Harries & Morrison 2003; Haussmann et al 2006; Schröder et al 2008; Bajaj 2008; in historical-conceptual perspective Nipkow 2007):

(1)   School education can contribute to socially reappraising such a tragedy and realizing it with the help of a lively culture of remembrance.

(2)   School education can help to offer people the perspective that violence and exclusion are not attractive options.

(3)   School education can help to raise young people as mature subjects so that authoritarian structures and demagoguism lose their fascination.

(4)   School education can contribute to practicing democratic ways of solving conflicts.

The program of the „Participatory and Active Pedagogy"(PAP), being evaluated with this study, is a peace educational measure which reacts to the horrors of the genocide. With this long-standing program, training for teachers is being offered which should enable them to practice subject-oriented and learner-centered education in the classroom, i.e. an education based on the needs of the students. Thereby, not only effective learning but also peace educational measures should be implemented in the lessons and the school practice. This educational approach uses student activating methods to improve the participation of the students in class, therewith strengthening their self-esteem and self-confidence. In addition, peaceful ways of resolving problems should be trained (cf. on PAP in detail chapter 2).

1.3   The educational profile of Protestant schools

The contribution to peace education

A peace educational approach as mentioned above takes up central concerns of Protestantism in two different perspectives:

Firstly, Protestant education should always be a subject-oriented education in accounted freedom. Subject-oriented education means „the meaningful demand from man to comply with his purpose as God's creation in aspects and relations beyond social standardization and short-term instrumentalizations" (EKD 2010, p. 14). From a reformation perspective the likeness and personhood of each individual person before God is being emphasized. As God's representative on earth, he is thought to be capable of and trusted with an autono-mous judgment concerning theological questions as well as questions to all other dimensions of life. God's gracious and merciful devotion to men enables man to autonomy and responsi-bility. The commitment to God's commandment gives him the „Freedom of a Christian" (Mar-

tin Luther), which releases him from many constraints and renders him open to turn to his neighbor and to assume responsibility for his fellow men and for society.

The educational offers have to meet this freedom and the demand likewise. Adolescents have to be pedagogically accompanied on their way to maturity, autonomy, and responsibility. The educational offers therefore have to strengthen the student's own activities and responsibility for theological reasons. „A protestant profile arises where young people are potentially enabled to experience the comfort and the demand of the gospel and where they can fathom out the meaning of the freedom of a Christian in their own lives." (EKD 2010, p. 14)

Secondly, the aim of all educational efforts results from this basic principle, namely to serve the well-being and the salvation of all people, or biblically speaking: the Shalom. Where "mercy and truth are met together, righteousness and peace have kissed each other"(Psalm 85.11) the prophetic vision of a renewed and changed world through God's shalom can be experienced already today. Martin Luther urged the schools to make a contribution to "peace, justice and life". This needs to have an educational effect, as young people are guided by educational offers towards a behavior which promotes peace and justice.

Protestant schooling as a service to society
Before the time of the Reformation, which took place in the 16th century, nearly all schools in central Europe had been schools as part of monasteries. Therefore, they had served primarily for the training of the clergy but had gradually been opened to offer basic education to everybody. During the Reformation, Martin Luther insisted on schools being run by the state authorities in his essay "To the Councilmen of all Cities in Germany that they Establish and Maintain Christian Schools" (1524). At the same time, Philipp Melanchthon drafted an educational program which found its expression in the "kursächsischen Schulordnung" (school regulation of Electoral Saxony) in 1528 and became a guiding example for Protestant schools.

Thereby a double strategy was set up to shape the further development of Protestant as well as Roman-Catholic school systems: on the one hand the demand to establish schools run by the state – which led to the creation of a secular school system – and on the other hand the development of specifically confessional school profiles (cf. Standfest et al 2005). Both elements also describe the situation in Rwanda where Christians attend state-run schools as well as schools run by the Protestant churches or the Roman-Catholic church

Schools run by the Protestant church consider themselves as both confessional schools and public schools meaning that they are aware of societal obligations and ready to fulfill them[1]. Schools in church ownership are a vivid expression of a democratic educational system. Schools run by the Protestant church are different to state run schools due to the fact that they ground in the Christian faith as their confession and that they show a Protestant profile in everyday school life. Elements of this profile are the specific care for each child or student, an education in turning to one's neighbor – also to the far neighbor - and the experience of community; this can be summarized as a student-centered approach (cf. EKD 2009).

Against this setting the conventional terms „public schools", signifying state-run schools, and "private schools" marking non-governmental schools, stand in contrast with the self-understanding of Protestant schools. A civil society consists of non-governmental related associations and organizations, free initiatives, groupings and coalitions as well as foundations, agencies and institutions owned by civilians. All these together make up the so - called civilian or civil society which in many respects contributes to a democratically constituted society. Against this background schools in Protestant ownership should and want to be "public schools" as they feel bound to the public gospel which addresses all mankind and they intend to contribute to the education and formation of children and young people as a joint societal task. Facing these challenges these schools are an expression of the plural fabric of society.

Therefore, Protestant schools are part of the public educational system and contribute jointly with state run schools to the important task of education and training indispensable for a modern society. Protestant schools can also play the part of creating and testing school models for new educational approaches and then recommending them to other "public schools".

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[1] The content of the following two paragraphs refers roughly to document EKD 2009.

2   PAP – The approach of the Participatory and Active Pedagogy

The Protestant churches in Rwanda maintain about 150 nursery schools, 550 primary schools and 200 secondary schools with about 535,000 students, being taught by about 8,800 teachers (December 2009).

The PAP-program addresses these teachers and their principals. It comprised several phases, in each of which different target groups were taken into focus (from 1998 to 2000 the first phase, which was evaluated, from 2002 to 2006 the second phase, and until 2010 a third phase, all of which were funded by the German Church Development Service (Evangelischer Entwicklungsdienst, EED); a fourth phase until 2013 has just been approved by the EED).

Content wise it focuses on the demand to put the learning child more at the center of the learning process. Therewith the traditionally passive role of the student in class as well as the authoritarian basic structure in school should be overcome. The school should be developed regarding the learning success and as the basis for a democratic education.

The principals, as well as the teachers (sometimes the whole teaching staff) are being trained in a three-week course in PAP, i.e. how to give learner-centered lessons. The training is non-specific in its domain, i.e. it addresses teachers of all subjects. The course combines activating didactical methods (group work, partner work, interviews, role plays, etc.) with units on learning theory and psychology, which normally refer to a constructivist understanding of learning and teaching. In addition, communication theories as well as practical exercises on communication (e.g. the sending of I-messages) are integrated in the program. Following this two-week training, what has been learned is being practically applied in a local school and then jointly analyzed. The program of the course has been published and is therefore publicly accessible (Grêt 2009). After the training, the teachers are professionally accompanied by regional coordinators during the implementation. They are also invited to follow-up courses. The high fluctuation of teachers from faith-based schools to public schools (due to better salaries and social security) has lead to a situation that schools which have already been trained consistently get new teachers. Those teachers are then introduced to the method through training within the schools, the so called "initiation". At the beginning, the program was accompanied by an expert on traumatic experiences and special offers for traumatized people were held in store. Furthermore, dealing with traumatic experiences was part of the content of the program.

Between 1998 and 2010 a total of 1,500 teachers were trained. When choosing the schools to be trained, a special emphasis was given to the participation of women.

The program was twice evaluated externally. The first evaluation by the German Federal Ministry for Economic Cooperation and Development in 2000 (cf. Cécé 2001) recommended to continue the project and suggested several minor administrative improvements. In 2005, the program was evaluated a second time by an international team, lead by Michel Moukouri-Edeme (cf. Broutier, Moukouri-Edeme & Sovoessi 2005). This time the focus was set on its approach and possible aspects of continuation. The evaluation resulted in the recommendation to expand the program, which so far had had its focus on primary schools, to secondary schools.

3   Focus of the evaluation

A perspective on the outcome of the program

The evaluation assesses the outcome of the program on teacher and student level. The aim is to identify if and to what extend not only the teachers who participated in the training, but also the main target group – the students – is beneficiary of the program.

The study therefore evaluates on teacher level self-concepts (including concepts of learning), feelings towards profession and the role of the teacher in the classroom (as reported by the teacher), and on student level self-concepts, emotions, social relations (as reported by the students), and on classroom level the climate in class and the level of activities (as reported by the teachers and students).

School and classroom research have indicated at different points during the last years that the impact of school education depends on a number of factors. Thus, the school's socio-cultural context, the way the lessons are designed, the teacher's personality, as well as the students' individual characteristics, have to be taken into consideration. A choice of possible factors is shown in fig. 2 (cf. esp. Helmke 2009). Some of these interrelations are reflected upon in this scientific evaluation. To control these aspects, data from the school as well as from the family background of the participants (teachers and students) is being added.

Fig. 2: Model of the interrelations between aspects of the evaluation
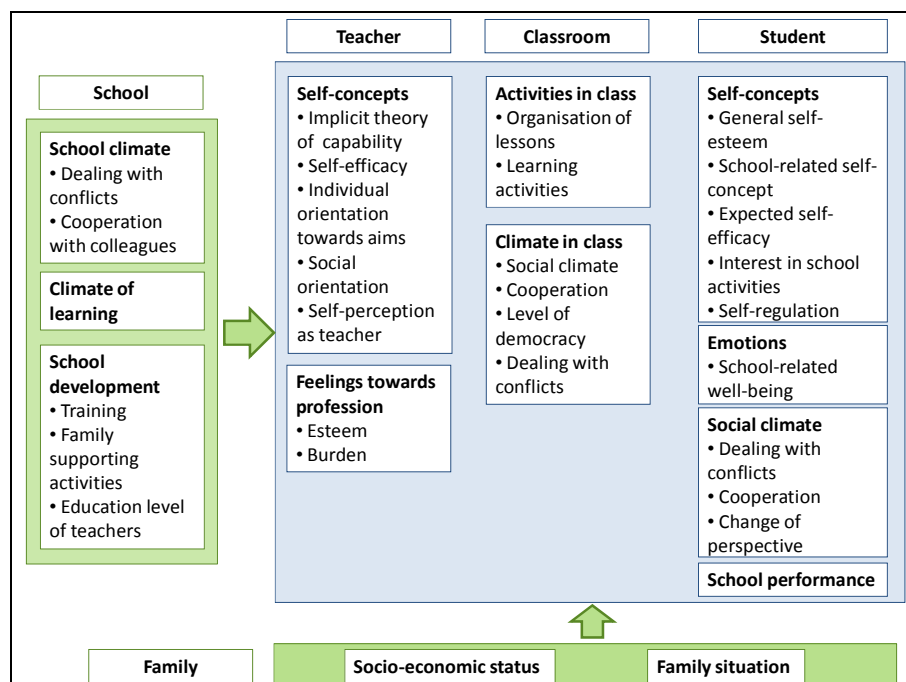
Source: adapted; based on Haertel, Walberg & Weinstein 1983/1993, Helmke & Weinert 1997.

The central question of the evaluation is: Are there measurable and significant differences between the results of schools where the teachers have been trained (so called PAP-schools) and schools where the teachers have not been trained (so called non-PAP-schools) concerning these different aspects? And if there are: Are these differences related to the participation in the PAP-training or do other factors influence the results?

With this perspective, the evaluation adds to the already existing program evaluations, which looked at the project handling (Cécé et al 2001) and the testimonies of participants and the opinions of the people involved (Broutier 2005).

Results of peace educational measures and programs of social education – the state of the discussion

To understand the following results it is important to realize how school influences the educational outcome. Tschannen-Moran et al (cf. 1998) were able to demonstrate that teachers with a higher expected self-efficacy show a higher motivation for their profession, prepare their lessons better, and make more efforts in supporting their students. Those hints at the relevance of experienced participation and self-efficacy are consolidated by other studies as well (Bertelsmann Stiftung 2007; Abs et al 2007).

The effects of teacher training on the attitudes of students are considered to be rather small. One has to realize which influence school can have in this regard. In so-called industrialized countries, and there especially in the area of social learning, the effects of social learning are indicated to be small, as schools find themselves in competition with a variety of educational and socialization players who reduce the school's effects (cf. Scheerens & Bosker 1997; Baumert & Köller 1998). Therefore, large effects should not be expected. An evaluation of a multiannual project on democratic education in Germany showed that a significant and relevant increase for example in self-esteem or in adopting a different perspective could not be observed (cf. Abs et al 2007; p. 58f). Despite their great efforts in the area of social learning, protestant schools in Germany reach only slightly higher results in the field of social cooperation than public schools (cf. Standfest, Köller & Scheunpflug 2005). Seeing the great importance of family education, especially in conveying values, even small results attributed to the program are important results.

4 Methods

4.1 Methodological Approach

The study is designed as a quantitative, hypotheses testing procedure. The peace educational approach aims at specific behavior and attitudes. The evaluation attempts to operationalize this behavior and these attitudes in a way that they can be tested in a control group design. Therefore teachers come into focus as the main target group of the PAP-training. In addition, the study wants to survey if these measures reach the students and therefore a second focus is put on students. Results from schools whose teachers participated in the PAP-training (PAP-schools) are compared with results from control schools, i.e. schools whose teachers did not participate in the PAP-training (non-PAP-schools).

The attitudes to be tested can only be surveyed as a self-evaluation or self-assessment of the teachers and students. This includes the disadvantage that the attitudes are not always free of socially desired answers. In addition, the method includes the problem that it requires the teachers and students to be able to reflect upon their behavior in such a way that they can transform it into language. In order to guard against this problem, lessons were observed. It is to be expected that teachers show a stronger social desirability than students.

