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Title: Bullying in primary schools: Prevention through the implementation of Social Work programmes

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ABSTRACT

Bullying has become a widespread phenomenon in schools worldwide, over the last years. Very few studies have been performed in Greek schools so far, while there has also been very little experience in the implementation of long-term programmes aiming at the prevention of the phenomenon. The increasing diversity of school population due to the immigration seems to have made school environment even more complex. The present study focuses on the exploration of the phenomenon of violence and bullying, as it appeared during a certain period of time (February 08 – February 09,) in four different multicultural primary schools in Greece. The study of social and personal elements that constitute the problem and the ways that each school culture seems to influence/affect on the appearance of bullying were the main topics of research.

Combining qualitative and quantitative methods, research was conducted in two cross cultural schools in the region of Attiki and two in the region of Eastern Macedonia and Thrace. Two hundred and twenty one (221) students attending the fourth, fifth and sixth grade, completed two questionnaires. The first one aimed at the assessment of the attitudes and behaviours concerning bullying, while the second one aimed at assessing the levels of self-confidence and self-awareness of the children and how it related to the appearance of violence (Manual for the Self Perception Profile for Children Harter, S. (1985).

In addition to this, a three-month social work group intervention (action research) was designed and implemented on a weekly basis, in two of the four schools, for a period of three months aiming at the prevention of the phenomenon of bullying. The fifth grade was selected for both schools, according to the questionnaires' results and the teachers' suggestions. The students attended a programme of 10 sessions. The teacher was in both cases present at all sessions with the students, the parents were aware of the existence and purpose of the programme. It was conducted under the permission of Greek Ministry of Education. A before – after evaluation was designed and implemented while two of the schools participated in the research as control groups. The results and outcomes of the action - research, as they appear through the qualitative analysis will be thoroughly presented.

Key words : school bullying, school violence, gender, ethnic diversity

Introduction

Bullying among schoolchildren is certainly a very old phenomenon, though it was not until the early 1970s that it was made the object of systematic research. Though research originally focused on Scandinavia, by the 1980s bullying among schoolchildren had attracted wider attention in countries such as Australia, Canada, Japan, the Netherlands, the United Kingdom and the United States. Recently, the problem of bullying in the state primary schools of Greece has become an issue of significant concern.

Olweus, (2001) considered that bullying occurs when a student is repeatedly exposed to negative actions on the part of one or more other students. These negative actions can take the form of physical contact, verbal abuse, or 'making faces' and rude gestures. Spreading rumours and excluding the victim from a group are also common forms. Bullying also entails a power imbalance between the bullies and the victim, what experts call an asymmetric power relationship

Recent research studies in primary schools that took part in the city of Athens indicate an increase of bullying incidents among school children. According to the research study of the National Centre of Social Research conducted in 2006, (where 2000 students from 101 primary schools participated), the 37% of students accepted that they have been in the past victims of bullying, while 13% admitted participation in violent incidents. 60% of teachers declared that bullying usually occur towards new comers and weak students. Verbal victimization among primary school children is indicated as the most frequent form of violence according to various research studies (Petropoulos- Papatsylianou, 2001, Pateraki et al, 2000, Andreou & Smith, 2002, Katsigiannis, 2006).

It has been shown that bullying has a negative effect on the development of positive self-esteem in the victims (Boulton & Smith, 1994); victims of bullying blame themselves for what is happening to them. This attitude affects their concentration and learning (Sharp & Smith, 1994). In addition, some children experience stress-related symptoms (e.g. headaches, nightmares) and even school phobia (Sharp & Smith, 1994). In the long term, some children continue to present low self-esteem and depression (Olweus, 1993) or even commit suicide (Slee, 1994).

Olweus (1993) provided a holistic definition of the phenomenon of bullying as it is expressed within the school environment: 'a student is being bullied or victimized when he/she is exposed, repeatedly and over time to negative actions on the part of one or more other students. It is a negative action when someone intentionally inflicts, or attempts to inflict, injury or discomfort upon another' (p. 9). Moreover, Olweus argued that the term 'negative actions' need not refer only to physical contact but could also refer to verbal or other methods, such as making faces or obscene gestures, and intentional exclusion from the group. However, not every negative act could be considered as bullying as this presupposes an imbalance in strength between the participants. This definition of bullying became the basis for the development of a worldwide research activity on school bullying (e.g. Pateraki & Houndoumadi, 2001; Smith et al., 1999; Stevens, De Bourdeaudhuij, & Van Oost, 2000; Whitney & Smith, 1993), which revealed that bullying is a significant educational problem in many countries which can impair the school's effectiveness. Studies have shown that teachers do not have a good understanding of bullying, thus also feel unable to deal with the phenomenon.

School consists of a context where attitudes are cultivated and expressed while it seems to be the most appropriate environment for the implementation of interventions based on social work theories and practices. Social Work as an applied social science, aims at empowering all the parts of the school in order to take action, individually or in groups and cope with disrupting situations as bullying among peers. School social work aims at social development, broadening of learning opportunities and enhancement of social skills to children. (Kandylaki, 2005).

The 'dynamic systems perspective' also provides a useful framework for study and research. In particular, it suggests that as well as identifying multiple risk factors (i.e. the structures) we should also focus on identifying the mechanisms through which these factors have an effect (Pepler et al., 1999). This multi-dimensional model acknowledges that the bully-victim relationship takes place in a much broader system. Thus, all parts of the 'system' are involved, not just the bully and the victim. This perspective implies that any intervention is unlikely to be effective unless it is carried out as part of a whole school anti-bullying programme. As noted by Pepler et al. (1999), "interventions aiming to reduce bullying must unfold simultaneously at the

individual, dyad, peer classroom, school, and family levels'' (p. 449). The principles of psychodynamic approach (Payne, 2000, Jones, 1990) that emphasizes in enhancement of emotional awareness, cognitive – behavioural (Bandura 1997) that emphasizes in the development of personal and social skills, and cross-cultural approach (Georgogiannis 1997) that focuses on empathy cultivation and respect of cultural diversity formed the main theoretical framework of the present action research. Research in social work derives its methodology materials from the broader scope of social researches while at the same time adopts an applied nature that prerequisites an intervention focusing on a realistic goal. Research in social work aims at the thorough study of a subject, deep understanding of the existing circumstances. It brings to the forefront the 'words'/ narratives of the participants, while aiming at planning, implementation and evaluation of a short term focused implementation (Kandylaki 2009).

Despite the Act of 1974 that acclaims the necessity of appointing social workers to all Greek schools, social workers only work in schools for children with special needs and during the recent years they consist members of cross scientific professional groups in Centers for the Diagnosis of Learning Disabilities (Kallinikaki 1988).

1. Aims of the thesis

The aim of the thesis is to study and explore the potential development of the phenomenon through social work interventions in Greek multicultural schools. Data indicating increasing of violence occurring within primary school children, the lack of professionals (social workers or psychologists) working within the school context intimate the need for design and implementation of school based interventions aiming at the prevention and management of the phenomenon during early adolescence. Children have to cope with a variety of biological and cognitive changes, emotional challenges and pressures within social and family context that seem unstable and insecure. Behavioral disorders as school failure, hostility, and drug abuse as well as mental disorders as depression and anxiety, appear as common symptoms of a whole system malfunctions. The school environment has been developed more complex due to the multicultural environment: increasing diversity of school population, different culture, religion, language.

This study has focused on the bullying phenomenon among school children (aged 9 – 11 y o) in primary education. Initially, the purpose of the study was to assess the attitudes and behaviors of two of the main parts of the school community (students and teachers) towards the phenomenon of bullying as it appears at school. They expressed their own point of view, providing revealing information about the school culture, concerning the effects of violence on school life and the whole educational procedure. Successively, the assessment and definition of the school's expressed needs regarding the elimination of the violence followed. The design, implementation and evaluation of an innovative intervention, based on the research findings, aiming at the prevention as well as effective management of bullying incidents at school was one of the main purposes of the certain study. A thorough exploration was held concerning crucial issues such as the nature of violence, various ways of expression, frequency and consequences to students mental health, effects for the educational procedure, what is the school policy towards violent incidents, which procedure, if any, is followed for the monitoring and estimation of above incidents. Furthermore, the study attempted to examine teachers' motives and personal desire to contribute to the prevention and effective handling of violent incidents. The certain study consists of an action - research, it is a qualitative methodology of research that combines research and action, aims at solving problems and provokes positive changes for the participants (Iosifides, 2003).

2. Methodology of the research

The study combines quantitative and qualitative methodology. It consists of three main phases. Initially the focus is to explore and study violence and the phenomenon of bullying and assess students' self esteem through structured questionnaires given to a sample of students. At the same time focus group interviews were conducted both with students and teachers. The second phase of the research was an action research based on social group work intervention with a group of students. The action research, based on social work theories and practices, lasted eleven (11) weeks while the sessions were semi structured and aimed at the management and prevention of bullying. In parallel there was availability to meet any needs pointed by the teachers

or parents' association. The last phase formed the evaluation process of the programme. An assessment of outcomes before and after the intervention, took place through structured questionnaires and focus group interviews with teachers and students and sessions with parents by using the observers' detailed diaries. Changes according to the following issues were assessed: enhancement of personal and social skills, ways of interpersonal interactions among students, involvement in violent incidents at school, relationships among students and relationship with the parents. This paper focuses on the second phase, mainly the analysis of action research since the quantitative analysis is still in process.