The following methodological approach is chosen:
- Paper & pencil questionnaires for students, teachers and principals
- Observations of English or mathematics lessons.

The methodological approach was developed with the BNEP team during a workshop in 2009 and later discussed with the consultative council in 2010. The Ministry of Education (MINEDUC) and the National Institute of Statistics (NIS) were informed about the study.

4.2 Instrumentation of the questionnaires

Translation and adaptation of the questionnaires
So far, data on forms of social learning have only been collected in industrialized countries. The languages used either show similar concepts due to a common language family or there exist evidence of problems with translation due to multiple translations already done. In addition, the countries in which the surveys were carried out are characterized by a similar

educational level. All this cannot be assumed for this study. Given the language situation in Rwanda it has been evident that this study needs to be done in Kinyarwanda. Kinyarwanda is a Bantu language with approximately 9 million speakers in Rwanda and surrounding states (as a recognized minority language in Uganda). Kinyarwanda is an agglutinative language with noun classes but few independent adjectives. The proportion of non-literal speakers is high (the ratio differs; in some sources 45 %, cf. http://www.panafril10n.org/index.php/ PanAfrLoc/RwandaRundi; 10.9.2010).

The questionnaires were first translated from German into Kinyarwanda by a native speaker. Then the translation was discussed with a group of experts (BNEP team). After this the first translation, as well as the revised translation, were re-translated into German by a native speaker not involved in the discussion. Problems which then occurred were again discussed with the group of experts and then translated by a native speaker. The translation was tested in a pre-test with 405 students and 37 teachers and then again modified. Nevertheless, the internal consistency of the scales did not reach the same value as in the original studies. Using a factor analysis and excluding items did not often help to improve the consistency. The data shows a tendency towards a rating which is little differentiated (i.e. most ratings are to be found on the extreme positions). Since the grades in Kinyarwanda were surveyed, we could eliminate with an analysis that the poor Cronbachs Alphas are due to a missing reading capacity, or the scattering of the age groups within the classes.

Instrumentation of the questionnaires
The *teacher questionnaire* acquired information on the attitudes of teachers towards their own teaching and learning, self-concepts and their perception of the school climate. In addition, different background information about the educational biography, the socio-economic status, as well as the individual social background was collected. The *student questionnaire* contained information on the students' self-concepts, how they perceive their school life and the lessons, the social climate, as well as context information concerning the socio-economic and family background, and school performance. In addition to the student and teacher questionnaire a *school questionnaire* was designed to receive background information on the school.

The key concepts of the teacher and student questionnaires and their instrumentation are described below (for the scales, see appendix):

4.2.1 Teacher questionnaire

Self-concepts

Expected self-efficacy

The concept of general expected self-efficacy asks for a personal estimation on how one can generally cope with difficulties in every-day life. This competence is an important resource when dealing with every-day demands of the environment and is closely linked with the willingness to accept new challenges. It steers the complexity factor of chosen actions, the perseverance and therewith indirectly the level of success of the action (cf. Schwarzer & Jerusalem, 1999, p. 58f.).

At teacher level the general self-efficacy as well as the self-efficacy towards their teaching are surveyed with the help of two scales from Schwarzer & Jerusalem (1999). The general self-efficacy scale consists of 10 items (example item „ I can find a solution for any problem ", Cronbachs α in the original .86; Cronbachs α in the present study .81; four-level answering format, 1 = I disagree, 4 = I agree a lot), the teaching self-efficacy scale consists of 9 items (example item „ I know that I can manage to teach everything that is relevant for the test even to the most problematic students ", Cronbachs α in the original .81; Cronbachs α in the present study .61; four-level answering format, 1 = I disagree, 4 = I agree a lot).

> **Cronbachs α**
>
> Value to measure the homogeneity of a concept, i.e.
>
> in how far the different items form a scale
>
> Cronbachs α > .75 = very good
>
> Cronbachs α < .55 = not acceptable, to be discussed

Implicit theory of capability

The implicit theories of capability are an important indicator of the teacher's attitude and self-perception concerning learner-centered education and the activation of the students. Implicit theories of capability mean the conviction towards the convertibility of capacities or rather talent (Dweck, 1999). The teachers' conviction is being evaluated regarding the question in how far the students' capacities and talents can be changed. Leroy et al (2007) for example tested the influence of the implicit theories of capability on the teachers' activities in class, which then influences the students' activities. They were able to show among other things that teachers who believe that capacities and talents cannot be changed have a tendency to show less support for autonomy. On the other hand, believing in the changeability, imparted

by a high self-efficacy of the teachers, strengthens the support for autonomy. In the present study a scale from Ziegler et al is used to measure this aspect (9 items, example item „My students cannot really change anything about how talented they are ", Cronbachs α in the original .77 ; Cronbachs α in the present study .72; six-level answering format, 1 = I disagree a lot, 6 = I agree a lot).

Individual orientation towards aims

The individual orientation towards aims is measured with adapted scales from Dresel (2008). One scale raises the orientations of the teachers towards competition in class (5 items, example item "In my lessons I attach great importance to motivate students by competition", Cronbachs α in the original .71 Cronbachs α in the present study .59). In PAP-schools, less importance should be attached to this scale due to the higher impact of individual learning, which concentrates on the individuals without comparing groups. The second scale shows the orientation of teachers towards cooperation and individual learning (10 items, example item „ In my lessons I attach great importance to the students helping each other ",Cronbachs α in the original .67 Cronbachs α in the present study .61; six-level answering format, 1 = I disagree a lot, 6 = I agree a lot).

Social orientation

The teachers' social orientation in class is measured with a scale from Gerecht et al (4 items, example item „I take time during class for personal and social matters", Cronbachs α in the original .73; Cronbachs α in the present study .43; four-level answering format, 1 = I disagree a lot , 4 = I agree a lot).

Feelings towards profession

Esteem

In this study, the esteem is measured with a scale from national PISA (3 items, example item „Do you think society appreciates your work?" Cronbachs α in the original .60; Cronbachs α in the present study .58; dichotomous answering format, 0 = no, 1 = yes). In this study, the scale is split into two parts: the esteem of the parents and society, and the esteem of the students. Taking out the esteem of the students, a Cronbachs α .73 is reached.

Burden

The burden is measured with an adapted scale from Schwarzer & Jerusalem (1999) (7 items, example item „I often feel overtaxed ", Cronbachs α in the original .83; Cronbachs α in the present study .61; five-level answering format, 1 = I disagree a lot , 5 = I agree a lot).

Activities in Class

Learning activities

The scale on learning activities is based on a scale from national PISA (2001) (13 items, Cronbachs α in the original .74; six-level answering format, 1 = never, 7 = in almost every lesson). We split the scale in two, one covering the traditional teaching (example item "in my lessons I talk and ask questions and single students reply"; Cronbachs α .67) and one highlighting student-centered ways of teaching, Cronbachs α .49).

Climate in Class

Democratic climate in class

The democratic climate in class is instrumented with a scale from BLK-Demokratie (2007) (7 items, example item „In my lessons I present different views on the same matter ", Cronbachs α in the original .68; Cronbachs α in the present study .53; four-level answering format, 0 = never, 4 = often).

Students' level of democracy

The students' level of democracy is measured with a scale from BLK-Demokratie (2007) (8 items, example item „Our students are able to give reasons for their opinion", Cronbachs α in the original .85; Cronbachs α in the present study .56, four-level answering format, 1 = I disagree, 4 = I agree).

Violence by teachers

The teacher-violence-scale is based on a scale from BLK-Demokratie (2007) (5 items, example item „A teacher hit a student", Cronbachs α in the original .65; Cronbachs α in the present study .62; four-level answering format, 0 = never, 4 = often).

School objectives

The teachers' perception concerning the school objectives are instrumented with a 12 item scale from Klieme, Reusser & Diedrich (2005), adopted from Fend (1998) (example item „At my school we encourage the students' self-confidence "; shortened scale, Cronbachs α in the present study .60; six-level answering format, 1 = I disagree a lot, 6 = I agree a lot).

4.2.2 Student questionnaire

Self-concepts and self-efficacy

Self-efficacy and school self-concepts are the key determinants of intrinsic motivation. They both describe the experience of one's own competencies. Students experience themselves as self-dependent and competent and this emotionally positive experience enhances the motivation. The concept of self-efficacy is based on Bandura (1977), who distinguishes between a person's expected result and expected efficacy. While the expected result specifies which behavior leads to success or failure, the expected efficacy addresses the question whether one considers oneself capable of executing a certain behavior leading to success. Moschner & Dickhäuser (2006) describe self-efficacy as „a person's conviction to be able to successfully execute a behavior which is necessary to reach a certain result of action "(p. 629). Key resources for self-efficacy are coping experiences (success vs. failure), substitutional experiences in which self-efficacy is being fed by the observation of a successful or unsuccessful model, feedback from a third person and physiological and affective conditions in which people suggest a lack of competence due to their strong agitation in a situation of performance (cf. Jonas & Brömer 2002). The experience of school self-efficacy can be decisively promoted in class when students work self-dependently on exercises, and with the help of their obtained performance results and a corresponding feedback from the teacher experience themselves as the cause for their success.

In the study, the school self-efficacy is instrumented with a scale from Schwarzer & Jerusalem (6 items, example item „I can solve even difficult exercises in class if I make an effort", Cronbachs α in the original .70; Cronbachs α in the present study .56; four-level answering format, 1 = I disagree, 4 = I agree a lot). The expected self-efficacy concerning social demands is also instrumented with a scale from Schwarzer & Jerusalem (8 items, example item „I dare to say what I think even when the others have a different opinion", Cronbachs α in the original .57; Cronbachs α in the present study .63; four-level answering format, 1 = I disagree, 4 = I agree a lot)

Dealing with failure

In this study dealing with failure is instrumented with a scale from Dresel et al (14 items, example item „If I make a mistake, I enjoy class less than before", Cronbachs α in the original .77; Cronbachs α in the present study .62; six-level answering format, 1 = I disagree a lot, 6 = I agree a lot).

Self-esteem

In this study self-esteem is instrumented with a scale from Collani & Herzberg (8 items, example item „ I consider myself a precious person, at least I'm not less precious than other people", Cronbachs α in the original .83; Cronbachs α in the present study .55; four-level answering format, 1 = I disagree, 4 = I agree).

Self-regulation

The scale on self-regulation focuses on the tendency to maintain difficult activities even if influences appear which affect the motivation and concentration. To be able to concentrate even if factors of distraction occur is an important regulating activity. Preserving motivation or restoring it after a set-back are such activities as well. There are individual differences in these two aspects which are to be captured in the present instrument. In this study self-regulation is instrumented with a scale from Schwarzer & Jerusalem, which has been edited by the evaluation team (10 items, example item „ After a break I can easily continue working", Cronbachs α in the original .82; Cronbachs α in the present study .47; four-level answering format, 1 = I disagree, 4 = I agree a lot).

School-related self-concept

School-related self-concepts are self-evaluations of one's own capabilities which refer to the obtained results in the different school subjects. They are based on experiences in situations of performance and on the interpretation of these experiences, for example with the help of attributing causes. In educational-psychological research school-related self-concepts are considered to be important person variables, which can explain and predict students' learning and performance behavior. Within research studies prevail which show that school-related self-concepts are always subject-specific. Thus a student can have a high self-concept in mathematics but at the same time a low self-concept in languages, and therefore the survey of school self-concepts is formulated subject specific. This is also why in this study the students' subject-specific self-concept (mathematics, Kinyarwanda) was surveyed in addition to the general school self-concept.

Both self-concepts were instrumented in this study with scales from PISA 2000 (example item of the general school self-concept „In most subjects I learn fast", Cronbachs α in the original .78; Cronbachs α in the present study .68; four-level answering format, 1 = I disagree, 4 = I agree, 3 items; example item of the subject specific self-concept „ In Kinyarwanda I get good grades", Cronbachs α in the original .83 (subject: German); Cronbachs α in the present study .68; four-level answering format, 1 = I disagree, 4 = I agree, 6 items).

Emotions

Fear in class is instrumented in this study with a scale from Ditton (3 items, example item „I'm afraid to raise my hand during class", Cronbachs α in the original .88; Cronbachs α in the present study .68; four-level answering format, 1 = I disagree a lot, 4 = I agree a lot).

Social climate

Cooperation vs. egoistic competition

An orientation towards cooperation is crucial for a peaceful social interaction. Eder (2006) describes the interaction of favorable effects in which an orientation towards cooperation is involved as follows: Where „an individualizing and supporting teacher-student-interaction, especially solicitousness, student-centered attitude, and an (individual) reference norm orientation appear in connection with a cooperative and emotionally positive student-student-interaction […], a strong enhancement especially of the school self-efficacy can be detected. Those influence significantly the school performance, the feeling in school and test anxiety. (…)" (p. 627). Rost and Schermer (2006) also report that strengthening the in-class cooperation prevents performance anxiety among students. The orientation towards cooperation or competition is instrumented with two scales from national PISA (cooperation: 5 items, example item „ I learn most when working together with other students ", Cronbachs α in the original .75; Cronbachs α in the present study .53; four-level answering format, 1 = I disagree, 4 = I agree; competition: 4 items, example item „ I like to try to be better than the other students", Cronbachs α in the original .75; Cronbachs α in the present study .56; four-level answering format, 1 = I disagree, 4 = I agree).

Adopting different perspectives

The capability to adopt different perspectives is regarded as an important pre-condition for pro-social action. It is measured with 5 items from national PISA (example item: „Before criticizing people I try to imagine how I would feel in their place"; Cronbachs α = .73 in the original; .59 in the present study, four-level answering format 1 = I disagree a lot; 4 = I agree a lot).

Activities in class

A key aspect of the students' perception of class is the question of whether students comprehend the structure of the lesson and if it enables them to follow actively in class. In this study a scale from Gerecht et al is used (9 Items, example item „ During the lesson the most important is often summarized ", Cronbachs α in the original .86; Cronbachs α in the present study .85; four-level answering format, 1 = I disagree a lot, 4 = I agree a lot).

Learning activities

Learning activities are instrumented in this study with a 13 item scale from the national PISA study (example item „We work in small groups", Cronbachs α in the present study .77; four-level answering format, 1 = never, 4 = in all or half the lessons).

School climate / Climate in class

To assess the school climate the student questionnaire contains three scales from PISA. The scale *students' teacher perception* deals with the question of how the teachers are looked upon by the students (5 items; example item from international PISA (2003; 160): „Most of my teachers are interested in what I have to say "; Cronbachs α = .76 in the original; .68 in the present study, four-level answering format, 1 = I disagree a lot; 4= I agree a lot). The scale *student-teacher-relation* is instrumented with a six-item scale from international PISA (2003) as well (example item: „Our teachers have a sympathy for our personal problems"; Cronbachs α = .78; .77 in the present study, five-level answering format, 1 = I disagree a lot; 5 = I agree a lot). Finally, the scale *general school satisfaction* is used as a global indicator for the assessment of schools or rather the climate in school (2 items from national PISA; example item: „In my school I feel to be in good hands "; Cronbachs α = .68; . Cronbachs α = .55 in the present study, five-level answering format, 1 = I disagree a lot; 5 = I agree a lot).

Level of democracy

In this study the level of democracy of the school is instrumented with a 10 item scale. The scale has been adapted to the Rwandese situation, using a scale from BLK-Demokratie as a basis (example item „My school is a place where I learn to give reasons for my opinion", Cronbachs α in the original .83; Cronbachs α in the present study .52; four-level answering format, 1 = I don't agree, 4 = I agree).

Violence

In this study three aspects of violence in school are being differentiated: students as victims of violence by teachers, students as victims of violence by their fellow students, and students as perpetrator of violence against fellow students. The scales have been adapted to the Rwandese situation from BLK-Demokratie.

The teacher-violence-scale is instrumented with 5 items (example item „A teacher hit you ", Cronbachs α in the original .65; Cronbachs α in the present study .72). The student-victim-scale consists of 9 items (example item „A fellow student took something away from you against your will ", Cronbachs α in the original .79; Cronbachs α in the present study .81), so does the student-perpetrator-scale (example item „You deliberately broke something in school ", Cronbachs α in the original .86; Cronbachs α in the present study .86). All three

scales have a four-level answering format (1 = never, 4 = often).

Dealing with conflicts

Dealing with conflicts is instrumented in this study with a scale from Klieme, Reusser & Diedrich (2005), adopted from Fend 1998 (8 items, example item „If there are different opinions in class concerning an important question, we better not speak about it ", Cronbachs α in the present study .63; four-level answering format, 1 = I disagree a lot, 4 = I agree a lot).

4.2.3 Background of teachers and students

The number of books at home is considered as an indicator of the educational background of the teachers as well as the parents (item taken from international PISA). This variable has proven to be a valid measurement for the educational background in all student assessment studies (e.g. Maaz, Chang & Köller 2004). The variable has been adjusted to the Rwandese situation with the following values: 1 (none), 2 (1-5 books), 3 (6-15 books), 4 (16-50 books), and 5 (more than 50 books). The number of books has been visualized by a picture of a bookshelf.

To measure the socio-economic status, a nomenclature of objects of personal belonging developed by Akresh & Walque (2008) is used. To build the scale, desk, cemented floor, bike, radio and mobile phone are rated one time, motorbike, electricity, running water and TV are rated two times, and car, refrigerator, computer and study are rated three times. Furthermore, the item from PIRLS on relative prosperity is taken („Compared with other families, how well-off do you think your family is financially?", five-level answering format 1 = not at all well off; 5 = very well off)

In addition, the background variables of age, sex, family members living in the household and number of members living in the household are surveyed on teacher and student level.

The following variables are measured on teacher level only:
The educational background of the teachers (were they trained at a TTC or did they have a different education before becoming a teacher) and their training habits (have they participated in in-school trainings, have they participated in the PAP-program) were also surveyed in the teacher questionnaires. In addition, the teachers were asked if they teach in one of the participating classes and if so, how they would rate their reading capacity.

The following background variables are measured on student level only:

Parent-child-activities

A 5 item scale on parent-child-activities is instrumented from national PISA (example item „How often do your parents generally talk with you about social topics ", Cronbachs α in the original .70; Cronbachs α in the present study .61; four-level answering format, 0 = never, 3 = often).

School performance

Information about the *school performance* is collected with the help of last year's grades in Kinyarwanda (mother tongue), mathematics, and English (foreign language). In relation to the school performance the students are asked about repeating a class. They are asked if they have ever repeated a class, and as a second step how often they have done it.

4.2.4 The course of the survey

The instruments were tested in a pre-test in one school with PAP-treatment (six classes with a total of 193 students and 15 teachers), as well as one school without PAP-treatment (five classes with a total of 212 students and 22 teachers) in March 2010. The main survey took place in two phases in May (13.-21.) and June (7.-18.) 2010. All surveys were carried out during the regular school hours.

Most students needed about 105 minutes to complete the questionnaire, the fastest student needed about 75 minutes, the slowest about 130 minutes. The average time it took the teachers to complete the questionnaire was about 90 minutes. The parents of the students were informed about the survey by a letter in Kinyarwanda (see annex). The test were accomplished by trained test supervisors (see annex for test instruction and test records).

4.3 Observation

In addition to the quantitative data collection, selected English and mathematics lessons were observed in primary and secondary schools. The teachers showed either a mathematics or English lesson which lasted between 45 and 100 minutes. The observation of the lessons had been arranged beforehand and took place in 5th and 6th grade primary school, as well as 3rd and 6th grade secondary school. The lessons were observed and recorded in writing by two observers. After the lesson, the observers rated the lessons

separately on the basis of their impressions and records and according to the following criteria, which comply with the instrumentation above.

(1) Subject-oriented didactical structure of the lesson
 - Structure of the lesson (1= not recognizable; 5= very clear structure)
 - Noticeable subject-oriented objective of the lesson (1 = not recognizable; 5 = very clear)
 - Subject-oriented correctness of the lesson (1 = not given; 5 = matches the subject-oriented requirements in every detail)

(2) Communication between the teachers and students
 - Climate in class (appreciative communication, calling the students by their names, personal address, appropriate politeness, good discipline) (1= not recognizable; 5= continuously recognizable)
 - Definite organization of the interaction (clear instructions, orientation-giving communication by the teacher) (1= not recognizable; 5= continuously recognizable)
 - Democratic climate in class (opportunity to mention one's own opinion, discursive climate) (1= not recognizable; 5= continuously recognizable)

(3) Participation opportunities
 - Addressing students as self-dependent learners (enabling them to find individual ways to the solution, individual activity level, enabling them to take up responsibility) (1= not recognizable; 5= continuously recognizable)
 - Offer of learner-activating methods ("new learning activities") (1= not recognizable; 5= continuously recognizable)
 - Students' level of activation (1 = no activation; 5 = very high continuous activation)

(4) Microelements of democratic education
 - Enabling a change of perspective through diversity, variety of opinions, plural perspectives etc. (1 = not recognizable; 5= continuously recognizable)
 - Constructive coping with conflicts and problems in class (1 = not recognizable; 5= continuously recognizable)
 - Higher significance of cooperation than competition in class (1 = not recognizable; 5= continuously recognizable)
 - Constructive, positive handling of mistakes (1 = not recognizable, 5 = continuously recognizable)

The separate ratings of the two observers were compared; in case the rating of an item showed a difference of more than one point, the item was excluded. In total, a number of 23 items out of 364 items were excluded; thus, 94 % of the ratings could enter the survey. The consistency of the two raters was remarkably high.

4.4 Sample

The data collection of the main survey, organized as a control group design, was carried out in ten protestant schools:

- Five of these schools were schools where the teachers had been trained or initiated in PAP and where – according to the BNEP-team – there was the best dynamic in PAP, so called PAP-schools.
- Five schools were control schools (so called non-PAP-schools) whose teaching staff had not participated in the PAP-training.

At each school, all teachers, (all or some) students of the 5th and 6th grade and the principal (in one case also the assistant principal) answered their respective questionnaires. Thereby data from 116 teachers, 976 students and 11 principals was collected.

The BNEP team chose the PAP-schools and then twinned each of them with a non-PAP-school regarding a similar economic background. Three pairs were situated in a rural area, one pair in the urban area of a big city, and one pair in the urban area of a small town.

The sample of the observations should include primary schools as well as secondary schools. The sample consists of

- Ten classes in ten primary schools (eight classes in 6th grade and two classes in 5th grade), six PAP-classes and four 4 non-PAP-classes, as well as
- Four classes in four secondary schools (two classes in 3rd grade, one class in 5th grade, one class in 6th grade), two PAP-schools and two non-PAP-schools.

Six primary schools were situated in rural areas, four close to mid-sized towns. All secondary schools were located in close proximity to or in small towns.

5 Results

5.1 Teachers

5.1.1 The participating teachers

A total of 116 teachers (68 PAP, 48 non-PAP) participated in the main survey, 56% of which were female (n=65), and 37% male (n=44). 6.1% of the teachers did not state their sex (n=7). While there is almost a gender balance among the non-PAP-schools (47.9% female [n=23], 45.8% male [n=22]), there is a majority of female teachers in PAP-schools (61.8% female [n=42], 32.4% male [n=22]) due to the gender related politics in recruiting the schools for the training. The difference does not become statistically significant (two-sided t-test).

> **Significance**
> Probability that the differences are not by coincidence
> $p < 0,001$ ***; = > 99,9 % probability
> $p < 0,01$ ** ; = > 99 %
> $p < 0,05$ *; = > 95 %

> **Standard deviation (SD)**
> It shows the variation of the data from the mean. A low standard deviation indicates that the data points tend to be very close to the mean. A high standard deviation indicates that the data is spread out over a large range of values.

The teachers' age ranges between 20 years and 62 years with an average age of 35.92 years (SD 8.8). 50% of the teachers are younger than 35. Teachers in the evaluated PAP-schools are slightly older with an average age of 38.29 years (SD 9.3) compared to 32.74 years (SD 7.1) in the non-PAP-schools. Six teachers did not state their age. The age difference is statistically significant ($p=0.001$**) and is therefore being considered in the following explanations.

The majority of teachers live with their spouses (75.9%, n=88) and own children (66.4%, n=77), followed by other people (33.6%, n=39), children without family relation (21.6%, n=25), nephew/niece (20.7%, n=24), brother/sister (19.8%, n=23). Only very few still live with their parents (mother: 14.7%, n=17; father: 8.6%, n=10). Even less live with their cousin,

brother-/sister-in-law (each 6.9%, n=8), parents-in-law (3.4%, n=4), stepfather, uncle/aunt (each 2.6%, n=3), foster father, foster mother, grandparents (each .9%, n=1) and no teacher lives with his or her stepmother (0%, n=0). The above stated age difference has an impact on the family members in the teachers' households. More PAP-teachers live with their spouse and own children while non-PAP-teachers more often live with their parents. Comparing the number of people living in the teachers' households, PAP-teachers live in slightly lager families (1 person more) than non-PAP-teachers (probably due to the age of the teachers). Most teachers live with a number of 7 people (18.1%, n=21), 6 people (17.2%, n=20), 5 people (15.5%, n=18) and 8 people (14.7%, n=17). 30.7% (n=35) of all teachers live with up to 5 people, 66.7 % (n=76) with up to 7 people. The difference is significant (p = 0,009**).

The economic background also differs between PAP- and non-PAP-teachers. Both from a subjective perspective (how do the teachers compare their financial situation with those living in the community around them; mean: PAP: 2.94 [SD .8], non-PAP: 2.62 [SD .8]) and from an objective perspective (which things do the teachers call their own; mean: PAP: 1.53 [SD .7], non-PAP: 1.10 [SD .3]), the economic situation of PAP-teachers is better compared to the economic situation of non-PAP-teachers. The difference becomes slightly significant (p = 0.032*), probably due to the older age of the teachers.

This is also visible in the number of books the teachers possess (PAP-mean: 3.0 [SD .9]; non-PAP-mean: 2.28 [SD .8]). While all PAP-teachers own books, 4 even more than 50 books, 8 non-PAP-teachers do not own any books. This difference is highly significant (p = 0.000 ***).

Most of the teachers have done their education at a TTC (n=108) with hardly any difference between PAP (94.1%, n=64) and non-PAP (91.7%, n=44). Therefore very few (PAP 10.3%, n=7; non-PAP 8.3 %, n=4) have done a different training before. This difference is not significant and therefore does not need to be considered.

Concerning their training habits, PAP-teachers are more active than teachers in non-PAP-schools. 72.1% of the PAP-teachers (n=49) attended a training course during the last year, compared to 62.5% (n=30) of the non-PAP-teachers. Taking into consideration training within the school, the difference is even bigger: 60.3% of all PAP-teachers (n=41) took part in such training during the last year, while only 22.9% (n=11) of the non-PAP-teachers did. The difference is highly significant (p= ***); this is to be expected as the participation in the training has been the sample criterion for this survey. PAP-teachers and non-PAP teachers do not

differ in regard to how much they read for their job (mean PAP: 1.09 [SD 0.3]; non-PAP 1.17 [SD 0.3]); this difference is not significant.