The longitudinal goal of the study is to empower the school community through the psychological, social and environmental elements that promote healthy life attitudes. Furthermore, the aim is to highlight the crucial elements / aspects that co operate to the long term policy configuration. This case study of schools in actual – realistic circumstances, with contemporary characteristics, aspires to affect and also contribute to an academic dialogue concerning the implementation of health promotion programmes, aiming at showing the absolute necessity of the implementation of social work programmes at schools.

The action research conducted from February 2008 – June 2008 in two primary schools in Attici, a Cross Cultural primary school¹ (school A) and a general but multicultural population primary school (school B). During the period September 2008 – January 2009, an equivalent action – research was also performed in two cross – cultural schools (mentioned as Thrace school A and B at the present paper) in the north part of Greece, Thrace, in two different small cities with Muslim population².

¹ It was back in 1996 that the Greek Ministry for National Education and Religious Matters laid the foundations of a system designed to meet the educational needs of social groups with a particular social, cultural or religious identity (Act 2413/1996). The Ministry adopted cross-cultural education - a new form of education in Greece - as part of this policy. The aim of cross-curriculum education is to set up and run primary and secondary classes that provide education to young people with a specific educational, social or cultural identity. In cross-cultural schools, the standard curriculum is adapted to meet the specific educational, social or cultural needs of the students attending them. A total of 26 cross-cultural schools have been set up throughout Greece since 1996. Of the 26 schools, 13 are primary schools, while there are 9 junior high schools and 4 senior high schools. A school can only be described as cross-cultural when repatriated Greek and/or foreign students account for at least 45% of the total student body. The educators in these schools receive special training, and are selected on the basis of their knowledge on the subject of cross-cultural education and teaching Greek as a second or foreign language (www.ypepth.gr).

² Muslim minority is the only official recognized minority in Greece. The status of this minority is specified by articles 37-45 of the Lausanne Treaty, which was signed in 1922 and which designed the national borders of the Balkan States. The minority population members are officially recognized as based on religious differences. Since 1991, three ethnic groups have been officially recognized within the Muslim minority: those of Turkish origin, Pomaks (who speak a Bulgarian – Slavic dialect), and Gypsies – Roma (Kandylaki, 2004: 30-31).

All of the above-mentioned areas come with common cultural, social, economic characteristics, as low economic and social status, high unemployment records, high cultural diversity and frequent variation of school population. Multi cultural environment, co-existence of students coming from diverse social groups with different customs, religious beliefs, cultural and spiritual characteristics, consists of the contemporary profile of public schools in Greece, regardless whether they have the title of Cross – Cultural.

Materials – Instruments (phase A)

This paper presents a case study of the action research- social work intervention in four multicultural schools in Greece, aiming at the assessment of needs, attitudes and beliefs of the school community concerning the phenomenon of bullying during a certain period of time. Furthermore, the study focuses on the design of an intervention model aiming at the indication of effective ways towards the management and prevention of bullying.

According to McMurrin & McGuire (2005), intervention aiming to preventing deviant behaviour 'is easier' among primary school children. It is during childhood and pre adolescence period that attitudes are formed; values are shaped while children are in a level of growth that prevention programmes seem to be more effective (Moon, 1998).

Research studies (Flannery, 1998 – Moon, 1998 – Flaxman, 1996) indicate that the age of 14 is the critical age when deviant behaviour appears. Hostility, home escapism, drug abuse, suicidal attempts, consists of common phenomena occurring during adolescence. School community seems to be the most appropriate setting for the implementation of a prevention programme.

Therefore, crucial for the study of the school culture and estimation of the needs and system dynamics, was the gathering of information from students and teachers concerning the bullying phenomenon. Researchers as Porteous (1996), Strauss and Corbin (1990), underline that in many research studies, a combination techniques are

being used. The study of a multi dimensional and complicated reality of social life prerequisite a research strategy of multiple techniques (Kyriazis, 2001). The use of multiple research methods in studying a certain subject requires a multi-methodological approach (Brannen, 1992, Cohen & Manion, 1997). The present study attempted through a combination of qualitative and quantitative research methods to describe and present a holistic view of each school current culture.

Questionnaire A aiming to assess students' attitudes and beliefs concerning bullying

Questionnaire B assessment of students' self-perception and self-esteem

Focus Group Interviews (groups of teachers)

Personal session for teachers

Questionnaires

Two questionnaires were administered in class by the researcher. Students were instructed to complete the questionnaire anonymously. They were seated to avoid conferring or copying. It was explained to them that their views would contribute in an academic study in order to help children in their every day life at school. The importance of answering sincerely was stressed to them. The questionnaires were completed in the classroom within two didactic hours with the teacher of the class present. The researcher developed the Questionnaire A. The aim is to assess: 1) peer victimisation, 2) frequency, 3) feelings provoked and 4) ways of response. Five questions provide further information on the prevalence of different forms of bullying behaviour. It was based on the definition of bullying, proposed by Olweus (1993; see above), and consists of 12 (5 of which are closed while the rest are open ended) questions for the measurement of aspects of bully/victim problems: physical, verbal, indirect, racial, forms of bullying harassment; initiation of various forms of bullying other students; where the bullying occurs; pro-bullying and pro-victim attitudes; and the extent to which teachers, peers, and parents are informed. Questionnaire B is the Greek version of the HARTER, S. (1985) questionnaire. Manual for the Self Perception Profile for Children of 4th, 5th and 6th grade. The purpose of the certain questionnaire was to explore the possible correlation between levels of self-esteem with the involvement in violent incidents. The Questionnaire B ' How I perceive

Myself ' consists of 30 closed questions, assesses six certain items: 1) School performance, 2) Peer relationships, 3) Sports and athletic abilities, 4) Physical appearance, 5) Behaviour and conduct, 6) Self esteem.

Focus Group Interviews

Questions mainly focused on deriving teachers' views concerning the relationships among students. Furthermore, they expressed their own experience of violent incidents as they take part in the classroom or in the schoolyard. They described the difficulty and effort they put on handling such incidents. Additionally there was an exploration of their views and attitudes concerning the existence of particular school policy as a mean of effective management of bullying.

Participants

The sample of the students consisted of 221 children:

	Students	Boys	Girls
Athens School A	70	37	33
Athens School B	56	25	31
Thrace School A	41	27	14
Thrace School B	54	26	28
Total	221	115	106

Seventeen (17) students from the population of Athens School B did not took part in the research due to their parent's denial to give their consent (15 boys and 2 girls). For the same reason nine (9) students from Thrace School B did not participated to the research (6 boys and 3 girls).

Concerning the sample of teachers, four focus group interviews were performed (one for each school): Athens school A: 15 teachers (2 men και 13 women), Athens School B: 12 teachers (10 women and 2 men), Thrace School A: 16 teachers (12 women και 4 men). Thrace School B: 9 teachers (8 women and one man).

Results

Schools Profile

	INTERVENTION SCHOOL	INTERVENTION SCHOOL	CONTROL SCHOOL	CONTROL SCHOOL
	ATTICA SCHOOL A	THRACE SCHOOL A	ATTICA SCHOOL B	THRACE SCHOOL B
POPULATION	110	180	160	109
COUNTRIES OF ORIGIN / RELIGION	Greece, USA, Africa, Philippines, Syria, Gana, Afganistan, Pakistan, Germany, Poland, Holland, Rumania,, Albania	Greece, Greek Muslims, Greek Gypsy, Albania, Armenia, Russia	Greece, Pontiacs, Gypsy, Pakistan	Greece, Greek Gipsy, Greek Muslim, Albania
NUMBER OF TEACHERS	14	15	17	13
CHARACTERISTICS	Intense bullying phenomena, acknowledgment of the existence situation. Expression of request for the implementation of the intervention.	Intense bullying phenomena, acknowledgment of the existence situation. Expression of request for the implementation of the intervention.	Intense bullying phenomena, schools' close culture, hesitant to co operation	Intense bullying phenomena, schools' close culture, hesitant to co operation

Main outcomes as they derive from Students' answers to the open ended questions

Not every respondent completed the open-ended questions; Open-ended questions were grouped into themes. Reluctance to inform adults (teachers, directors, parents) about a violent incident may indicate previous experience of nothing being done. If this is the case, it highlights the importance of students witnessing incidents of bullying being dealt with effectively. Students acknowledge the existence of violence in their schools in all its forms. They declare their support in cases their friends are involved in violent incidents. They describe a variety of ways of responding when they become subjects of hostile behavior. Three sub-scales of responding were established: 1) Counter-aggressive (they want to take revenge, fight back) 2) Helpless (e.g., starting to cry), and 3) Indifferent – passive (remain silent, stay still or try to

leave without any other reaction). 4) Inform adults, teacher, school director or parents. Making clear though that even if they inform the adults 'it's in vain since nothing is really done'. Helplessness was a more common answer in girls, and counter aggression for boys. Furthermore they describe intense feelings of sorrow, emotional pain, sadness, loneliness, while they do not hesitate to admit desire for revenge regardless of their actual response to violence.