70.6% of all the teachers in the PAP-schools (n=48) have participated in the PAP-training, while in the non-PAP-schools, only 8.3 % (n=4) have received this training. From the principals' questionnaires we know, that all those teachers in PAP-schools who have not done the training in PAP have been initiated by trained colleagues. (This might be partly the reason for the high number of participation in trainings within the school (see above).)

The length of working as a teacher ranges from 1 year (n=4, 4.4%) to 42 years (n=1, 0.9%) with an average length of 12.85 years (SD 9.5). PAP-teachers work an average of 15.61 years (SD 9.9) compared to 8.82 years (SD 7.1) among non-PAP-teachers; this difference is highly significant (p = 0.000***).

5.1.2 Differences between PAP- and non-PAP-Schools

After the general presentation of the surveyed teachers, their attitudes and professional orientations regarding the PAP-offer are looked at in detail in the following section.

At first, the attitudes and professional orientation of teachers with and without PAP-training are compared. The following table shows the comparison of means in professional orientations between those teachers who had the opportunity to participate in a PAP-training by the CPR and those teachers who did not participate in such a training or rather have not had the opportunity to do so yet. The significance of the comparison of means has been determined by a two-sided t-test. As shown above, some teachers working in non-PAP-schools have also received the PAP-training because they used to work at a different school and changed schools after the PAP-training. Therefore the following calculations are not based on the schools but rather on the question whether or not a teacher has participated in the training.

Tab. 1: Comparison of means of the measured pedagogical orientations of teachers

	With PAP-training	Without PAP-training
Esteem as teacher [a]	0.7 (SD 0.3)	0.7 (SD 0.3)
Personally felt burden [b]	2.8 (SD 0.7)	2.5 (SD 0.7)
General self-efficacy [c]	2.8 (SD 0.6)	2.8 (SD 0.5)
Teacher self-efficacy [c] *	3.5 (SD 0.4)	3.7 (SD 0.3)
Preference for traditional learning activities [d] ***	4.4 (SD (1.3)	5.3 (SD 0.9)
Preference for student-centered learning activities [d] *	4.7 (SD 0.7)	4.3 (SD 0.9)
Implicit theory of capability [e]*	4.9 (SD 0.6)	4.5 (SD 0.9)
Interaction with students [f]	3.6 (SD 0.2)	3.5 (SD 0.2)
Teacher orientation towards competition in class [e]*	4.6 (SD 0.8)	5.0 (SD 0.8)
Teacher orientation towards individual learning in class [e]	4.4 (SD 0.5)	4.2 (SD 0.9)
Democratic climate in class [g]	3.5 (SD 0.3)	3.4 (SD 0.4)
Students' level of democracy [h]	3.5 (SD 0.4)	3.4 (SD 0.4)
Violence in school [g]	1.3 (SD 0.4)	1.4 (SD 0.4)
Positive coping with conflicts [f]	3.4 (SD 0.5)	3.3 (SD 0.5)
Communication between teachers [i]***	4.6 (SD 1.7)	1.1 (SD 1.6)

Note: a = dichotomous (0 = no esteem, 1 = great esteem); b = five-level scale (1 = no burden, 5 = very high burden); c = four-level scale (1= low; 4 = very high); d = six-level scale (1 = no preference, 6 = very high preference); e = six-level scale (1 = very low, 6 = very high); f = four-level scale (1 = very negative, 4= very positive); g = four-level scale (1 = very low, 4 = very high); h = four-level scale (1 = low, 4 = high); i = seven-level scale (1 = does not exist; 7 = highest level)

Values which are marked with *, ** or *** indicate differences which are not by chance but have a systematic cause (two-sided t-test; p***<0.001; p**<0.01; p*<0.05).

Results:

- Looking at the attitudes related to PAP, PAP-teachers generally get better or at least equal values than their non-PAP-colleagues in all surveyed scales.

- The scales preference for traditional learning activities, preference for student-centered learning activities, and implicit theories of capability show statistically significant differences, i.e. these differences are not by chance, but can be attributed to systematic differences within the sample. In these aspects the PAP-schools perform better. In perspective of the orientations of teachers towards competition, PAP-schools show lower results.

- In PAP-schools, teachers speak more often about what they have learned (mean = 4.62, SD 1.6) than in non-PAP-schools (mean = 1.13, SD 1.7); the difference is highly significant (p=0.000***). This may be partly related to the training habit (where little training has been done, there is little to talk about). It also shows that there is a lot of communication between teachers in PAP-schools.

The five mentioned scales are re-checked to see whether the differences can really be attributed to the PAP-training. We used possible explanations which could be assumed to have an influence on the differences and tested them. One could imagine

(1)   that the sex of the teachers might be of importance, because women may have more positive attitudes toward social learning;

(2)   that age might possibly have an influence as the age of teachers generates pedagogical experiences concerning their own biographical experiences as well as experiences within society;

(3)   that the working experience (how long a teacher has been working in this profession) might be of importance as a teacher with more years of teaching reaches a higher expertise in teaching;

(4)   that the economic situation might be of importance, as poor teachers have more sorrows, less time to concentrate on their professionalism and can invest less money in a study and professional materials (books etc.);

(5)   that the family size might have an influence as teachers with larger families might be more distracted from their profession;

(6)   that the general educational status of the teacher might be of importance;

(7)   or that this difference simply is to be attributed to the PAP-training.

We therefore did a regression analysis in which we entered each of the mentioned variables[2]. The following table (Tab. 2) shows the results.

Tab 2: Influence of background variables on teachers' professional orientation

	Sex	Age	Work experience	Economic situation	Family size	Books at home	PAP
Preference of traditional learning activities ($R^2 = 0.13$)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	B= -0.8**
Preference of new learning activities ($R^2 = 0.14$)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	B=0.4 p=0.059
Implicit theories of capability ($R^2 = 0.39$)	n.s.	B= -0.6*	B=0.6*	n.s.	n.s.	n.s.	n.s.
Teacher orientation towards competition in class	n.s.	n.s.	n.s	B = -0.2*	n.s.	n.s.	n.s.
Communication between teachers ($R^2 = 0.75$)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	B=3.3***

Note: n.s. = not significant, i.e. the mentioned factors do not have an influence.

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[2]   The difference between rural and urban surroundings does not make a difference as it completely merges in the teachers' financial and social background.

Coefficient of determination: Explained Variance

Percentage of the influence which can be explained by the mentioned factors

$R^2 = 0.14$ -> 14 %

B: Regression coefficient

The regression coefficient is the slope of the regression line. It measures the influence of a variable X on the dependent variable Y, meaning the quantitative change of Y when X is changed by one unit.

Results:

- Weak effects of age and working experience on the implicit theories of capability can be seen. Apart from these weak influences, the background variables of the teachers do not have an influence on the stated differences between PAP- and non-PAP-schools.

- Taking into consideration that influencing factors in this working field are expected to be low, the explained variance of the mentioned variables is remarkable.

- The decrease in the use of very traditional learning activities (such as chorally memorizing, chorally reading etc.) through PAP is remarkable (B= -0.8 **; R^2=0.13). Teachers obviously succeed in attributing less importance to these learning activities in class due to the PAP-training.

- On the other hand, actively adopting new learning activities through PAP (self-dependent work, forms of free work etc.) narrowly misses the limit of significance (B=0.4; p=0.59; R^2=0.14). Apparently, teachers succeed in implementing new things, but less obviously than rejecting the traditional extremes.

- The orientation toward competition seems to be slightly influenced by the economic background of the teachers. The poorer they are, the more they prefer competition (B= -0.2; p=0.042*; R^2=0.38).

- Through PAP-training the communication among colleagues is considerably enhanced (B=3.3; p=0.000***; R^2=0.75).

The results refer to the fact that – leaving aside the change in the implicit theories of capability – the above mentioned better values of PAP-teachers are to be attributed to the PAP-training and are not influenced by other background variables. Furthermore, the results can be interpreted in a way that there is a change in the teachers' perception of the students as well as the learning process, traditional activities of teaching are more and more avoided, but the teachers have not yet succeeded in constantly implementing an explicit learner-centered didactics. Considering how difficult it is to change teachers' attitudes, these results show the

effectiveness of the PAP-program. At the same time they point to the necessity of further developing the PAP-support during the implementation in class (for more details see below).

5.1.3 Influencing factors on democracy-beneficial teaching

With the following explanations we focus on the objectives of PAP and try to elaborate the factors which become effective. The instrumental aim of the PAP-training on teacher level is to enable the teachers to realize aspects in their lessons which are of relevance in a democratic society. This includes a democratic climate in class, which activates students and allows a plurality of perspectives as well as a non-violent education. To receive results, a regression analysis has been performed.

Fig. 3: Influence on the teachers' perception of a democratic climate in class
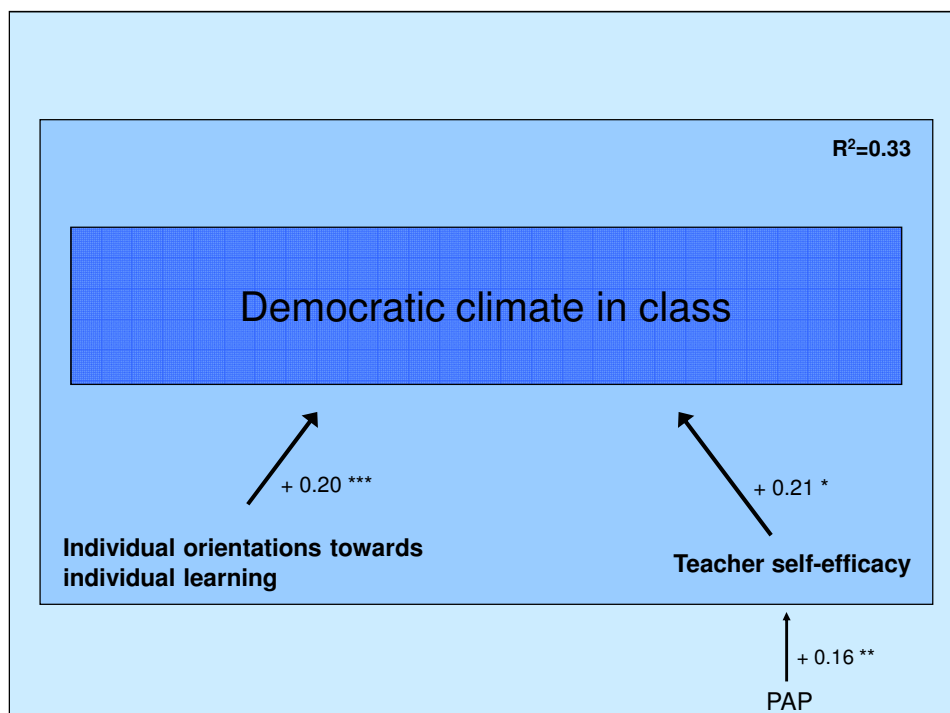
The democratic climate in class is being influenced in a (partly highly) significant way by the teachers' individual orientation towards individual learning (p=0.000 ***, B=0.2), as well as the teacher self-efficacy (p=0.05*, B=0.21) with an explained variance of R^2=0.33, i.e. 33% of the influences on the democratic climate in class can be explained with these factors. No

significant influence can be proven of the teachers' age and sex, their objective and relative prosperity, as well as the participation in the PAP-training.

Which other factors influence these significant factors? The participation in the PAP-training has a significant influence on the teacher self-efficacy (p=0.027**, B=0.16) with an explained variance of R^2=0.22. The PAP-training obviously leads to higher teacher self-esteem.

5.2 Students

5.2.1 The Participating Students

A total of 976 students participated in the main survey. 56.3% (n=549) came from PAP-schools and 43.8% (n=427) from non-PAP-schools. There is a balance in the participating grades: 49.3% (n=481) came from 5th grade, 50.7% (n=495) from 6th grade. While there is almost a balance in origin of grade in PAP schools, (5th grade: 50.8% [n=481], 6th grade: 49.2% [n=495]), there is a slight plus of 6th graders (52.7% [n=225]) in non-PAP-schools (5th grade: 47.3% [n=202]).

52.7% of all participating students were female (n=514), 41.9% male (n=409), and 5.4% (n=53) of the students did not state their sex. In both types of schools (PAP and non-PAP), more girls than boys participated in the survey (PAP: 54.1% girls [n=297], 40.1% boys [n=220]; non-PAP: 50.8% girls [n=217], 44.3% boys [n=189]; the differences are not significant).

The students' age ranges between 1 (or 9) years and 20 years with an average age of 13.86 years (SD 1.9). It is almost the same among PAP- and non-PAP-schools, only a slight difference can be stated (PAP: 13.72 years [SD 1.7]; non-PAP: 14.04 years [SD 2.1]; p = 0.01** two-sided t-test). 61 students did not state their age.

The majority of students live with their mother (84.7%, n=827), siblings (77.7%, n=758), and father (61.8%, n=603), followed by foster mother (37.6%, n=367), other people (36.7%, n=358), aunt/uncle (31.3%, n=305), cousins (30.7%, n=300), foster father (26.9%, n=263), brother-/sister-in-law and siblings (25%, n=244), and grandparents (24%, n=234). Only very few live with the children of their step mother (13.2%, n=129), their step mother (10.3%, n=101); children of their step father (10%, n=98), and stepfather (8.7%, n=85).

The number of people living in the students' households ranges from 2 to more than 10, but does not differ between PAP- and non-PAP-schools with an average of 5.37 persons (SD 2.3) in PAP- and 5.40 people (SD 2.2) in non-PAP households. Most students live with a number of 6 people (15.1%, n=147), 7 people (14.5%, n=142), 5 people (13.7%, n=134) and 8 people (10.6%, n=103). 30.7% of all students (n=316) live with up to 5 people, 66.7 % with up to 7 people (n=605).

The economic background does not differ between PAP- and non-PAP-students. From a relative perspective (How do the students compare their financial situation with those living in the community around them?), PAP-students as well as non-PAP-students feel that they are at an average economic level (PAP: 3.12 [SD 1.0]; non-PAP-students 3.17 [SD 1.0]; no significance). From an objective perspective as well (Which things do the students call their own?), the economic situation of PAP-students does not differ significantly compared to the economic situation of non-PAP-students (mean PAP: 1.48 [SD 0.7], non-PAP: 1.37 [SD 0.7]).

This is also visible in the number of books the students possess (PAP-mean: 2.48 [SD 1.2]; non-PAP-mean; 2.18 [SD 1.2]; p = 0,000***, two-sided t-test). While 14.4% (n=79) of PAP-students do not own books, it is 23.9% (n=102) among non-PAP-students.

59.6% (n= 327) off all PAP-students and 56.4% (n=241) of non-PAP-students stated to have repeated a class (no significance), 70.1% (n=385) of PAP-students and 69.6% (n=297) of non-PAP-students mentioned the number of times they have repeated a class. When it comes to the number of repetitions, the distribution is similar between PAP- and non-PAP-schools: once 46.6% (n=256) vs. 44.3% (n=189), twice 20.2% (n=111) vs. 21.5% (n=92) and several times 3.3% (n=18) vs. 3.7% (n=16).

Leaving aside the number of books, students in PAP-schools do not differ from students in non-PAP-schools. The difference in books is predominantly caused by the students of one school, which stands out in regard to the educational background of the students' homes.

5.2.2 Differences in the students' perception of the lessons (PAP- vs. non-PAP-schools)

At first it is tested whether there is a difference between the attitudes of students whose teachers participated in the PAP-training and those whose teachers did not participate in the PAP-training. The following table 3 shows the difference between two means, a two-sided t-test is performed to show the significance.

Tab. 3: Mean comparison of the measured orientations on student-level

	PAP-school	Non-PAP-school
Self-esteem [a] *	3.28 (SD 0.7)	3.19 (SD 0.6)
Structured lesson [b] **	3.61 (SD 0.4)	3.51 (SD 0.5)
Fear in class [b] **	1.79 (SD 0.9)	1.95 (SD 0.9)
New learning activities [c] ***	3.00 (SD 0.6)	2.77 (SD 0,6)
Positive coping with conflicts [b] ***	2.65 (SD 0.6)	2.49 (SD 0.6)
School-related expected self-efficacy [d] **	3.28 (SD 0.5)	3.19 (SD 0.6)
School's level of democracy [a] ***	3.18 (SD 0.4)	3.08 (SD 0.5)
Climate: Teacher [b] *	3.42 (SD 0.6)	3.34 (SD 0.6)
Climate: School [e] *	4.55 (SD 0.7)	4.42 (SD 0.9)
Violence by teachers [b] ***	1.87 (SD 0.8)	2.06 (SD 0.8)

Note: a = four-level scale (1 = low; 4 = high); b = four-level scale (1= very low; 4 = very high); c = four-level scale (1 = do not exist, 4 = exist in every lesson); d = four-level scale (1 = low, 4 = very high); e = five-level scale (1 = very low, 5 = very high)

Values which are marked with *, ** or *** indicate differences which are not by chance but have a systematic cause (two-sided t-test; p****<0.001; p**<0.01; p*<0.05).

Results:

- No significant differences can be stated concerning self-regulation, dealing with failure, interest in reading, preference for certain learning activities, expected self-efficacy concerning social demands, adoption of a different perspective, subject-related self-concept, general school-related self-concept, the perceived frequency of traditional learning activities, as well as the perception of violence among students (these means are not reported).

- In PAP-schools, fear in class is significantly less than in schools without PAP-treatment.

- The students' experience of new learning activities is significantly higher in PAP-schools than in non-PAP-schools.

- Students in PAP-schools experience significantly more often a constructive dealing with conflicts as well as forms of school democratization.

- In PAP-schools, the students' experience of violence by teachers is highly significantly less than in non-PAP-schools. This student data states more precisely the above mentioned teachers' self-assessment on practicing violence, which did not show any significant difference. This is probably due to socially desired answering by the non-PAP-teachers.

- The students' experience of didactically structured lessons also becomes significant. PAP-students experience the lessons as more comprehensibly structured than non-PAP-students.

- In addition, the experience of PAP-students regarding the relation with their teachers is slightly significantly better than the experience of non-PAP-students.

The mentioned scales are again tested on whether the stated differences in attitude are caused by the teachers' participation in the PAP-training or by other characteristics of the sample. We took the following aspects as possible explanations for the differences and tested them: One could assume

(1)   that the students' objective prosperity could change their view on school in so far as poverty could make it more difficult to react to school offers in a positive way;

(2)   that the students' relative prosperity influences their view on school in so far as the feeling of possessing more or less than the others influences the perspective on school as well;

(3)   that the family's educational background, expressed by the number of books at home, influences the school perception in so far as a differentiated offer can be more easily grasped with a higher educational background.;

(4)   that the family size matters, as students with very large families might be more distracted from school;

(5)   that the students' sex could have an influence, as girls might be more easily filled with enthusiasm for pro-social activities in class than boys;

(6)   that the students' age might be of importance in so far as it could be easier to leave a mark on younger students while older students could more easily deal with the demands of a cognitively activating school;

(7)   that the number of times a student had to repeat a class might influence the attitudes because those students might review school in general more negatively;

(8)   that the students' school performance matters and students with good grades have a more positive attitude as well;

(9)   or that this difference simply is to be attributed to the PAP-training.

The following table (Tab. 4) shows the results of this consideration (regression analysis)[3]:

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[3] The difference between rural and urban surroundings does not make a difference as it completely merges in the students' financial and social background.

Tab 4: Influence of background variables on students' attitudes or rather their perception of the lessons

	Objective prosperity	Relative prosperity	Number of books	Family size	Sex	Age	School's participation in PAP
Self-esteem (R^2= .038)	n.s.	B=0.05*	n.s.	n.s.	B=0.09*	n.s.	B=0.09 p =0.054
Structured lessons (R^2= .041)	n.s.	B=0.05*	n.s.	n.s.	B= -0.09*	n.s.	B=0.09*
Fear in class (R^2= .033)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	B= -0.19**
New learning activities (R^2= .050)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	B=0.22***
Positive coping with conflicts (R^2= .025)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	B=0.17**
School-related expected self-efficacy (R^2= .034)	B= -0.08*	n.s.	n.s.	n.s.	B= -0.10*	n.s.	n.s.
School's level of democracy (R^2= .073)	n.s.	B=0.08***	n.s.	n.s.	B= -0.09*	n.s.	B=0.11**
Climate: Teacher (R^2= .048)	n.s.	B=0.10***	n.s.	n.s.	B= -0.12*	n.s.	n.s.
Climate: School (R^2= .020)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	B=0.16*
Violence by teachers (R^2= .032)	n.s.	n.s.	n.s.	n.s.	B=0.14*	n.s.	B= -0.19**

Note: n.s. = not significant, i.e. the mentioned factors do not have an influence.

Results:

- The fact that a class had to be repeated, the number of repetitions, as well as the performance in Kinyarwanda and the number of books at home, i.e. the educational background at home, do not have a significant influence on the mentioned attitudes. Repeating a class is connected with the students' objective prosperity (B= -0.13*). The fact that neither the school performance nor the repetition of a class nor the family's educational background (possession of books) have a significant influence on the self-esteem could be interpreted as a hint that - socially speaking - school performance has only little influence on the students' further journey through life and that in the students' awareness society in general is organized only little meritocratic, or rather that social and economic advancement is obviously not based on education.

- The family size does not seem to have a relevant influence on the family's income and therefore does not become relevant for social attitudes.

- The students' self-esteem is slightly influenced by the relative prosperity and the students' sex (boys have a higher self-esteem than girls). The influence of PAP narrowly misses the limit of significance.

- The structure of the lesson is seen as more important or better by girls. In addition, the relative prosperity has an influence on it, as well as the teachers' participation in PAP.

- The teachers' participation in PAP significantly reduces the students' fear in class.

- The teachers' participation in PAP leads to a higher perception of new learning activities in class by the students.

- The teachers' participation in PAP influences the increase of the perception of positive (i.e. democracy-oriented) ways of dealing with conflicts in class.

- The relative prosperity and the sex influence negatively the school-related expected self-efficacy. Being a boy has a stronger influence on the school-related expected self-efficacy than being a girl.

- The PAP's effect on the perception of the school's level of democracy is significant; but the perception of the school's level of democracy is also influenced by the relative prosperity, as well as the students' sex. Girls are more sensitive about it than boys.

- The perception of the students' relation with the teacher is highly significantly influenced by the relative prosperity. In addition, the sex matters: Boys perceive the relation more positively.

- The climate in school is influenced slightly positive by the teachers' participation in PAP.

- The students' perception of violence is significantly influenced by PAP: In schools where teachers have not participated in PAP the perception of violence is higher. In addition, this perception of violence is influenced by the students' sex: Girls perceive it more distinctively than boys.

5.2.3 Effects of PAP on the students' orientations

With the following explanations we focus again on the objectives of PAP and try to elaborate the factors which become effective. On student-level, the PAP-training aims at providing attitudes and experiences which are of relevance in a democratic and non-authoritarian society. The focus is set on the capability to adopt different perspectives, i.e. to be able to see things from somebody else's perspective, the experience of reciprocal cooperation, and the experience of democratically resolving conflicts. To receive results, a regression analysis has been performed.

Fig. 4: Influence on the students' adoption of different perspectives
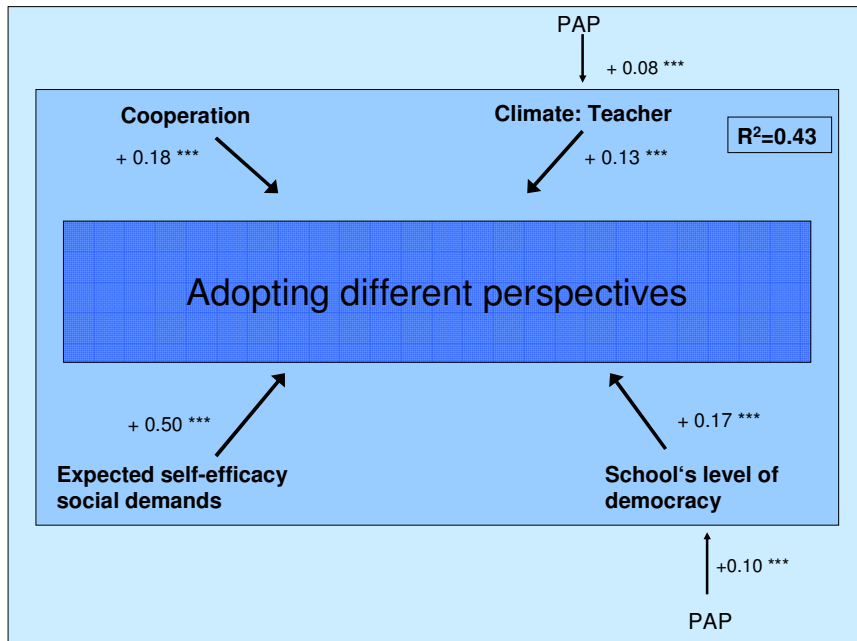
Adopting different perspectives is highly significantly influenced by the expected self-efficacy concerning social demands (p=0.000***, B=0.50), the school's level of democracy (p=0.000***, B=0.17), the climate between teachers and students (p=0.000***, B=0.13), and the experience of cooperation (p=0.000 ***, B=0.18) with an explained variance of $R^2=0.43$ i.e. 43% of the influence on the adoption of different perspectives can be explained with these factors. No significant influence could be proven concerning the age of the students, the sex, the relative prosperity, and the participation in the PAP-training; the objective prosperity has a negative effect (p=0,007**, B = -0.11). The PAP-participation is rather mediated: PAP influences the teacher climate (B= -0.08, p=0.04* with an explained variance of $R^2=0.01$) and the school's level of democracy (B=0.10 p=0.000*** with an explained variance of $R^2=0.02$).

We can also trace such influences regarding the cooperation in class (cf. fig. 5).