Main outcomes as they derive from the qualitative analysis of teachers' participation to the Focus Group Interviews

They hesitate to openly admit the existence of bullying among students at school. They consider family, society and the students themselves responsible for the problem. They feel incompetent of coping effectively with the violent incidents occurring in the classroom or in the schoolyard. They acknowledge difficult relationships and various obstacles in co-operation with the parents. All of them admitted that there is no clear school policy regarding the problem. They claimed that a particular school policy based on certain philosophy and values concerning the effective management of violent incidence consists of an absolute necessity. Nevertheless, they avoid including their role and attribution to the whole procedure of bullying management and prevention.

3. Methodology of the intervention (phase b)

Additionally/successively to the research, a three-month social work group intervention programme (action research) was designed and implemented on a weekly basis, in two of the four schools, for a period of three months aiming at the prevention of the phenomenon of bullying. The fifth grade was selected for both schools, and the students attended a programme of 10 sessions based on basic Social Work theories and practices. The teacher was in both cases present at all sessions with the students, the parents were aware of the existence and purpose of the programme and the whole programme was conducted under the permission of Greek Ministry of Education. A before – after evaluation was designed and implemented while two of the schools

participated in the research as control groups. The children who took part in the intervention programmes were followed up approximately one year later

The intervention aims at the improvement of the interpersonal relationships, the elimination of verbal and physical violence among students. There was an attempt to work with all the systems and school groups through action research. The intervention programme was based on three basic elements: Development of self awareness, Acknowledgment – identification of feelings, Development of social skills. The general title for the whole programme was: ‘ Communication Games’. Practices and theory of Social work with group and individual were the main techniques of the programme.

Sample of the intervention

According to the design of action research, the intervention programme would be implemented in two of the four schools, in Attiki and Thrace successively. A relevant proposal was addressed to all schools – since according to the research findings bullying incidents were massively occurring. There was an effort aiming at sensitising each school community to take action and deal with the bullying problem. Two of the schools (one in Athens and one in Thrace) were hesitant; the directors were reluctant of taking responsibility for the implementation of the programme. They considered that the hours needed for the programme would put extra burden to students. The need to ‘protect’ the school community was stronger so they denied co-operating with the researcher. For the two other schools, there was actually a formulation of request for the programme to be implemented. The school director and most of the teachers acknowledged the existence of the problem and considered that the implementation of the programme would potentially help the students and the whole system of school community.

According to the design of the action research, the selection of the fifth grade (10 – 11 yo) would allow the opportunity to follow up the children of the intervention one year after. Schools agreed to that and since there were two classes at the 5th Grade, suggested the one they considered to be the most ‘disgraced’. It consisted for both cases group at risk, with characteristics as poor school performance, hostility,

behavioral problems, difficulties in relationships and co-operation in the classroom, combined with high diversity. In close co-operation with the teachers of the certain classes, and after they gave their absolute consent, the final selection was made. The implementation of the programme started after student's parents were informed about it and gave their written permission. Finally, 5th grade from Athens cross cultural school A consisted of 13 students (11 boys and 2 girls) and the 5th grade from Thrace cross cultural school consisted of 14 students (8 boys and 6 girls) was the two groups that attended the intervention programme.

Additionally, the selection of the control group took place in order for the results of the intervention to be assessed in comparison to the absence of it. Equivalent, according to the age and characteristics (group at risk), classes were selected from the other two schools that did not participate to the intervention. According to Harrell, (2005) experimental researches are reliable since they appoint strong evidence for the effectiveness of interventions' implementation.

Implementation of the intervention

Ten (10) weekly sessions, of ninety minutes (90) duration, within the school programme took place for each school with the presence of the teacher and participant observers. The development of social skills, the effective interaction among the students, the personal growth and enhancement of self-esteem consisted of the main goal of the intervention. The programme attempted to empower the children to cope better with every day difficulties. In the context of the certain programme, themes concerning the children's psychosocial development were analysed. Students had the opportunity to explore their relationships with the other students and the broader environment – the rest of the school, society, and family. They had the chance to discuss further issues that they brought to the group. This allowed them to get to know each other in a different way. They examined the ways they interacted, and challenged violent behaviour while they tried to develop alternative ways of dealing with their sentiments.

The methodology of the implementation makes use of the group dynamics and group processes as a main mean for understanding and explanation of behaviours. It is also taking advantage of experiential techniques as brainstorming, role-playing, positive

reframing, and experiential learning. Experiential learning enhances children to develop empathy, free expression, participation, co-operation and decision-making.

Thematic entities

- A. Development of interpersonal relationships within the group – opportunities for co operation
- B. Self esteem, self perception, self respect, respect for others
- C. Acknowledgment, expression and control of emotions (communication skills)
- D. Conflict resolution, violent behavior – examination of factors that affect the behavior - consequences

4. The Evaluation Process (phase c)

Materials – Instruments

Factors indicating behavioral changes according to the following issues were evaluated during the third phase of the action research: enhancement of personal and social skills, ways of interpersonal interactions among students, involvement in violent incidents at school, relationships among students and relationship with the parents.

Focus group interviews were conducted for the selected groups of students before and after the implementation of the programme while they also completed the A Phase questionnaires, before and after their participation to the programme. Since the Ministry of Education had rejected any record of the procedure (visual or hearing), the co operation with participant observers³ was the only possible way to register in details all the narratives of the group sessions. Observer's session diaries were utilized as they came out of the attendance to all sessions with students.

Content analysis of the observer's notes (detailed diary for each session) took place after the completion of the programme. The participant observers were present in all meetings with students (sessions and focus group interviews). The co-operation with

³ Two students attending the last year of their studies at Social Administration Dep of Demokritos of Thrace Univeristy, as well as one graduate of the same Dep took the roles of participant observers in Thrace and Athens successively.

the participant observers provided the opportunity of registration and analysis of the actual students' words. Furthermore it allowed an important process analysis.

Each group had its own characteristics and different ways of interacting. In Athens cross-cultural primary school A, the students of the 5th grade had a 'bad reputation' concerning their behavior. High diversity concerning the country of origin was the main characteristic, since students were coming from Congo, Cameroon, Germany, Rumania, United States of America, Nigeria, Philippines, Albania. Further more diversity was made obvious not only in outside characteristics, mother language, but concerning the levels of understanding the Greek language, the age, the sex (11 boys and 2 girls), the school performance of each student. They had behavioral problems, difficult relationships with each other, severe rejection for co students expressed both verbally and physically, lack of respect and empathy, lack of communication based on rules. They expressed anger for their parents, hardly negotiated the rules, found relief in violent games.

On the other hand, the 5th grade of Thrace cross cultural primary school A had its own characteristics: Diversity concerning the country of origin and the religion (2 students from Russia and 3 Muslims). Different levels of understanding greek language, difficulties in relationships, indirect expression of rejection mainly in verbal and non verbal ways, lack of trust within the group, discrimination between bad ad good students (concerning the academic performance). Students remained silent, showing reluctance to express feelings, thoughts and opinions; they were avoiding interaction or dialogue with each other. Passive hostility was expressed from girls towards boys.

Content Analysis of the session narratives

Within the procedure of the programme implementation to both groups, slight elements revealed changes occurring slowly but visibly: Their constant need to play was facilitated since they had the chance to play various games within the group. They eventually made an effort to follow the rules – continuously reminded to them – since the realised rules made things more fair and clear. They took advantage from the opportunities to make dialogue and interact with each other in alternative ways. They

started showing trust to the group procedure, and gain trust for themselves by expressing feelings and attitudes. The group becomes ‘theirs’ and they find their way to have fun, express their talents by singing songs, dancing, laughing freely. They discovered new ways of self-expression and interaction. They take extremely seriously the conversations about their rights, they also wonder openly about the contemporary trends in outfits and behaviour of peers (trendy – emo). They are aware of the current social conditions and problems, they seek for space and opportunity to share concerns, doubts, and concepts. They show resistance, hence, they make an effort to listen, interact, express fears, anger, and they try to attach (relate) taking shy steps towards the others by showing respect and acceptance.

They described their own view about themselves and how the programme affected them:

‘We learnt not to call teasing ‘names’ and cooperate’

‘ Our goal is not to fight with each other, we want to be united, be together’

‘ We need to love our friend, respect the others and talk politely’

‘We want the rules’

‘We learnt not to hit each other’

‘We want to have fun and co operate’

‘We want to love without hurting others feelings’

‘We feel ‘changed’ (that we have changed)’

Additional effectiveness criteria: Teachers expressed positive feedback towards the intervention programme and its influence to the school community. Furthermore, the relationship and co-operation between parents and teachers were viewed from a different perspective. The teachers who were present in the classroom during the sessions were actually trained in dealing with matters within the classroom with alternative ways. They even attempted to continue the work with children even after the end of the programme. The schoolteachers appreciated the presence of a social worker at school; they eventually showed much less resistance by identifying the positive effects of the co-operation. School Director successively to the programme implementation, addressed request to the Ministry of Education pin pointing the urgency and importance of appointing social workers at schools. Both schools started procedures in order to decide the philosophy and values of a whole school policy for

the management and prevention of bullying. All parts of the school, teachers, students and parents participated.