Fig. 5: Influence on the positive perception of cooperation in class

PAP
+ 0.23 ***

New learning activities   Failure   R ²= .20
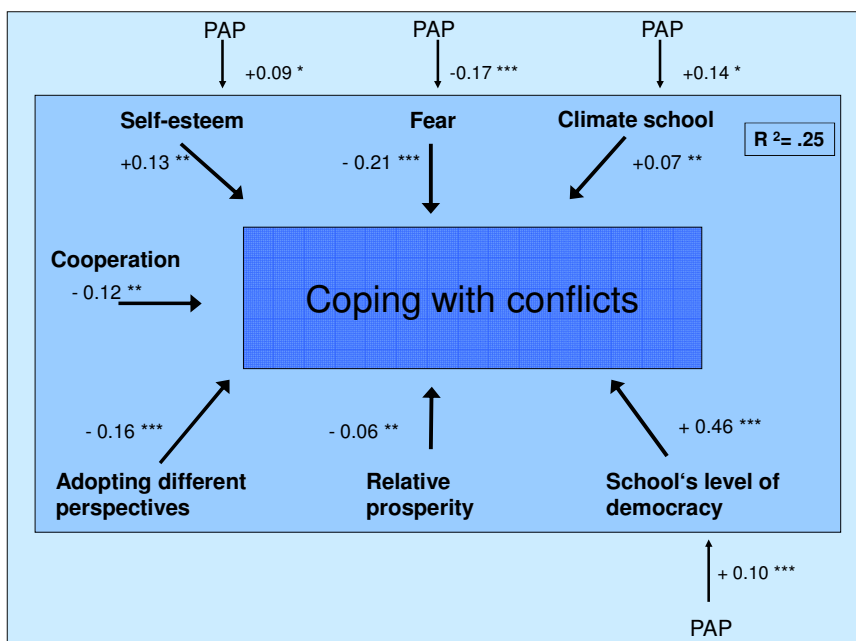+ 0.12 ***   + 0.08 **

Cooperation

+ 0.13 **   + 0.22 ***

Expected self-efficacy   Adopting a different
social demands   perspective
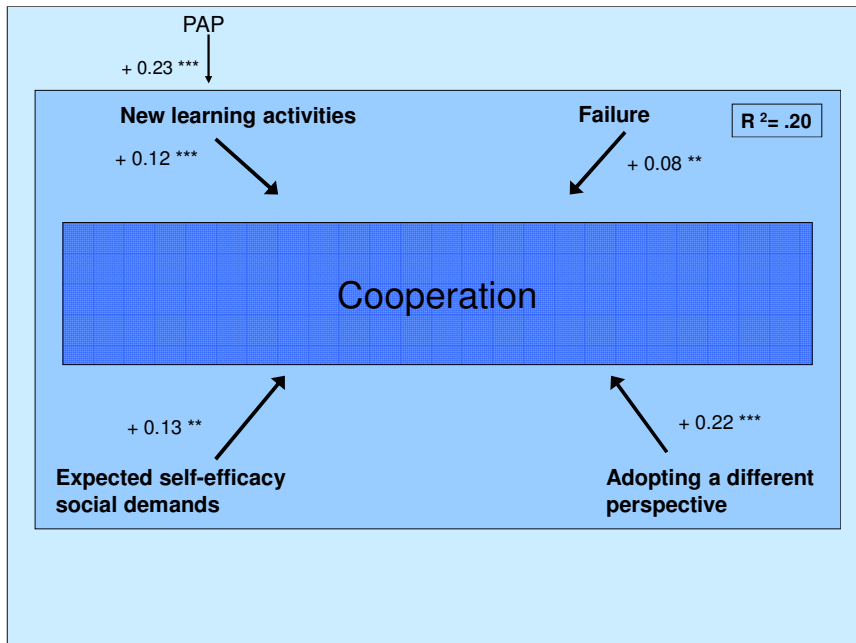
The positive cooperation is highly significantly influenced by the ability to adopt different perspectives (p=0.000 ***, B=0.22), the experience of new learning activities (p=0.000***, B=0.12), a positive expected self-efficacy regarding social demands (p=0.009**, B=0.13), and a constructive dealing with failure (p=0.022**, B=0.08) with an explained variance of R^2=0.20, i.e. 20% of the influence on the cooperation in class can be explained with these factors. The PAP-training works as an important catalyst through the application of new learning activities (p=0.000***; B=0.23).

Fig. 6: Influence on coping with conflicts

PAP   PAP   PAP
+0.09 *   -0.17 ***   +0.14 *

Self-esteem   Fear   Climate school   R ²= .25
+0.13 **   - 0.21 ***   +0.07 **

Cooperation
- 0.12 **   Coping with conflicts

- 0.16 ***   - 0.06 **   + 0.46 ***

Adopting different   Relative   School's level of
perspectives   prosperity   democracy

+ 0.10 ***
PAP

Dealing constructively with conflicts is being influenced by a number of aspects, each of which has only a small effect. The model has an explained variance of 26 % (R^2=0.26).

- A positive self-esteem influences the constructive dealing with conflicts (p=0.006**; B=0.13). This aspect is slightly enhanced by the school's participation in PAP (p=0.014*; B=0.09; R^2=0.08).

- The less afraid students feel in class, the more willing they are to deal with problems in a positive manner (p=0,000***; B= -0.21). The school's participation in PAP leads to a decrease in fear (p=0,000***; B= -0.17; R^2=0.014).

- A positive school climate also influences the constructive dealing with conflicts (p=0,009**; B=0.07). From a student perspective, the school's participation in PAP influences this climate (p= 0.01**; B=0.14; R^2=0.08).

- The school's level of democracy has an influence on how the students deal with problems as well (p=0.000***; B=0.46). From a student perspective, the school's participation in PAP influences this climate (p=0.000***; B=0.10, R^2=0.015).

- The students' relative prosperity has a slightly negative influence of their willingness to deal with conflicts in a constructive way (p=0.006**; B= -0.06).

- The willingness to adopt different perspectives has a negative influence on constructively dealing with conflicts. (p=000***; B= -0.16). This is contra to the theoretical prediction and cannot be explained by us.

- The preference for cooperation has a negative influence on constructively dealing with conflicts (p=0.003*; B= -0.12). This is contra to the theoretical prediction and cannot be explained by us.

5.3 Observation

The following presentation of the observation results is based on the means of the two ratings. Ratings which differed more than one point were excluded. This leads to the following results in tab. 5.

Tab. 5: Comparison of means of the observed communication in class

	PAP	non-PAP	p
Subject-oriented structure of the lesson	3.29 (SD 0.8)	2.31 (SD 0.4)	p=*
Organization of communication in class	3.18 (SD 0.9)	2.42 (SD 0.9)	n.s.
Participation opportunities in class	3.05 (SD 1.0)	2.25 (SD 0.5)	p=0.07
Micro-elements of democratization	2.21 (SD 0.5)	1.48 (SD 0.4)	p=*

Note: scale 1= not observable; 5 = continuously observable; p calculated by a two-sided t-test

The results have a similar representation when comparing primary and secondary schools as well as the two subjects English and mathematics.

Results:

- Classes whose teachers have participated in PAP-training reach in average better values in all aspects. Nevertheless, the aspects of subject-oriented structure of the lesson, organization of communication in class, and participation opportunities in class have a standard deviation of about one point. This means that even though there is an averaged difference, there are also individual cases where teacher have difficulties with the practical implementation.

- The difference in participation opportunities narrowly misses the significance; the difference in the subject-oriented structure of the lesson and the micro-elements of democratization (change of perspectives, cooperation, etc.) become slightly significant.

- The fact that similar results can be described for the different types of schools as well as the different subjects, leads to the assumption that the PAP-training does not lead to a different implementation regarding the different school types and that there is little difference in the implementation in the different subjects.

Summary: The teachers' orientations stated in chapter 5.1., as well as those of the students described in chapter 5.2 can actually be found in class.

6   Summary of the results and discussion

As a synopsis of the empirical findings, the following results can be summarized:

(1) The PAP-training program shows effects regarding teachers' attitudes which become effective on student-level as well.

The study was able to demonstrate that the PAP-training shows effects not only on teacher-level, but on student-level as well. On teacher-level, effects were especially visible in a lower orientation towards ineffective learning activities such as chorally speaking, in an increased positive attitude towards learner-centered learning activities, as well as in an increased social orientation. On student-level, an increase in democracy-related forms of resolving conflicts, less fear in class, as well as fewer experiences with violence by teachers became noticeable. Thus, the PAP-program answers the expectations applied to it.

(2)   The effects of the PAP-training are observable in class

The study was able to show that the effects of the PAP-training could also be observed in class. As expected, the evidence is heterogeneous: In some classes the implementation is more successful than in others.

(3) PAP influences the teachers' professionalism

The PAP-program leads to a higher professional communication within the school and therewith contributes to an increase in the teachers' professional competence beyond the close effects of the program. Communication between teachers about their work practice is an important predictor for the interpretation of school as a learning organization and the dynamization of pedagogical reflection.

(4)   Trainings do not have linear effects but are found in a complex context

The study has also shown that a direct influence of the program on the teachers' and students' self-esteem cannot be assumed. Its constituency is too complex to be traced back to experiences within the profession or the school alone; it is rather economically and socially conveyed. It became visible that the family background matters a lot regarding this aspect, e.g. the economic prosperity. The strain of the genocide, which could not be measured, should be a mayor issue as well.

(5) School performance and self-esteem are not linked

In addition, no influence of good school performance on self-esteem could be proven. This is striking and needs to be interpreted. One can suggest that success in school is not a stable

predictor for social reputation and economic success; at least students in 5th and 6th grade primary school seem to feel this way. A different interpretation would be that students do not understand how grades are formed and that they see it more as their fate than as a result of personal effort.

(6)   Initiation has only week effects
Concerning the further spreading of the program, it is assumed that teachers who are new to a school which is already working in PAP are being taught by their colleagues and therewith learn this methodology through initiation, a kind of multiplier program. Our study could show that this transfer is too weak and does not show the desired effects.

(7)   The subject-specific didactical concretization of the acquired methodology is very low
Especially during the observation of the lessons, but also in some details of the teachers' questionnaire it became recognizable that the transfer from a general didactical position to the different subject-specific demands is a great challenge for the teachers. They often do not succeed to use general didactical principles by concretizing them subject-specifically, e.g. to organize the assignment for group work along the demands of the specific subject. At this point a potential for further development of the PAP-approach can be detected.

(8)   The didactic-theoretical concretization of the acquired methodology is very low
The results of the classroom observations regarding the structure of the lessons suggest that integrating the contents of the PAP-training into didactic-theoretical aspects might advance the professionalism of the program.

7   Recommendations

Given the background of these results we would like to propose the following aspects to further develop the PAP-program:

(1)   Reinforcement of the approach: PAP is of great importance
The results of this evaluation demonstrate empirically that PAP has an influence on the participating schools. The program makes a contribution to peace education. At the same time it has to be realized that the effects (especially on student-level), even though they are visible, result in very small differences. The results can be seen in accordance with results from school research (e.g. Abs et al 2009), which leads to expect rather long-term and smallish effects from peace educational measures. Therefore the program should be pursued and further developed.

(2)   Conceptual continuation of the program with regard to subject-specific and specialized didactic subjects
Considering the identifiable difficulties of the subject-specific transfer, we recommend to extend the program to subject-specific approaches, for instance in the main subjects mathematics, first language and foreign language. Thereby, the methods could be refined, linked with the subject-relevant contents, and therewith the learner-centeredness of the program could be strengthened.

(3)   Conceptual continuation of the program with regards to the pedagogical foundation of the program
The findings lead one to suppose that the program could benefit from an explicit embedding in didactical theory. The contents of the training could be more decisively related to topics of classroom-management, e.g. features of a good lesson.

(4)   A distinct Protestant identity
The search for justice and the promotion of individual responsibility are key characteristics of Protestant identity. So far they are not recognizable in the PAP-training program. Even if some schools have developed a content-wise Protestant identity, this is not linked to the PAP-program. There is a distinct potential for the development of the program in this regard and to strengthen the identity of teachers.

(5)   Development of the program towards an approach of lifelong learning

So far the focus of the program has been lying on primary and secondary schools. In addition there are some experiences of the program in nursery schools. We do not only recommend to expending the program across the entire educational phases, but we suggest customizing it more specifically than before regarding the different age groups addressed.

(6)   Certification of the program and publication of the outcome of the program

We recommend discussing the outcome of the program publically and therewith advancing the discussion on the peace-building contribution of education in Rwanda. To this belongs to certify the teachers who participate in such training and to keep training them in refresher trainings.

(7)   Development of a teacher's handbook on classroom-management using the already existing course materials

Given the importance of books for the professional development of teachers and their own learning process, we propose using a handbook during the training and handing it over to the teachers. If necessary this book should be compiled in Kinyarwanda.

8   References

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Additionally, we used documents of the BNEP, given to us on a CD-Rom.

9   Annex

Annex 1: Scales from the teacher questionnaire

Scale	Questions
General self-efficacy	Iyo hari ibintu bishatse kubangamira ibyo nkora, nshobora kubona inzira nany-uramo kugirango ngere ku cyo ngamije. Nta kibazo bintera kugera ku ntego zanjye no ku bindi nifuza kugeraho. Iyo ikintu kidasanzwe kimbayeho, iteka menya uko mbyifatamo. N'iyo haza ibintu bintunguye, nashobora kubyitwaramo neza. Iyo mpuye n'ibibazo mpangana na byo ntuje kuko nizeye ubushobozi bwanjye. Ikintu cyaba cyose, uko cyaba kimeze kose nashobora kukikuramo. Kuri buri kibazo nshobora kubona igisubizo. Iyo ngize ikibazo gishya, menya uko nagikemura. Iyo ikibazo kingwiririye, kenshi mba mfite uburyo bwinshi nagikemuramo.
Teacher self-efficacy	Nzi ko n'abanyeshuri barushya cyane nshobora kubasobanurira neza ingingo z'ingenzi zikunze kubazwa mu masuzumabumenyi. Nzi ko ngirana n'ababyeyi b'abana umubano mwiza, ndetse no mu bihe biko-meye. Nzi ko n'abanyeshuri barushya cyane nshobora gusabana na bo ndamutse mbishyizeho umwete. Nizeye ko mu gihe kiri imbere nzabasha kongera kurushaho kumva neza ibibazo byihariye by'abanyeshuri. Iyo hagize ikindogoya ndi kwigisha, ntibimbuza kwihangana ngakomeza. Nubwo naba ntameze neza, mu isomo nshobora kwita ku banyeshuri neza. Nizeye ko nashobora kugira ibitekerezo binyuranye byamfasha guhindura imyig-ishirize idahwitse. Ndiyizeye ko nashobora gukora ikintu cyashimisha abanyeshuri cyane.
Implicite theory of capability	Abanyeshuri banjye bashobora kongera ubushobozi bwabo. Ibyo abanyeshuri banjye bazi ntibigira umupaka, bashobora kwiga byinshi no kongera ubushobozi bwabo. Abanyeshuri banjye bashobora kwiga ibintu byinshi bishya. Abanyeshuri banjye bafite mu biganza byabo kwiyongerera ubushobozi bwabo. Kwiga ibintu bishya no kongera ubushobozi bwabo bigora abanyeshuri banjye. Kuba abanyeshuri banjye baba bafite ibyo batabashije, ntacyo bashobora kubi-hinduraho. Abanyeshuri banjye nta cyo bashobora guhindura ku mpano bafite. Impano y'abanyeshuri banjye irihariye, kuko ntacyo bashobora guhinduraho cyane. Abanyeshuri banjye bashobora kwiga ibintu bishya, ariko ntacyo ibyo bihindura ku mpano baba bafite.