Sub goals

Cross-methodological social work was applied for working with school groups and systems

Networking between school and family was attempted

Activation and utilization of the family sources additionally to those of the community services aiming at asserting students various psychosocial and learning needs.

Concluding notes

The School community contains remarkable sources of energy deriving from the richness of interaction among students, teachers, parents and the local community. The schools' dynamic also reflects characteristics of the broader economic, social, cultural contemporary situation. Therefore school community has to cope with the challenges that affect its traditional function and demand new ways of managing issues and student's needs. Teachers want to defend schools adequate function therefore they are hesitant to admit the existing problems. At the same time they feel incompetent and helpless to deal with a variety of problems. They experience constant disappointment while they either struggle to respond to the needs of their profession or quit feeling that every effort done is in vain. Parents on the other hand, need to trust the school for their children's cognitive and mental development. They expect much from the school as well as from the teachers and they often blame them for their children's behavior. Furthermore the family, consist of a changing system in crisis the recent years with the parents (both immigrants and natives) struggling to earn living and cope with every day difficulties. On the other hand children receive all the double bind messages from significant adults that they have to succeed in something vague while at the same time they feel unsafe. They feel they have no space to express anxieties, desires and doubts. They lack basic skills of communication and positive

interaction mainly due to the fact that they have no such role model. They recognize/acknowledge their parents efforts but they reject them at the same time. Furthermore, they feel school demands from them and provide restrictions without trying to respond to their needs.

Anti-bullying interventions need to focus on how bullying is managed within a school setting. If students perceive teachers as being incompetent, they are unlikely to tell them that it is occurring either for themselves or others. This may result in the bullying continuing and students feeling unsafe. The implementation of social work programmes seems an absolute necessity in order for all school parts to cope with the contemporary complexity and a variety of challenges affecting every day life at school.

Finally, it's worth mentioning that a number of restrictions and challenges came along this fascinating and rich full experience of co operation with schools in Athens and Thrace two contradictory but in fact very similar settings. According to each schools culture (regardless of its location), it was either close or open to the challenge of interaction with the professionals. Resistance appeared often disguised in time limitations, bureaucracy, matters of responsibility, difficulties in communication, intention to protect the students. It is certainly a great challenge for schools to overcome all the resistance but it seems that besides the existing difficulties, the benefits are substantial. It is hoped that in the long run this attempt to implement long-term social work intervention at school community, may contribute to a more effective and organized process in the implementation of social work programmes to schools. This study also constitutes a starting point for further research on bullying in Greek schools, since it seems to be a growing problem with serious effects that seeks particular attention.

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APPLICATION AND EVALUATION OF DIFFERENTIATION INSTRUCTION IN MIXED ABILITY CLASSROOMS

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Abstract

In a century characterized by multiculturalism affecting all aspects of life, in amalgamation of the demand for social justice and equal educational prospects for all, school failure experienced in most educational systems consist a solemn problem which prompts for solutions to be given through educational research. It is argued (Tomlinson, 2001; Koutselini, 2006) that traditional teaching methods can no longer support learning in metamodern mixed ability classrooms. There is a need for extensive research on teaching methods which are proficient to comfort with different educational needs of all students in a mixed ability classroom. Differentiation can deal with both, the chain reactions by increased diversity in mixed ability classes and the continuation of the phenomenon of school failure. Differentiation is not a recipe to be applied (Tomlinson, 2001a, 2005), it requires deep knowledge of the theoretical framework and differentiating process and the ways that theory is translated into action. In consequence high quality and continuous in service training teacher's training, the reconstruction of the curriculum and the creation of supporting educational material constitute main parameters for an affective differentiating practice. The research described in this paper consists an empirical research on differentiation instruction in mixed ability in the fourth grade primary school classrooms in Cyprus. Fourteen volunteer teachers after receiving high quality training on the theory and practice of differentiation instruction used differentiation instruction to teach language (greek) during a whole school year. The main aim of the research is to evaluate the effect of the application of Differentiation Instruction in mixed ability classrooms on academic achievement, on the development of competences and the self-image of students.

Introduction

Ineffectiveness of educational systems and their malfunction in corresponding to students' needs (educational, physical, mental, social etc.) consists one of the main characteristics of modern educational times. An outsized number of students in our days is led to failure, where another big segment is incapable to function beneficially and act critically towards emerged problems in a social environment marked by multiculturalism, by its orientation to knowledge and driven by technology and information. In an effort to clarify the factors that educe this problem prompts a twofold question. What are the main causes of these problems? and how school and especially teachers can effectively act accordingly in order to maximize academic achievement for all students? There are no optimism in answering these crucial educational questions on the whole through a single research. Nevertheless an experimental research on effective ways of teaching will enlighten teaching practises in mixed ability classrooms and will lead the way in facing the problem of school failure. Many researchers and scholars believe that the solution of this problem lays in the frames of differentiation theory and practice.

Current educational issues as mentioned above and the call for equity of education opportunities has led to the formation of mixed ability classrooms, where is believed that equity of educational opportunities can be achieved by teaching students corresponding to their level of readiness, their interests and their learning style, maximizing their opportunities for learning and growth (McLaughlin & Talbert, 1993). In this framework equity in education and social justice can only be met if teachers find the way to correspond to the diversity of their students (Gamoran & Weinstein, 1995).

Traditional and undifferentiated instructive approaches that do not facilitate the construction of knowledge for all students in mixed ability classrooms are seen as one of the basic factors causing this problem. Based on the idea that a change in instructive approaches can help overcome the ineffectiveness of educational systems, several fundamental questions arise. Which teaching approaches facilitates the construction of knowledge for all students in mixed ability classrooms? Is differentiation the most suitable and effective teaching approach for mixed ability classrooms? If differentiation constitutes the means for effective teaching in mixed ability classrooms what are its main characteristics, and what are the presuppositions for applying effective differentiated practice?

The research presented in this article is mainly an effort to put differentiation in practice by meeting all the main presuppositions for an effective differentiated practice and evaluate its application and its results quantitatively and qualitatively aiming to find a way to act in the best interest of students in mixed ability classrooms.

Literature Review on Differentiation

Theoretical Background: Different traditions of Differentiation

Society has experienced radical changes that altered its needs and the way that these needs must be met. Although education is supposed to be the system responsible to educate future citizens in response to society's needs and characteristics, this was not the case. Education on the whole could not follow and respond to the immense rhythm of change although some education aspects have gain new meanings leading to criticism on educational practices and theories used in the past. Technocratic and positivist tradition that once supposed to be the means to mediated the society's needs was strongly criticized (M. Apple, 2003; Guba and Lincoln, 1989; Habermas, 1978; Giddens, 1976) for its highly content based curriculum and its prevailing testing rationale, that was shown to

be ineffective, producing citizens with high test grades but without any real life skills and thinking abilities. In this sense technocratic and positivist teaching practices constitute a “one way street” in the way knowledge is taught and oriented, in order to ensure political decisions (B. Ryann, 2003) revealing the hidden “target” of such practices.

As a response to the criticism of technocratic and positivist tradition, Tomlinson suggests the theory and practise of differentiation. Differentiation of teaching is proposed as a change of teaching process based on teaching routines that correspond to the large span of students’ differences in mixed ability classrooms, such as student’s readiness, interests and learning style (Tomlinson 1999, 2001). Bearne (1996) identifies differentiation as an instructive approach by which teachers modify the curriculum, their teaching methods, the educational sources used, the learning activities and the evaluation methods according and in correspondence to students’ differentiated needs, in order to maximize the learning opportunities for every student.

Differentiation can be also characterized as an innovating way of effective teaching and learning. The practice of differentiated teaching cannot be found in readymade recipes for teaching. The search of readymade lesson plans for differentiated instructions by teachers can only suggests their ignorance on the theory of differentiation and the way to place this theory into their everyday teaching practice. The lack of awareness over the theory and practice of differentiation prevents teachers from using this instructive approach and condemn to failure any attempts in doing so. The variety of different forms, different categories and different techniques or strategies of differentiation can only be used effectively when chosen by teachers, based on the factors that determine the needs of the students. The learning style, the interests, the talents, the skills, the competences and the cultural background of students that will be previously studied by the teacher will guide his final decision concerning the kind of differentiated teaching to be chosen (Hall, 2002).

The theory that supports differentiated teaching has great impact in teaching all over the world bringing major changes in the way we envision and practice teaching. Although we have witness curriculum changes according to differentiation, literature lacks of research evidence supporting differentiation theory, limiting its support through individual theories based on which differentiation theory and practice has been developed. However, a literature review reveals a number of studies and research attempts that show and support the enhancement of teaching and learning through differentiation (Tomlinson 1999, Good and Brophy 2003). Precedence in academic outcomes in standardised tests of students that received differentiated teaching compared to students that were taught by traditional teaching methods (one method fits them all) was shown by Gayfer (1991) where McAdamis’ (2001) research shows an important academic improvement of students with low academic outcomes after differentiation of teaching.

Differentiation, as suggested by Tomlinson is only a step away from positivist teaching methods and practices as the shifting of interest in favour of students and their personal characteristics was not actually for the student’s best interest since crucial personal and other factors that affect and determine learning were not considered. In this first differentiated proposal equity was sacrificed for better test grades making education a mean for the reproduction and the creation of social and academic inequalities (Apple, 1979). Education in this sense is shaped and formed responding to society’s call for the rise of standards, through strictly countable tests and their results. Educational sociologists all over the world criticise both the emphasis given by neo-liberal curriculum on growth and development of students as a product (working force) and the focusing on testing and standards by neo- conservative educational policies. Apple refers to these theories based on which curriculum is being developed as dangerous and very simplistic (Apple 2006; Apple, et al. 2003).

In contrast to positivism and technocratic educational ideas, the proposed meta-modern curriculum by Koutselini (2001) consists a mainframe for curriculum development away from the

negative side-effects and disabilities of modernism. Meta-modern curriculum offers a critical framework for the theory and practise of differentiation where students are placed in the centre of educational process and teaching is design based on their needs. Students in a differentiated teaching are being carefully studied by the teacher in order to distinguish their individual characteristics, their needs and other factors that influence their learning which are situated both at school and family environment. It is important to consider social and other factors of students that influence learning (Koutselini, 2001) since it is proven that learning can be affected from factors like the socio-economic status of family (Reyes & Stanic, 1988) and self-image of the student. Student's characteristics and needs must guide the design and reflective teaching practise.

Research supports the connection of self-image, self-perception, self-concept of student, with various student faculties (e.g. school record, reading faculty) and further more shows that students with a positive self-image score higher academic outcomes (Sygoliotou, 1997 Chapman, Lambourne & Silva, 1990). Literature also supports a positive correlation of self-image of children with the educative and socio-economic level of their parents (Flouris, 1989; Mpartha et. al. 1982) where the perception for the degree of student's social acceptance from children of the same age, as well as the degree of acceptance of students actions, correlate with a self-awareness for his behaviour. Positive self-image is mostly determined from the educative level of the family and other family factors (familial structure, educative-economic level, special factors of family environment, family background). In differentiated teaching all such factors must be accounted and support the design of high quality teaching process.

Differentiation of teaching in a metamodern curriculum is not actually a teaching process but must be seen more as a "learning process", where emphasis is placed on the interaction of student, knowledge and teacher in an open and flexible learning process. Teachers in the case of a metamodern curriculum act as professionals, diagnosing the educational needs of students and plan the learning process accordingly (Koutselini 2001, 2006). Differentiated teaching is the learning process in which students are facilitated to construct their knowledge by maximising motivation for cognitive and metacognitive growth that will eventually improve academic outcomes for all students (Koutselini & Gagatsis, 2003) and strengthen their explanatory faculty.

Differentiation of teaching in the frame of constructivism constitutes the answer in facing the problem of increasing diversity and the phenomenon of school failure in mixed ability classrooms. Construction of knowledge is a unique personal learning process, where each and every person understands and gains meaning of new knowledge based upon his prior knowledge and his personal beliefs and needs. In a constructivism learning process where differentiation is applied, a child centred teaching approach faces every student as a unique "biography" and not as a copy of the same picture. Consequently, differentiation is the correspondence to the needs of each student and the facilitation of construction of knowledge for each and every student that cannot be considered as a transfer of knowledge (Koutselini, 2006). Throughout differentiated teaching, an opportunity will be given to students to put theory into practice based on their prior knowledge and simultaneously they will be able to investigate the connection of knowledge gained with knowledge from other subject areas. (Koutselini, 2006).

Differentiation in Classroom: From theory to practise

The translation of differentiation theory into practise requires in depth knowledge and analysis of the theory it self. Theory simply sketches the framework and the basic lines of differentiation where the teacher is the one to colour the lines and add the details. "Details" gain new meaning of the whole process since they reveal the overall needs of students. In this context teachers provide

students with various, interrelated, well planned educational activities based on their prior knowledge and dexterities, by adapting and regulating the curriculum, according to the diversity and differentiated needs of the specific students (Mitchell & Hobson, 2005). The uniqueness of each and every student guides the planning and the course of teaching (Willis, S. & Mann, L. 2000). Teaching which accomplishes, through the exploitation of various methods, means and materials, to correspond to the particular needs of each child is a clear example of effective differentiated teaching.

Literature reveals that differentiated instruction can be applied and achieved by changing different aspects of teaching. The main areas of diffusion of differentiation are the adaption of what is taught (content), the encouragement of critical thinking (process), the provision of a variety of opportunities for students to demonstrate and prove what they have learned (product), in a pleasant and secure environment, reinsuring that most students including students with learning difficulties get an opportunity to achieve high academic outcomes (Smutney, 2003 Lewis & Batts, 2005). Tomlinson (2001, 2006) suggests that differentiation can be allied as differentiation of content, process, product and differentiation of learning environment and evaluation methods. Although this implies to good way to start differentiation, differentiated instruction has not only to do with what goes on into the classroom and the school but goes further by taking into consideration other factors affecting learning outside the school borders. Koutselini believes that teachers can differentiate their teaching aiming to correspond and fulfil the needs of all students, according to their readiness, their learning profile, their interests, their socio-economic status and their self-image (Koutselini, 2006).

Differentiation by content is focused on what all students should learn and it is based on the construction of “core” knowledge and dexterities ensuring the access of all students to information resources. Differentiation by process consists of the use of differentiated activities in a way that all students comprehend the content and conquers the knowledge, while differentiation as product consists of different ways of application and presentation of knowledge learned by students through their final work (final result). Differentiation of the learning environment encompasses the ways by which classroom and school environment can be differentiated (space arrangement, temperature, furniture, means, access to means, aesthetics, colours) in order to create a comfortable, friendly and secure environment that supports and promotes the learning effort of students. Differentiation however can also be seen at the level of evaluation of students’ final work (product), by differentiating the ways and means used to evaluate the learning outcomes of students.

The type and area of differentiation is a decision to be made by each teacher, taking into serious consideration the particular needs of each student (Smutny, 2003). An important element that all teachers should consider, when attempting differentiation, is that the starting point for every student is different regarding student’s competences, learning profile and dexterities (Schlechty, 1997; Smutny, 2003). In order to deliver a highly effective lesson, learning process must be aligned with the student’s level of readiness (Vygotsky, 1986). If the level of activities is below students’ readiness level, then the learning process becomes boring and ineffective. In contrast if the level of activities is higher than student’s readiness level, the student is disappointed and loses his interest and consequently the learning process is once again ineffective.

Over the years educators and scholars have been studying school and teaching factors and how these factors support effective teaching and simultaneously affect learning positively or negatively. Beyond the school factors that influence learning, other factors that also influence the learning procedure and are located beyond the school environment should also be considered if we are about to determine effectiveness on the whole. Such factors are the socio-economic status of students, their self-image, as well as other factors that are direct or indirect connected with students’ life and might affect their learning. Research has shown that the family socio-economic status is related with the academic outcomes of students (Reyes & Stanic, 1988) where there is also a strong correlation of

academic achievement and students' self-image (Sygkoliotou, 1997; Chapman, Lambourne & Silva, 1990). School and teachers should find the way to mediate any negative effects from such factors and take advantage of factors that affect students' growth and development positively.

Differentiation is an on going dynamic process that requires knowledge, skills and personal involvement in order to be applied effectively. Differentiated instruction is a part of the whole puzzle of differentiation. In order to have effective differentiation all the pieces of the puzzle must take their place. Based on Oaksford and Jones (2001) diagram of the course of differentiation, which presents an overall approach of differentiated teaching, we propose a more inclusive diagram aiming to present clearly all the main factors that determine differentiation in practice. This diagram clearly shows the main factors that must be taken into consideration when planning and delivering differentiated instruction. Firstly there is a need to determine all the factors that might affect the learning process. Such factors are the readiness level, the interests, the learning profile of students and other factors that influence the learning and are to be found outside the school environment. Family factors like the general family socio-economic and psychological factors, like self-perception (self-image) of students, can affect the learning process and consequently influence and determine learning outcomes. Secondly, there is a need to show the reflective character of differentiation by promoting a continuous evaluation of students. Continuous evaluation leads to modification of teaching and planning according to emerged needs of students making differentiated teaching a highly reflective process to students' learning needs. Finally, differentiation of the learning environment must be promoted in order to facilitate the learning process for all students (Diagram 1).