Orientation towards competition	Mu isomo ryanjye nita ku bikurikira gushishikariza abanyeshuri binyuze mu marushanwa
	Mu isomo ryanjye nita ku bikurikira gushyiraho Uburyo bwo kugereranya abanyeshuri hagati yabo
	Mu isomo ryanjye nita ku bikurikira kubumvisha ko kubona amanota meza ari ngombwa.
	Mu isomo ryanjye nita ku bikurikira kugaragaza imikorere myiza ya bamwe mu banyeshuri
	Mu isomo ryanjye nita ku bikurikira gukora ku buryo buri munyeshuri amenya umwanya yakwishyiramo yigereranyije n'abandi banyeshuri.
Orientation towards cooperation	Mu isomo ryanjye nita ku bikurikira ko abanyeshuri ubwabo bemeza ibikorwa by'imyigire
	Mu isomo ryanjye nita ku bikurikira kurushaho kwita ku mizamukire y'umunyeshuri umwe umwe.
	Mu isomo ryanjye nita ku bikurikira ko abanyeshuri baterana inkunga hagati yabo.
	Mu isomo ryanjye nita ku bikurikira kubereka ko umuntu yigira ku makosa ye.
	Mu isomo ryanjye nita ku bikurikira ko ntawe ugomba guseka abanyeshuri ko bakoze amakosa.
	Mu isomo ryanjye nita ku bikurikira mfasha abanyeshuri kumenya ko igihe habaye ikosa ari ubundi buryo bwo kwiga
	Mu isomo ryanjye nita ku bikurikira imigendekere y'imyigire igomba kuba imwe kuri buri munyeshuri
	Mu isomo ryanjye nita ku bikurikira ko abanyeshuri bagomba gufashanya.
	Mu isomo ryanjye nita ku bikurikira gutsindagira/kumvikanisha ko amakosa atari mabi cyane
	Mu isomo ryanjye nita ku bikurikira gufasha abanyeshuri kumenya gusesengura amakosa yabo ku buryo byabafasha mu myigire yabo.
Esteem	Urakeka ko abantu baha agaciro akazi kawe?
	Urakeka ko ababyeyi b'abanyeshuri baha agaciro akazi ukora?
	Urakeka ko abanyeshuri wigisha bashima ibyo ubakorera?
Burden	Umwuga wanjye uranshimisha.
	Mu mwuga wo kwigisha umuntu ahora afite akazi kenshi.
	Muri rusange numva akazi nkora kanshimishije.
	Kenshi numva akazi kanteye imvune ihoraho.
	Si kenshi numva nashobora kwikuramo ibibazo bijyanye n'akazi nkora.
	Mu kazi kanjye nshobora gukoresha neza ubushobozi bwanjye.
	Nkora mpangayitse kubera igihe gito.
Preference for traditional learning activities	Mu masomo yanjye ndondora ibikubiye mu isomo byose, abanyeshuri bakantega amatwi.
	Mu masomo yanjye mbaza abanyeshuri (urugero: amategeko,interuro zo kuzirikana)
	Mu masomo yanjye ndavuga, nkanabaza ibibazo, abanyeshuri bamwe bagasubiza.
	Mu masomo yanjye abanyeshuri bandukura ibyanditse ku kibaho.
	Mu masomo yanjye abanyeshuri bavugira rimwe
	Mu masomo yanjye nsaba abanyeshuri gufata mu mutwe ibyo nigisha.

Preference for student-centered learning activities	Mu masomo yanjye nereka abanyeshuri imfashanyigisho. Mu masomo yanjye abanyeshuri barikoresha bakihitiramo imyitozo n'amabwriza bari bukurikize. Mu masomo yanjye abanyeshuri bakora ku bibazo bibonetse byose bishobora kuba byabaho koko mu buzima. Mu masomo yanjye abanyeshuri bakora bonyine ubwabo imyitozo bahawe bakurikije uburyo buzwi bwanditse. Mu masomo yanjye ndeka abanyeshuri ubwabo bakishakira inzira zo gusubiza ibibazo/imyitozo Mu masomo yanjye abanyeshuri batanga ibitekerezo Mu masomo yanjye abanyeshuri bakora imyitozo n'imyandiko mu matsinda.
Social orientation	Iyo umunyeshuri afite ikibazo yihariye mbivugaho no mu gihe cy'amasomo. Nganiriza abanyeshuri ku ngingo z'ubumenyi rusange cyangwa ku zijyanye n'amakuru agezweho, nubwo igihe cy'amasomo asanzwe cyaba cyahatakarira. Gushyikirana n'abanyeshuri banjye mbiha agaciro kuruta uko amasomo agomba gukurikiza igihe yateganyirijwe. Ibibazo byihariye n'imibanire y'abantu na byo mbigenera umwanya wabyo no mu gihe cy'amasomo.
Student-teacher interaction	Muri rusange hano hari imikoranire myiza hagati y'abarimu n'abanyeshuri Icyo abanyeshuri batekereza ntacyo kivuze kuri benshi mu barimu. Nabonye kenshi hano abanyeshuri bateshwa agaciro Abarimu bakora uko bashoboye ngo bafate abanyeshuri bose kimwe. Abarimu benshi bakora uko bashoboye ngo n'abanyeshuri b'intege nke mu myigire bashobore gukurikira. Kuri iri shuri hitabwaho cyane abanyeshuri b'abahanga. Ibibazo by'abanyeshuri bamwe bifatwa cyane nk'ukuri ku ishuri ryacu
Text work	Gusubiza mu ikaye cg ku rupapuro ibibazo byerekana uko bumvise umwandiko. Kwandika ikintu ku byo basomye Gusubiza ibibazo bitanditse ku byasomwe cyangwa kubivuga mu ncamake bitanditse Kuganira ku bikubiye mu mwandiko. Gukora ishusho cg umushinga muhimbano ku byo basomye Gutegura ikinamico rijyanye n'umwandiko no kurikina. Gukora itsinda riganira ku mwandiko. Gukora isuzumabumenyi kuri uwo mwandiko.
Democratic climate in class	Abanyeshuri mu ishuri bashobora kuvuga icyo batekereza bisanzuye Nita ku bitekerezo by'abanyeshuri nubwo byaba bivuguruza ibyanjye Nshyigikira ko abanyeshuri bavuga beruye icyo batekereza mu masomo, n'iyo bidahuye n'ibya benshi mu bandi banyeshuri. Abakunze guceceka mbashishikariza kugira icyo bavuga. Ntinyura abanyeshuri kuganira/kuvuga ku bibazo bivugwaho ibintu bitandukanye Mu isomo ryanjye nerekana uburyo butandukanye umuntu ashobora kurebamo ikibazo. Mu gihe ntanga isomo, abanyeshuri bazana ibibazo bifuza ko tuganiraho.

Student's level of democracy	Abanyeshuri bacu Bamenya/babona ko hagati yabo bareshya. Abanyeshuri bacu bashobora gusobanura ibitekerezo byabo Abanyeshuri bacu bahitamo kwicecekera aho kugirango bahangane. Abanyeshuri bacu bemera ko abantu bashobora kutavuga rumwe ku kintu kimwe. Abanyeshuri bacu si ko iteka bavuga icyo batekereza nyacyo. Abanyeshuri bacu mu mubano wabo harimo kwihanganirana n'ubugwaneza Abanyeshuri bacu mu gufatira hamwe ibyemezo, bumva ibitekerezo bitandukanye Abanyeshuri bacu iteka bemera ibitekerezo bitangwa n'abanyeshuri bake kandi bahora ari bamwe.
Violence by teachers	Umwarimu yarenganyije umunyeshuri. Umwarimu yakoshereje umunyeshuri Umwarimu yakoresheje zimwe mu ngingo z'umubiri we atera ubwoba umunye-shuri. Umwarimu yakubise umunyeshuri. Umwarimu yahaye umunyeshuri ikindi gihano kibabaza umubiri.
School objec-tives	Ku ishuri ryacu abanyeshuri bagaragaje intege nke mu myigire, bafashwa ku buryo bwihariye. Ku ishuri ryacu abanyeshuri bahigira kwiga. Ku ishuri ryacu twishingira ubwacu buri munyeshuri Ku ishuri ryacu dufasha abanyeshuri mu myitwarire yo guhimba (kuzana udushya) Ku ishuri ryacu dushyigikira ko abanyeshuri bigirira icyizere. Ku ishuri ryacu abanyeshuri biga gukorana na bagenzi babo umukoro(sujet) Ku ishuri ryacu twihatira kugirana umubano mwiza n'abanyeshuri Ku ishuri ryacu twigisha/dutanga isomo ryacu ku buryo bushimishije kandi buta-rambiranye Ku ishuri ryacu abanyeshuri biga gushungura no gucukumbura ingingo z'ingenzi zikubiye mu byo biga. Ku ishuri ryacu nta munyeshuri dutonesha kurusha abandi. Ku ishuri ryacu duharanira ko mu kwigisha habamo umwuka mwiza/ibihe byiza Ku ishuri ryacu ku ishuri ryanjye abanyeshuri biga gufata bagenzi babo nkuko na bo bifuza ko babafata no kwakira bagenzi babo uko bari.
Dealing with conflicts	Iyo mu biganiro mbwirwa-ruhame habayeho ukutumvikana ku ngingo z'ingenzi, impande zihangana zihora ari zimwe. Iyo mu biganiro mbwirwa-ruhame habayeho ukutumvikana ku ngingo z'ingenzi, hashakwa uburyo bw'uko abantu baganira bashyira mu gaciro, kugirango bagere ku cyo bumvikanyeho. Iyo mu biganiro mbwirwa-ruhame habayeho ukutumvikana ku ngingo z'ingenzi, hari abantu bigaragaza ko bakaze kandi batsimbaraye ku bitekerezo byabo. Abarimu bashya mu kigo birabagora kwakirwa n'abandi.

Annex 2:   Scales from the student questionnaire

Scale	Questions
School self-efficacy	Nshobora gukora n'imyitozo ikomeye mu isomo, iyo nihase.
	Bikunze kunyorohera kumva ibikubiye mu isomo rishya.
	Iyo ngiye ku kibaho gukora umwitozo ukomeye numva ndi bubishobore.
	N'iyo namaze igihe kirekire ndwaye ntibimbuza kugira amanota meza.
	N'iyo mwarimu ashidikanya ku bushobozi bwanjye, nizeye ko nshobora kwere-kana imikorere myiza.
	Nizeye ko nshobora kugera ku mikorere myiza nifuza mu ishuri n'iyo naba nabo-nye amanota mabi
Social self-efficacy	Ntinyuka kuvuga, icyo ntekereza n'iyo abandi batemera ibitekerezo byanjye.
	N'iyo ngeze mu ishuri rishya sintinda kubonamo inshuti.
	Iyo hari unshotoye, nshobora kwirwanaho ntateye amahane.
	Nshobora gusaba imbabazi iyo nakoze ikosa.
	Iyo hagize ikintera agahinda kenshi nshobora kuba nabiganiraho n'abandi.
	Iyo hari unshotoye, nshobora kwikomeza sindakare.
	Niyo ibintu byandenze nshobora kwiyumanganya sinteze umunabi mu bandi.
Dealing with failure	Iyo hari ikinaniye, bituma ndushaho gushyiraho umwete ku nshuro ikurikiyeho.
	Iyo hari icyo mvuze kidatunganye mara isomo ryose bikimbabaje.
	Iyo hari ikinaniye, mbona ko nagombye kuzajya niteroga neza mbere.
	N'iyo nkoze ikosa, ntabwo rimbuza kwishimira amasomo.
	Iyo nkoze ikosa ngerageza kurikosora, nkarushaho gokora neza icyo nishe.
	Iyo hari icyo mvuze kitari cyo, ntibimbuza gukomeza ibyishimo muri iryo somo.
	Iyo nkoze ikosa, bituma ubutaha menya aho ngomba kurushaho gushyira ingufu.
	Iyo hari ikinaniye, ntibimbuza gukomeza kwishimira amasomo.
	Iyo hari icyo nkoze cy'amafuti, ngerageza kuba ariho nibanda nikosora.
	Iyo hari umwitozo unaniye, inshuro ikurikiyeho mbikora ntishimye.
	Iyo nkoze ikosa, ntabwo isomo ryongera kunshimisha nka mbere.
	Iyo hari umwitozo unaniye, nkora imyitozo myinshi ijyane na wo.
	Iyo hari ikinaniye, ntibimbuza gukomeza kwishimira ibyo nkora.
Self-esteem	Muri rusange numva nishimiye uwo ndiwe.
	Hari ubwo rimwe na rimwe numva ntacyo ndi cyo.
	Ndi umunyamico myiza.
	Nshobora ibintu byinshi neza nk'uko abandi benshi babishobora.
	Mfite impungenge ko nta kintu cyaba kintera ishema.
	Hari igihe numva ntacyo maze.
	Numva ndi umuntu ufite agaciro, ibyo aribyo byose abandi ntibanduta.
	Mu bintu byose njya nifata nk'umuswa.
Self-regulation	Nshobora gutekereza ku kintu umwanya munini.
	Iyo umuntu andangaje nshobora gukomeza gutekereza neza.
	Iyo natwawe cyane mu byo ndimo nshobora kwigarura ngatuza.
	Iyo hari igikorwa gisaba ukwifata, nshobora kwigenzura mu marangamutima yanjye.
	Iyo ngize ibindi bitekerezo bishobora kumbuza gukora akazi nakoraga.
	Buri gihe ibitekerezo byanjye biba byerekeye ku gikorwa nkora.
	Iyo mfite ibibazo, sinshobora gukora neza.
	Iyo hagize ikindogoya nshobora gukomeza gukora neza.
	Ibitekerezo byanjye bimbuza gukora.
	Nzirikana intego yanjye buri gihe, ntihagire ikindangaza.
General school self-concept	Amasomo menshi nyafata vuba.
	Mu masomo menshi mbona amanota meza mu masuzumabumenyi.
	Ndi umuhanga mu masomo menshi.