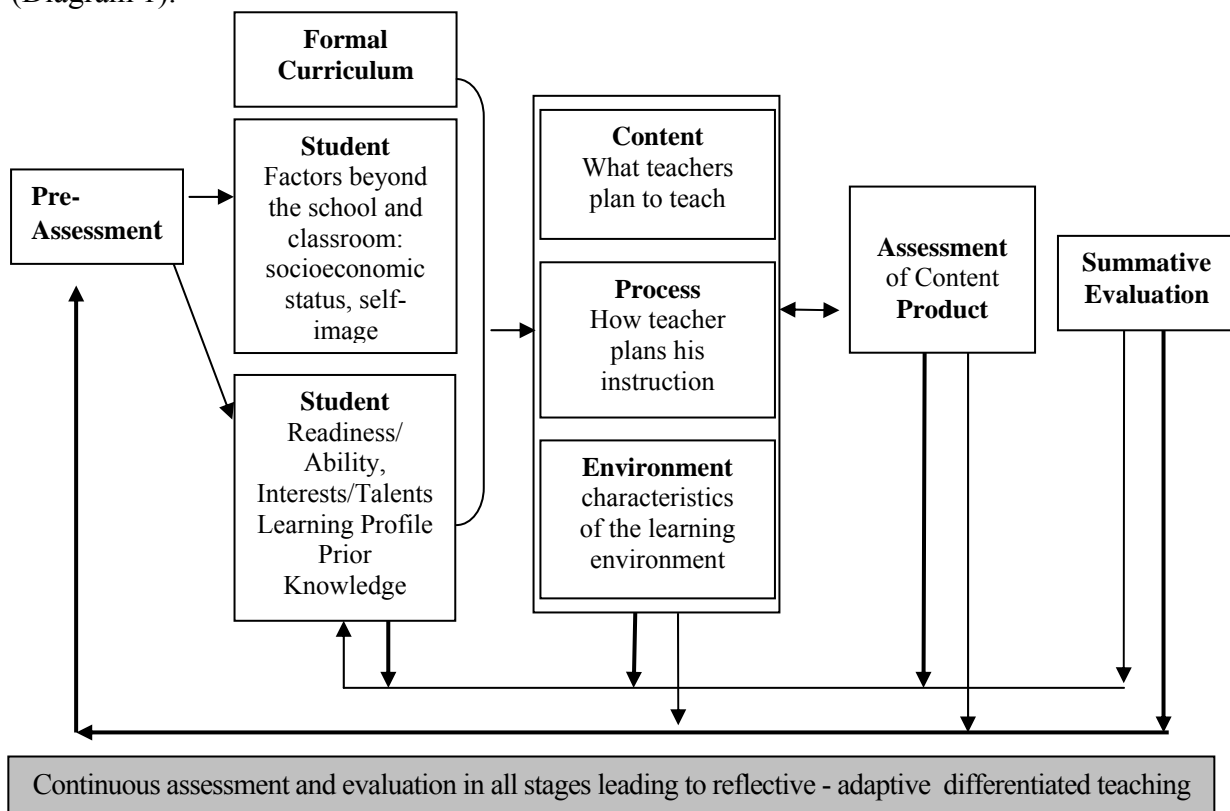


Diagram 1: Route of Planning and Application of Effective Differentiation Instruction in Mixed Ability Classrooms (Valiande & Koutselini, 2008).

Many techniques and strategies have been developed and used in every day teaching practice in order to differentiate learning process. Although testimonials of teachers using these techniques show that their use is plausible Koutselini supports, that the philosophy of differentiation cannot and should not be enslaved and exhausted in the frames of techniques and practices of differentiation (Koutselini, 2006). Most of these techniques have been used effectively with specific students

groups with particular characteristics (talented children, children with special needs, foreign speakers etc.). Consequently, their validation and their accountability have not been tested through extensive and serious experimental research in order to ensure that these techniques are as effective for any group of students. Teachers need to have a solid knowledge of differentiation techniques, but primarily they must be focused on examining the needs and the characteristics of their students in detail, having in mind all the factors that might influence considerably students' learning (Koutselini, 2006) and then decide whether to use some of these techniques or differentiate their teaching in other ways to match students needs and characteristics.

There is a debate between scholars in order to determine if differentiation is mostly a pedagogic approach, an organisational approach or an approach that encompasses both the pedagogical and organisational characteristics. Starling & Saunders (1993) support that differentiation should be faced more as pedagogical approach rather than an organisational one, due to the constant and deep involvement and participation of student and teacher in the learning process. On the other hand Koutselini (2001, 2006) believes that differentiation is simultaneously an organisational and a pedagogical approach, allowing all children to achieve their personal targets, which are directly related to their personal needs. Organisational and pedagogical differentiation constitutes of two different aspects of the same concept and can be found in harmonic combination in differentiated instruction. The work of the teacher on the whole and his teaching practises and techniques constitute the pedagogical approach of differentiation. In order to accomplish a successful pedagogical differentiation approach there is a concurrent need for an organisational differentiation, which concerns matters of classroom management, education materials and alternative ways of teaching and evaluation (Koutselini, 2006). Consequently differentiation on the whole is the adaptation, organisational and pedagogical, in order to correspond to different needs of students in mixed ability classes. In mixed ability classrooms that are mainly characterized by diversity, differentiation is the only way to offer all students the best possible teaching and learning experiences and treat each student as unique, by recognizing his personal abilities and offering him opportunities to develop his dexterities through various techniques (Mulroy & Eddinger, 2003; Tomlinson, 2001a; Tomlinson & Kalbfleisch, 1998; Tuttle, 2000; Koutselini, 2001).

Main Presuppositions of differentiated instruction

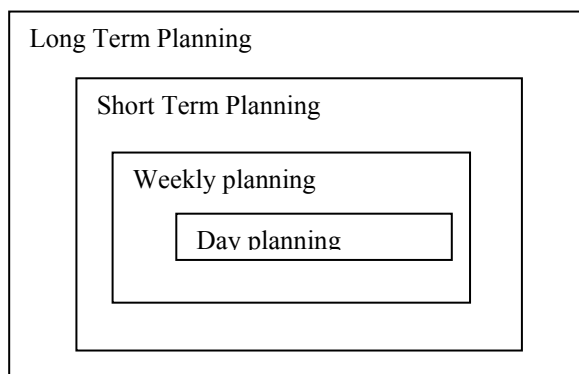
Effective application of differentiated teaching, based on educational literature and daily teaching experience of teachers is connected with specific presuppositions from which some of them are of a decisive importance. Differentiation of teaching is not a lesson plan with specific guidelines to follow and is not something a teacher does in his spare educational time (Tomlinson, 2001a, 2005). Differentiation is a multifunctional and a demanding instructive approach which requires an excellent knowledge of its theoretical framework for an effective translation of theory into practice by the teacher. This can only be feasible through continuous and scientifically organised training of teachers on differentiation issues.

Teachers constitute the means, but also the key to achieved concretisation of any innovation or change in the educational system, particularly when this change has to do with teaching. Teachers' development and application of innovations are interrelated and interdependent so that no plan for educational change can take place without a corresponding plan for teachers' development (Fullan and Hargreaves 1992). According to Fullan "continuous development of all teachers is the cornerstone for improvement and reform. Professional development and school development are inextricably linked" (Fullan 1991). Therefore, teachers that will be called to apply any reform, change or innovation should be properly informed and trained, to get the feeling that this effort is partly theirs and the success of it lays in their quality of work. In order to correspond and materialise a new educational proposal teachers need time, to get informed and trained, whereas at the same

time there is a need for communication with other teachers for exchanging ideas and discussing problems arising from practice. Differentiation as a multileveled, complex and synthetic teaching approach requires numerous and huge changes in the way that teachers think and act in their every day work in order to solidified differentiated teaching (Leader, et al, 1994).

Research and studies from international literature regarding differentiation of teaching in mixed ability classrooms reveals that although teachers acknowledge the diversity of students, mainly in the academic sector, most of them do nothing to respond to this diversity (Tomlinson et. al. 2003). Even in some cases where efforts for differentiation were made these were ineffective (Schumm et. al 1995; Starling & Saunders, 1993) and differentiation constituted of teaching improvisations without planning, as it is expected in a differentiated teaching approach (Wehrmann, 2000). Tomlinson says that teachers need to be motivated and determined, in order to differentiate teaching. However, to be determined is not enough. Teachers need to have a deep knowledge of the theory of differentiation and the way theory can be translated in practice, in order to adopt differentiated teaching (Mary Ann Coley, 2005). Furthermore differentiation is a teaching approach for the concretisation of which there is a need for development and growth of concrete planning and teaching dexterities by the teachers. Great deal of time is needed in order to develop and established such dexterities.

Teachers differentiating their teaching for the first time must not rush into it. On the contrary differentiation must be brought into practice little by little so that both teacher and student have the appropriate time to learn and adapt to this new way of working and learning. Wehrmann (2000) says that to achieve successful differentiation teachers should take slow, solid and regular steps that resemble the baby's first steps. But most of all, differentiation requires a systematic planning of instruction process (Riley, T. In press). According to Clark & Callow (1998) systematic planning, organisation and management of learning process constitute one of the most important factors of effective teaching, particularly in the case of differentiation. The course of differentiated teaching can be seen in three hierarchical steps (Tomlinson, 2003). Initially, teachers ought to study the content to be taught, analyse it and verify the issues, the main ideas and the basic dexterities that all students must concord through teaching process. Then, teachers should evaluate student's prior knowledge and dexterities and report on their educational needs that will finally guide the planning of differentiated teaching, in a way that will connect students' prior knowledge and their dexterities with new knowledge and dexterities. The planning for differentiated teaching, according to Clark and Callow (1998), is stated beyond daily or weekly planning and is extended in short-term and long-term planning (Diagram 2).

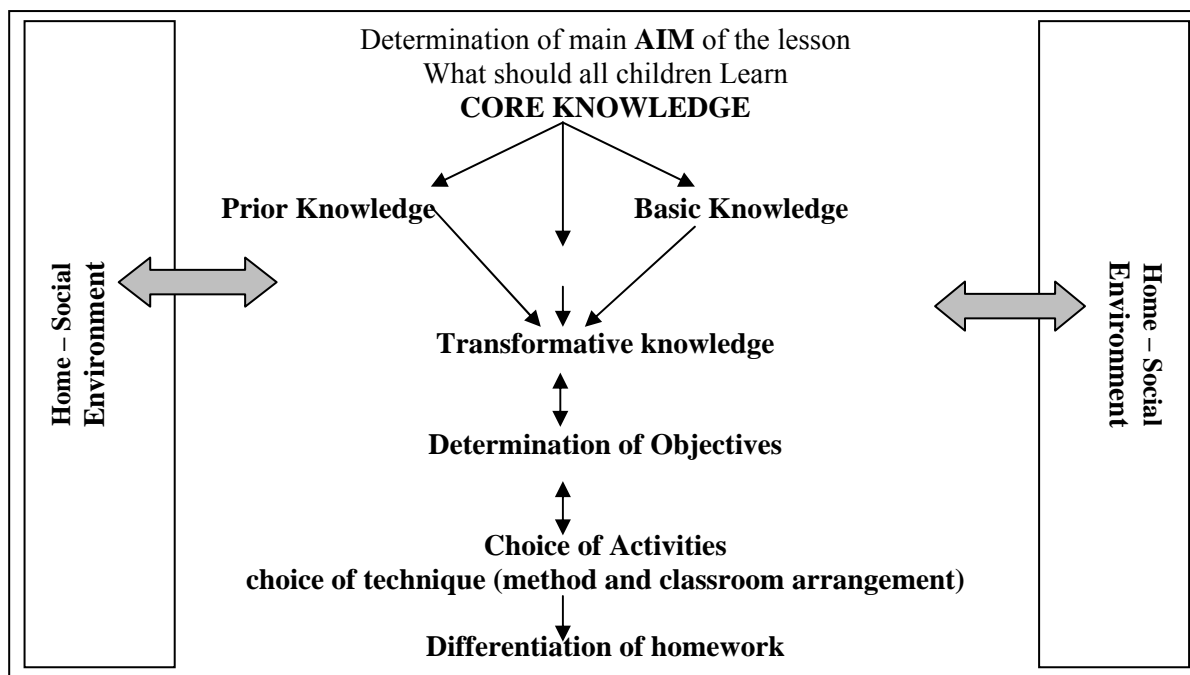


*Diagram 2: Clark & Callow (1998),
Systematic Planning the Course of
Differentiated Teaching*

Koutselini, analysing extensively the processes of planning of differentiation based on research on mixed ability classrooms in Cyprus, supports the existence of basic stages for the preparation, planning and application of differentiated teaching. The planning of differentiation begins with the determination of aim from which "core" knowledge (information, dexterities and strategies) is determined, crystallizing what all students must learn from a particular course. Then knowledge is

being categorized according to the content and the aim of the lesson in three main categories as basic (new knowledge to be learned by the course of the day), as prior or pre-requisite (knowledge that is essential in order to conquest basic knowledge) and metaschematic knowledge (knowledge beyond pre-requisite and basic knowledge which is addressed mainly to charismatic or advanced students). Finally objectives of differentiated teaching will be decided, based on “core”, basic, pre-requisite and metaschematic knowledge. The objectives will guide teachers’ choice of activities and his decision on the hierarchy of these activities according to their horizontal analysis in order to satisfy all different ways of thinking and learning (Koutselini 2006, p. 87) (Diagram 3).

Diagram 3: Preparation of differentiated teaching Koutselini M. (2006). Differentiation of teaching Learning in mixed ability classes: Philosophy and significance, approaches and applications. Volume A. Line: Curriculum and Teaching, University Cyprus.



The lesson planning process is based on the theory and practise of differentiation and it constitutes the foundation for an effective differentiated instruction. A divergence from the line of this process particularly in the first basic stages of preparation will lead to an unsuccessful effort of differentiation where teachers and students will get lost in the way.

Even though planning is the essence of differentiation, long before planning of instruction begins, the teacher must find the ways to learn almost everything about her/ his students, their educational, social, physical and psychological needs. The teacher must study and utilise these information, in order to plan a differentiated teaching process through which each and every student will construct the new knowledge based on their prior knowledge (Tomlinson, 1999).

Furthermore effective differentiated teaching is fundamentally based on the ability of the teachers to criticise their own work and act reflectively. Tomlinson stresses out that effective teaching is not a teaching process where students are kept occupied, but a learning process that helps students to develop further basic dexterities and leads them to grasp on main issues with importance for their life. In order to do so teachers must be flexible and well prepared to modify the aims, the means and the way of work according to students’ development on the spot.

Students are not the only ones learning through the differentiation teaching process. Teachers also learn a great deal by planning and developing a differentiated lesson (Hess Mary Anne, 1999).

As new teachers begin their professional life with a 'repertoire' of instructive practices that are consciously or unconsciously changed and are enriched and perfected, the same happens when teachers differentiate their practice. Experiences that teachers acquire through differentiated practises help them develop new teaching practises and strategies that help them adapt their teaching to the needs of students.

Teacher's role in classroom where differentiation is being deployed changes considerably. Teacher is no longer at his desk in front of the classroom or by the board teaching and monopolizing learning time by delivering the new content via direct teaching. The teacher finds herself/ himself among the students that work individually or in groups, moving in the classroom watching and supervising on their work. Teachers' movement in the classroom is not random. He goes where he is needed the most, offering mental scaffolding to students helping them to move a step further in the road of knowledge maximising their abilities and capabilities. In differentiated teaching classroom students' deal with written and reading work, they discuss and support their opinion in their group and with the whole of the classroom. In other words students are not just good listeners they are active participants engage in their own learning process. A differentiated lesson will only be running smoothly, if it is well planed taking into consideration all the factors (students' needs and abilities, core knowledge, prior knowledge e.t.c.) and nothing is left to chance.

The role of teachers in the differentiated teaching is vital, difficult and intensely differentiated. The teacher does not have the "leading role" with the image of someone who knows everything and is in charge of everything. In differentiated teaching teacher is "silently" the person in charge. He is the one to draw the main lines of the learning process leaving the students plenty of time and space for development and growth according to their personal characteristics and needs together with differentiated support received by their teacher. As Koutselini supports (2006), differentiation is what and how students work, something that is orchestrated with mastery, knowledge, experience, interest and love from each teacher for his students.

The creation of supporting differentiated educational material is also important in order to strengthen and facilitate the planning and application of differentiation, which is a time-consuming process. Resnik (1996), through his research with trainee teachers that applied differentiated teaching, reports the lack of materials (activities, books, work, medium), the lack of time for the necessary planning of work and finally the unsatisfactory support of their effort from the educational institutions and formal educational structures as the most important problems of the application of differentiation. Even though Resnik's research concerned students with special needs, the same problems are also reported in plenty of case studies in regular classrooms. Teaching based on the interests and the level of readiness of students is a demanding and time-consuming process, as it is expected by the teachers to create additional educational material. Teachers spend a great deal of time developing material for new differentiate activities, while they are deprived of time and opportunities for communication with other colleagues in order to discuss and reflected on their work (Leader, et. at., 1994). Furthermore the trial of new material is very difficult in the narrow time frames of school life (Leader, et. at., 1994).

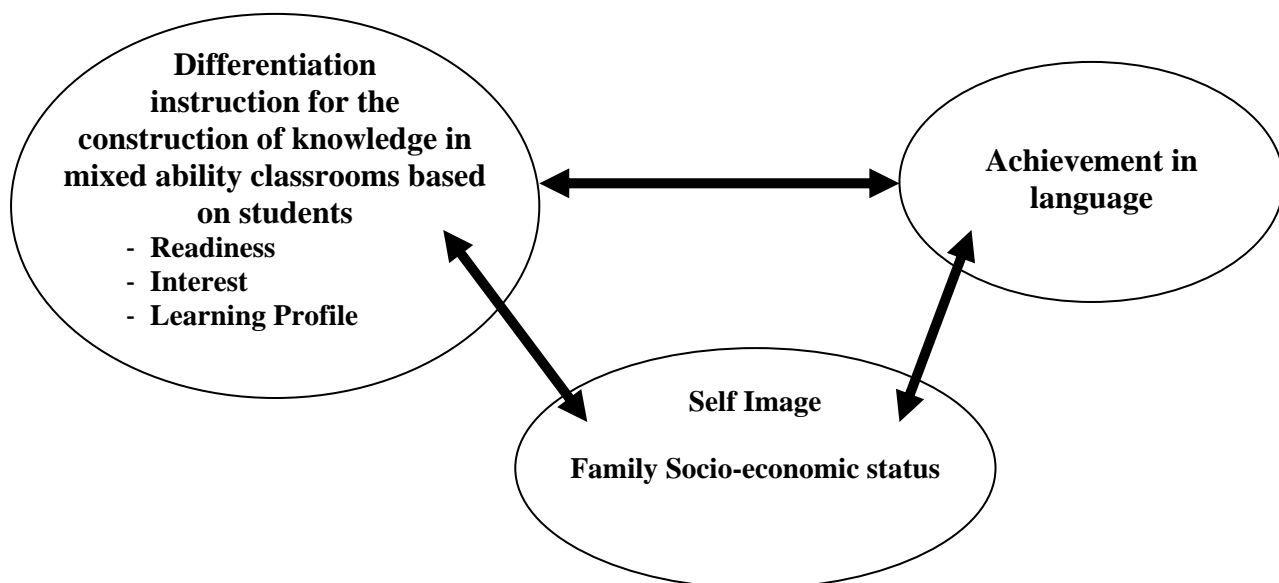
Theoretical Framework of the Research

Based on the theory of differentiation as presented through education literature, there is a great need for a research on the practice and the effectiveness of differentiation. Literature review has little to offer regarding differentiation, as it is mainly reporting on theories and practices on which differentiation practice is based on and refers only to a small number of studies (small scale – talented or unprivileged students) that support the event of effective teaching and learning through

differentiation (Tomlinson, 1999; Good and Brophy, 2003). Lack of evidence of the effectiveness of differentiation in mixed ability classrooms in combination with lack of evidence through empirical research concerning the techniques and practices of differentiation provides us with a basic framework of a full scale empirical research. A research that will provide the education world with substantial information on effective practices on differentiating teaching in mixed ability classrooms and at the same time investigate the effectiveness of differentiation on students on the whole and on specific group of students is an essence.

Based on the idea that differentiation can confront both, the chain reactions by increased diversity in mixed ability classes and the continuation of the phenomenon of school failure (Valiande & Koutselini, 2008) we believe that a research investigating differentiation instruction in mixed ability classrooms might help answer some critical questions on differentiation and the dark road to effective practises.

The basic theoretical framework of the research is present in the diagram (diag. 4).



Based on the theoretical framework of the research (Diagram 4), differentiation of teaching that leads students in mixed ability classrooms to construction of knowledge must take into consideration particular characteristics of students: readiness, interesting, training profile, socio-economic level and self-image of student, that effect learning positively or negatively and consequently effect both differentiation's final result and the academic achievement of students.

Readiness, interests, learning style, family socio-economic status and self-concept of student should shape and determine the differentiation instruction. The relationship between differentiated instruction and the factors that determine and form it are interrelated. In this sense it is believed that differentiated instruction can lead to a change in student's readiness level and the level of his self-concept and at the same time it is able to compensate the inferiority fillings of students from families with low socio-economic status.

The main aim of the research is the application of Differentiation Instruction (DI) in mixed ability classrooms and the evaluation of the effect of this application on academic achievement, on the development of competences and the self-image of students.

Furthermore the research will try and answer the main research questions:

- Is there a correlation between academic achievement and differentiated teaching?
- Is there a correlation between differentiated teaching and students' self esteem?

- Can DI act positively simultaneously for students from different family backgrounds?
- In what degree issues of self-image and family background together with DI improve academic achievement?

The significance and importance of this research can be found in the way that its results can facilitate and guide future educational and political decisions on formulating instructional approaches that are effective in modern mixed ability and multicultural classrooms.

Methodology of the research

The proposed research takes place this academic year (2008-2009). There are 450 4th grade elementary students and 24 teachers taking part in this research from Nicosia Educational District. Fourteen volunteer elementary teachers teaching in the fourth grade of Elementary school started training on the theory and practice of DI from the previous academic year. The researcher in cooperation with the Professor was responsible for the training of the participant teachers. The participant teachers continued to receive training and support all through the research in order to use DI in their classrooms. The mixed ability classrooms receiving differentiation language instruction constituted the experimental group. Another 10 teachers and their classrooms participated in the experimental research as the control group (10 classes). The teachers of the control group did not receive any training or support on differentiation throughout the research and did not differentiate their instruction in any way.

The researcher prepared material for the experimental group in cooperation with the volunteer teachers and observed systematically their teaching by using a likert scale questionnaire on DI. The questionnaire was developed by the researcher and its statements-questions were about the basic characteristics of effective differentiation instruction. Immediate feedback was given to the teachers by the researcher and a discussion followed the observed lesson in order to help the development of teachers in differentiating their instruction. Furthermore an online forum was created that gave the opportunity for teachers to exchange ideas and share their thoughts with the whole team of teachers participating in the research. The researcher was able through the forum and his personal email to address all the problems and the questions of the teachers.

Student's academic achievement was tested with two different tests they took prior to the research beginning of October 2008 and two tests taken at the end of the research end of May 2009. The same tests were taken by the students of the control group. Data was collected regarding the socioeconomical status of the students and other family factors that may influence the academic achievement of students by a questionnaire filled in by the students.

Data regarding the self-image of students was collected by the use of Harter's Self-Perception Profile for Children (SPPC) (1985). The SPPC is a multidimensional self-report instrument assessing perceived competence in children by using a 36 item self-report scale that consists of five specific sub-scales (scholastic competence, social acceptance, athletic competence, physical appearance, behavioural conduct) and one global measure of self-worth. Each sub-scale is measured by six items. Harter's questionnaire was given to students of both groups (experimental – control group) at the beginning and at the end of the research targeting to examine if self-image of students is affected by differentiated instruction and in what degree.

More data was collected by the semi-constructed interviews taken from the teachers and numerous students from the experimental group. The interviews investigated mainly the attitudes and perceptions of students and teachers over differentiation instruction and gave them the chance to

express them selves freely on practices they liked and enjoyed; on difficulties, qualities and on the benefits they gained from the experience of differentiation instruction over the school year.

The analysis of data due to the nature of the data collected (more than one level, level student, teacher, team, asynchronous data: pre- and pos-test) will be contacted by the use of multilevel analysis. The model of multilevel analysis of data it is used to a large extent in the analysis of data in research of educational effectiveness, since it offers a wider field of data analysis (Kyriakides and Charalambous, 2005).

Research data as mentioned above, were collected by quantitative research methods of collection of data (test - questionnaires) and qualitative research methods of collection of data (observation - interviews). The purpose and objective of using a combination of the two alter data collection methods is the advantages gain by analysing, evaluating and supporting the outcomes of the research by triangulation. Triangulation of data offers a more solid support for the research's conclusions (Cohen, D., Manion, L., and Morrison, K., (2000).

First outcomes from the research

The data collection has been completed this month (June 2009) and analysis of data will start immediately in order to investigate and answer the main research questions. Although data analysis is not yet completed on quantitative data some outcomes mainly on qualitative data are exported. Below we present some of the first outcomes of the research on differentiated instruction in mixed ability classrooms.

Teachers participated in the research reported that although they heard a lot about differentiation non of them didn't really knew how to practise differentiation instruction and most them had serious misconception on what is differentiation instruction. Almost none of the teachers practise differentiation instruction in their classrooms and none of them received a substantial training on differentiation, although differentiation instruction is one of the main teaching approaches in the Cyprus curriculum. Teachers cherish differentiation instruction as an effective teaching approach but none of them differentiate their teaching. Some of the teachers that reported to have use differentiation in the past did not really differentiate their instruction but had the misconception they did so by using different teaching methods, different materials and different activities.

Through the research we confirm some of the main presuppositions in bringing a change in education which is to motivate the teachers, to train them, to cooperate closely with them and offer them practical help (feedback and education material). Volunteer teachers participated in the research were very enthusiastic and willing to bring a change in their way of teaching in order to overcome some serious difficulties in teaching in mixed ability classrooms. There enthusiasm was shattered by their conservatism and their fears in changing routines they have been using over the years. They also seemed to fear losing control and failing to fulfil their teaching aims. With time and as the training went on they realise that the proposed differentiated instruction was a viable teaching proposition and not another education trend. From the minute they realize what differentiation really was and how they could put it into practise, their attitude changed and most of them took some small steps that lead them to a full scale differentiation. The image of students actively engage in the learning process, where everybody has its place, is not an image we can come across every day. In the case of differentiation this was the predominance image.

Final Word and expectations from the research

At the end of the experimental research we are really happy that we are able to follow through all the research procedures as planned and excluding the hard work, the tight schedule in preparing materials and meeting with all the participants, no real problems occur. We are optimistic that the research analysis will provide us with substantial and accountable results and information regarding our research questions. Finally it is important that the information gathered by this research will guide future research attempts.

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