Subject-specific self-concept	Isomo ry'ikinyarwanda mbona ntazigera ndyumva.
	Isomo ry'ikinyarwanda ndyumva vuba.
	Mu isomo ry'ikinyarwanda mbonamo amanota meza.
	Isomo ry'imibare mbona ntazigera ndyumva.
	Isomo ry'imibare ndyumva vuba.
	Isomo ry'imibare mbonamo amanota meza.
Fear in class	Ngira ubwoba bwo gutera agatoki mu isomo.
	Ngira rwose ubwoba ko mwarimu yagira icyo ambaza.
	Sintinyuka kuba nabaza icyo ntumvise neza.
Orientation towards coop-eration	Nkunda gufatanya n'abandi banyeshuri.
	Kenshi niga iyo mfatanyije n'abandi.
	Akazi keza ngakora iyo nakoranye n'abandi banyeshuri.
	Nkunda gufasha abandi,mu itsinda tukagira imikorere/imyigire myiza.
	Iyo abana bari mu gikorwa kimwe, mbona gushira hamwe ibitekerezo by'abandi bifite akamaro.
Orientation towards com-petition	Numva nifuza ko hagira nibura isomo mbamo uwa mbere.
	Ngerageza kuba narusha abandi.
	Iyo ngerageje kurusha abandi ngira imyigire/imikorere myiza.
	Niga vuba kurushaho, iyo ngerageje kurusha abandi.
Adopting differ-ent perspec-tives	Iyo hari ibyo abantu batumvikanaho, ngerageza kumva impande zose, mbere y'uko ngira uruhande mfata.
	Ntekereza ko buri kibazo kigira uburyo bubiri bwo kugishakira igisubizo nger-ageza kwiga ubwo buryo bwombi.
	Ngerageza rimwe na rimwe kurushaho kumva inshuti zanjye, ndeba uko nabona ibintu nanjye mbaye mu mwanya wabo.
	Mbere y'uko ngira uwo nenga, mbanza kwibaza uko nanjye byangendekera ndi mu mwanya we.
	Iyo ndakariye umuntu, ubusanzwe ngerageza kubanza kwishyira mu mwanya we.
Traditional learning activi-ties	Dutega amatwi umwarimu.
	Tuganira ku bikubiye mu mukoro wo mu rugo.
	Abanyeshuri bamwe ni bo basubiza ibibazo bya mwarimu.
	Twandukura ibyanditse ku kibaho.
	Dusoma mu bitabo byacu.
	Dufata ibintu mu mutwe.
	Dusubiriramo icyarimwe ibyo mwarimu adusabye.
Student-centered learn-ing activities	Turitegereza tugasobanura ibyo tureba.
	Duhabwa imyitozo myinshi, tugatoranyamo iyo dukora.
	Turakorana, babiri babiri dufatanyije.
	Twishakira ibisubizo twebwe ubwacu.
	Turaganira, tugatanga ingingo zisobanura ibyo tutavugaho rumwe.
	Dukora mu matsinda matoya.

Structured lessons	Mu gihe cy'isomo akenshi ibintu by'ingenzi bisubirwamo mu ncamake.
	Mu gihe cy'isomo twongera kwibukiranya ingingo z'ingenzi z'ibyo twize mu gihe cyashize.
	Abarimu bacu bahora bashimangira ibintu by'ingezi kurusha ibindi.
	Abarimu bacu kenshi batubwira ibyo tugomba kwitaho kurusha ibindi.
	Abarimu bacu kenshi basubiramo muri make isomo kugirango dushobore kurifata.
	Abarimu bacu bifuza gukurikiranira hafi uko buri munyeshuri atera imbere mu myigire.
	Abarimu baduha umwanya tukavuga/tugatanga ibitekerezo byacu.
	Abarimu bacu badufasha mu byo dukora.
	Abarimu bacu baradusobanurira kugeza igihe dusobanukiwe.
	Abarimu bacu badufasha ku buryo bushobotse bwose.
	Abarimu bacu badufasha mu myigire.
Student's teacher perception	Abanyeshuri bashobora kumvikana na benshi mu barimu.
	Abarimu benshi basanga ari ngombwa ko abanyeshuri bamererwa neza.
	Abenshi mu barimu banjye bashishikazwa no kumva ibyo mvuga.
	Iyo nkeneye inkunga yihariye, abarimu banjye bashobora kuyimpa.
	Abarimu bamfata neza uko bikwiye.
Student-teacher relation	Iyo hari ikitadushimishije, abarimu bemera ko tubiganiraho.
	Iyo abarimu bakoze amakosa barabyemera.
	Abarimu bacu batanga amasomo ku buryo bushimishije kandi buteye amatsiko.
	Abarimu bacu bashimishwa n'uko koko hari icyo twungutse mu masomo.
	Abarimu bacu bumva ibibazo byacu byihariye.
	Muri rusange mfitiye icyizere abenshi mu barimu.
General school satisfaction	Kujya ku ishuri biranshimisha.
	Binshobokeye nakwigira ku kindi kigo.
	Numva ku ishuri ryacu mfashwe neza cyane.
School's level democracy	Mu kigo cy'ishuri ryacu, mpamenyera ko abanyeshuri bose bafite uburenganzira bungana.
	Mu kigo cy'ishuri ryacu, mpamenyera gusobanurira abandi icyo ntekereza aho gishingiye.
	Mu kigo cy'ishuri ryacu, hari bamwe batajya bavuga icyo batekereza nyacyo.
	Mu kigo cy'ishuri ryacu, nanjye nshobora gutanga igitekerezo cyanjye.
	Mu kigo cy'ishuri ryacu, mpamenyera ko abantu bashobora kugira ibitekerezo bitandukanye ku kintu kimwe.
	Mu kigo cy'ishuri ryacu, hari iteka abanyeshuri batoneshwa kurusha abandi.
	Mu kigo cy'ishuri ryacu, niga gufata bagenzi banjye nk'uko nifuza ko na bo bamfata no kubakira uko bari.
	Mu kigo cy'ishuri ryacu, iyo abantu bagomba gufatira hamwe ibyemezo habamo ibitekerezo bitandukanye.
	Mu kigo cy'ishuri ryacu, ibyemezo byafashwe bireba abantu bose bishyirwa mu bikorwa
	Mu kigo cy'ishuri ryacu, iteka abanyeshuri bamwe ni bo bemeza ikigomba gukorwa.
Violence by teachers	Mwarimu yarakurenganyije.
	Mwarimu yakubwiye ikintu cyakubabaje.
	Umwarimu yatoteje abanyeshuri.
	Mwarimu yaragukubise.
	Mwarimu yahaye umunyeshuri ikindi gihano kibabaza umubiri.
Violence by students – victim	Umunyeshuri mwigana yaragushotoye.
	Umunyeshuri mwigana yakubwiye ikintu kitari cyiza cyangwa yaragukankamiye.
	Umunyeshuri mwigana yakuvuze nabi mu bandi ariko wowe ntiyagira icyo akubwira.
	Umunyeshuri mwigana yagutwaye ikintu utabishaka.
	Umunyeshuri mwigana yangije ikintu ku ishuri ku bushake.
	Umunyeshuri mwigana yarakurakariye ariko ntiyagira icyo akubwira.
	Umunyeshuri mwigana yaragukubise.
	Umunyeshuri mwigana yaragusuzuguye.

Violence by students – offender	Washotoye umunyeshuri mwigana. Wakankamiye umunyeshuri mwigana, cyangwa wamubwiye ikintu kitari cyiza. Wavuze umunyeshuri mwigana nabi adahari. Wambuye umunyeshuri mwigana ikintu atabishaka. Wangije ku ishuri ikintu ku bushake. Warakariye umunyeshuri mwigana ariko ntiwagira icyo umubwira. Wakubise umunyeshuri mwigana. Wasuzuguye umunyeshuri mwigana.
Dealing with conflicts	Iyo mu ishuri hari ibitekerezo bitandukanye ku bibazo bikomeye, biraruta ko tutabiganiraho. Iyo mu ishuri hari ibitekerezo bitandukanye ku bibazo bikomeye, iteka abagira icyo bavuga baba ari bamwe. Iyo mu ishuri hari ibitekerezo bitandukanye ku bibazo bikomeye, iteka ni bamwe bahora bemera ibintu hakaba n'abandi iteka bahora babyanga. Iyo mu ishuri hari ibitekerezo bitandukanye ku bibazo bikomeye, tugerageza guhana ibitekerezo ku buryo burambuye tubinyujije mu kuri, tukagera ku mwanzuro twumvikanyeho. Iyo mu ishuri hari ibitekerezo bitandukanye ku bibazo bikomeye, hari bamwe batajya bagira icyo bavuga mu biganiro. Iyo mu ishuri hari ibitekerezo bitandukanye ku bibazo bikomeye, hari gihe mu biganiro hagaragara umuntu udakunda undi. Iyo mu ishuri hari ibitekerezo bitandukanye ku bibazo bikomeye, hari bamwe batajya bavuga icyo batekereza nyacyo. Abanyeshuri bashya mu kigo birabagora ko abandi babakira.

Annex 3:   Letter to the parents

CONSEIL PROTESTANT DU RWANDA (C.P.R.)
Bureau National de l'Enseignement Protestant (BNEP)

                              Kigali, le ………………………..

<u>Impamvu</u> :   Kumenyesha iby'ubushakashatsi
                  BNEP irimo gukora

Mubyeyi,

Mu rwego rwo gukora ubushakashatsi mu mashuri y'Abaprotestanti, harimo n'ikigo cy'ishuri umwana wawe yigamo, Inama y'Abaprotestanti mu Rwanda / Ibiro byayo bishinzwe uburezi (CPR/BNEP) ifatanyije na Kaminuza ya Nuremberg yo mu Budage yateguye ibibazo byo kumenya uko abanyeshuri, barimo n'umwana wawe, babona imyigire yabo.
Ibibazo biteguye ku mpapuro umunyeshuri asubirizaho. Nta zina ryandikwaho kandi ibyo bibazo bisubirizwa ku ishuri. Nta muntu wamenya uwatanze igitekerezo iki n'iki kuko nta ma-zina ashyirwaho.

Ubwo bushakashatsi buzadufasha kurushaho kugira uruhare mu guteza imbere ireme ry'uburezi mu kigo cy'ishuri umwana yigamo.
Haramutse hari icyo mukeneye gusobanukirwa birenzeho mwahamagara kuri tel.
0252 585825 bakabasobanurira.

Tubashimiye ko mubyakiriye neza.

RWAMBONERA François
Umuyobozi wa BNEP

Annexe 4: Test instruction

Directives pour introduire la recherche

1. Informer qu'on va faire un questionnaire pour savoir comment améliorer l'école et l'apprentissage. C'est pourquoi on doit savoir les opinions des élèves. Remerciez les élèves pour leur participation.

2. Donner à chaque enfant un stylo et un questionnaire – les élèves peuvent lire la page 1 mais ne doivent pas tourner la page.

3. Racontez dans vos propres mots en bref ce qu'il est écrit sur la page 1.

4. Laissez tourner ensemble la page 1.

5. Racontez dans vos propres mots en bref ce qu'il est écrit sur les pages 2 et 3. Dites aux élèves de regarder les exemples.

6. Demandez lentement et d'une façon motivante s'il y a des questions. Répondez avec patience aux questions des élèves.

7. Laissez tourner page nr 3.

8. Pendant le test: Si un élève a une question, il peut la poser en silence. Si cette question est important pour tous les élèves vous pourriez répéter les informations pour tous les élèves.

9. Si un élève a fini, ramassez les questionnaires d'une façon que c'est clair et visible que vous allez respecter l'anonymat.

10. À la fin, notez quelques impressions sur la fiche d'observation.

11. Faites un paquet des questionnaires avec la ficelle.

Annex 5:   Test record

Date:

École:

Classe:

Nombre des étudiants:

Événements spéciaux pendant le test:

Observations / Commentaire: