

Mainstream teachers' instructional adaptations: implications for inclusive responses

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Abstract

The aim of the study was to examine Greek mainstream teachers' views concerning the feasibility and desirability of routine instructional adaptations and to explore the reasoning underpinning their responses.

Data were collected by using interviews, which included both highly-and semi-structured questions. A modified version of the Teaching Adaptation Scale (TAS, Cardona-Molto, 2003) was used for the interview process. The scale allowed for the evaluation of teachers' perceptions of instructional adaptations and their feasibility and desirability in five out of the six original categories including: a) Classroom Management, b) Grouping Strategies, c) Additional Teaching, d) Activity Adjustment and e) Formative Assessment.

The majority of participants reported that they use frequently most of the adaptations included while those used rarely or never used by teachers were: between class grouping, activities at various levels of difficulty, diverse activities, specific resources and computers. These were also the adaptations- with the exception of using specific resources- that deemed to be more desirable than feasible. At the same time, some adaptations were not desirable by a minority of teachers including between-class grouping, grouping all students in pairs, providing additional teaching to certain subgroups in the class, implementing activities at various levels of difficulty, forwarding diverse activities, and using alternative material, specific resources and computers.

The most salient recurring finding was that all of the participants were strongly bounded by pace, curriculum and the implementation of the text-book. Lack of time and the overloaded syllabuses were reported as some of the main barriers prohibiting the implementation of adaptations. Further, academic area seemed to influence the pattern of teachers' responses while a number of misconceptions were revealed in teachers' understanding and knowledge of particular adaptations. Implications in terms of teachers' training, inclusive responses and policy practices are discussed and analyzed.

Key words: instruction, instructional adaptations, inclusive education, mainstream teachers, primary schools.

Introduction

In recent years a number of stated intentions and written policies towards the achievement of inclusive education have been enacted across a range of contexts (Booth & Ainscow, 1998). The clear implication of the inclusive education movement is that mainstream schools seek to

restructure so as to provide for an increasing diversity of educational needs and eliminate the problem of students who fail to fulfil their learning potential (Avramidis *et al.*, 2000). However, despite the widespread advocacy of inclusion in educational discourse and policy guidance, the question of how children's divergent needs are best met within educational systems still remains a highly debatable and controversial issue (Dyson & Gallannaugh, 2007; Florian, 2005).

To put the above controversy into perspective, a considerable number of authors (Ainscow, 2007; Dyson & Millward, 2000; Low, 2007) have argued that much of that debate pertains to the poor implementation of inclusive programs, rather than the opposition towards the concept of inclusion *per se*. While, for example, it is generally agreed that teachers need to have an increasingly large repertoire of instructional strategies to meet students' divergent needs, little descriptive information is available regarding the types of instructional adaptations that are necessary in implementing an inclusive school program (deBettencourt, 1999; Salend & Duhaney, 1999; Schumm, *et al.*, 1995). Limited is also the information concerning the kinds and effectiveness of instructional adaptations in teachers' everyday practice, within the mainstream classrooms, which aim at responding to students' diversity (McLeskey & Waldron, 2002; McIntosh, *et al.*, 1993).

The overall picture emerging from the vast majority of relevant studies suggests that regular education teachers do not usually differentiate instruction to meet students' diversity in regular classrooms. In addition, few instructional adaptations are provided for those with identified SENs and difficulties in learning (deBettencourt, 1999; McIntosh, *et al.*, 1993; Schumm, *et al.*, 1995; Vaughn, *et al.*, 1994). Mainstream teachers seem to be concerned about finding ways for responding to students' without disabilities increasing diversity in terms of academic background, level of mastery skills and interests. More importantly they mostly feel under-resourced and ill-equipped to master this task. The amount of difficulty they already face in the teaching process increases considerably, when students with disabilities are included in their mainstream classes (McLeskey & Waldron, 2002).

Baker and Zigmond (1990), found, for example, that the teachers in the mainstream primary schools they studied, taught in single, large groups and seldom differentiated instruction or made adaptations based on students' needs. Besides, on a survey addressing adaptive instruction (Ysseldyke, *et al.*, 1990), regular education teachers did not specify classroom adaptations for students with disabilities. Although students with disabilities appear to be accepted by their teachers, they could be characterised as «passive learners» who are rarely engaged in the learning process, either by themselves or due to the teachers' initiation (McIntosh, *et al.*, 1993). These findings have been endorsed, somewhat, in a subsequent study by Vaughn and her colleagues (1994), who suggested that instruction in mainstream classes was not differentiated to meet the needs of students with learning disabilities and that few instructional adaptations were provided. In such instances, teachers' adaptations tended to be largely incidental, inconsistent, idiosyncratic and not part of the overall plan for an individual student in the classroom or at the school level (Miner & Finn, 2003; Schumm, *et al.*, 1994). Consequently, if students who are mainstreamed are going to learn successfully in the general education classroom, then they will have to meet the expectations set by the teachers for all students in the classroom (Vaughn & Schumm, 1994).

Within the context of inclusion, teacher acceptability of various adaptations is a critical issue in understanding why accommodations are made or not made for students facing difficulties (Subban, 2006). Consequently, it is also important to note that managing to understand why teachers tend to implement or avoid the implementation of certain adaptations in their classrooms is a difficult and demanding process, mainly due to: a) the complexity underpinning teachers' decisions over instructional practices, b) the multifaceted aspects of teaching, and c) the impact that the unique contextual and educational characteristics of different national systems exert on teachers' decision-making processes (Kohler *et al.*, 2008). Despite these complexities, analysing teachers' acceptability of routine adaptations is a key variable for understanding their compromise in teaching diverse students in inclusive classrooms and for learning to what extent they are ready to adapt and differentiate instruction. Moreover, studying how teachers approach adaptations may

contribute not only to identify teacher preference, but also the various barriers and impediments to implementing them (Cardona-Molton, 2003; Scott, *et al.*, 1998).

In the light of the above, this paper aims at addressing the need for additional information, regarding teachers' convictions of instructional adaptations in regular education settings. It reports on and discusses a recent research project, considered to contribute to this emerging field, by examining Greek teachers' responses to instructional adaptations. This is the first time that such an exercise has been conducted in Greece, and comes at a time when policy-makers are considering the next step in developing more inclusive provision in an educational system in which provision unfolds around a nationally prescribed and restricted curriculum.

Rational and aims of the study

The study was based on the long-standing assumption that successful educational outcomes depend on adapting teaching to individual differences among learners (Corno & Snow, 1986). For research purposes, however, existing literature differentiates between routine/general and specialized adaptations (Fuchs, *et al.*, 1995; Fuchs, *et al.*, 1992). The former is what the teacher carries out for a class-group as a whole, which does not call for significant curriculum change or modification. It comprises the conventional routines and instructional designs used in the general classrooms for reaching students' divergent learning styles, routes of learning and needs. On the other hand, specialized adaptations refer to individual adaptations of a planned curriculum, in order to respond to particular and extreme educational needs. Specialized adaptations consist of individualized instructional modifications that extend beyond teachers' routine adaptations, in light of students' identified learning needs and problems (Cardona-Molto, 2003; Fuchs, *et al.*, 1992). The focus of this study was on general instructional adaptations that define the extent to which teachers establish their initial routines to facilitate ongoing adaptations for responding to students' diversity. After all, as it has already been reported, before asking teachers to differentiate the curriculum and implement more specialized adaptations, it is important to explore and understand how they respond to more general/routine adaptations that concern the class-group as a whole (Fuchs & Fuchs, 1993).

Within this context, the aim of the study was twofold: a) to examine teachers' views concerning the *feasibility*, *desirability* and *effectiveness* of general/routine instructional adaptations and most importantly b) to explore and understand the reasoning underpinning teachers responses. The findings reported in this study are confined by shortage of space to teachers' views and reasoning, concerning the *feasibility* and *desirability* of general instructional adaptations. Findings, pertaining to the issue of perceived *effectiveness* of instructional adaptations, will be reported elsewhere.

Methods

Participants

Participants were 45 primary school teachers (46.7% males & 53.3% females) in Grades 1-6, representing 12 schools in a northeastern suburban area of Greece. Almost half of the participants were between 36 and 45 years old; 21 teachers were teaching in the three first grades and 24 in the three upper primary school grades. Half of the teachers (51.1%) had

between 1 and 10 years of teaching experiences; 26.7% had between 11 and 20 years of experiences while the remaining had more than 21 years of teaching experience. Twenty-three teachers held a four years Bachelor's degree; 17, had had a Degree Upgrade; and 5, held a two years Degree from a Pedagogical Academy. At the time of the study, they were teaching a variety of subjects: Language, Math, History, Environmental Studies/Geography and Science. Further the majority of teachers (66.7%) had at least one student from a different ethnic-cultural background (i.e. Albania), while half of the participants (53.3%) reported that they had at least one student with special educational needs (S.E.N) with mainly learning and/or behavioural problems. None of these students, however, had any official diagnosis and none was receiving any individualized or additional instruction due to lack of specialized education provision.

Instrumentation

Data were collected by using interviews, which included both highly- and semi-structured questions. The Teaching Adaptation Scale (TAS, Cardona-Molto, 2003) was used as the core-basis for the interview process. The TAS was designed in order to examine teachers' perceptions of instructional adaptations and allows for the evaluation of three different dimensions: feasibility, desirability and effectiveness of adaptations. The original instrument consisted of 29 strategies made up of several procedures to adapt instruction. It comprised six categories or domains: (a) Classroom Management, (b) Grouping Strategies, (c) Additional Teaching, (d) Strategic Teaching, (e) Activity Adjustment and (f) Formative Assessment

The items making up the Scale were translated in Greek language and the form of the Scale was modified for using it within an interview context following a two-stage procedure. First, the items were translated into Greek by a panel of four Greek experts in issues related to Pedagogy, Didactics, Inclusive Education and Research Methodology. Modifications were also made at the system of evaluation, so as to allow the inclusion of open-ended and probing interview questions. Once the Scale was modified and translated into Greek, three two-hourly sessions of group interviews, with three special and four regular education teachers with wide teaching experience, were held, the aim being to check whether the categories and strategies of the translated version were meaningful in terms of teacher's language and daily praxis. The final Scale consisted of five out of the six original categories and included 24 items in total (see Table 1 for the full range of instructional adaptations).

Interviewing Procedure

Interviews lasted from 60 - 90 minutes. They were carried out individually and were tape-recorded, following an assurance to participants that their responses would be kept in confidentiality.

The interview process included two phases. The first phase involved responses related to highly-structured questions. Specifically, according to the final version of the Interview Schedule, each participant teacher was asked to read each item/adaptation of each category and respond on how often s/he practiced each adaptation, denoting in this way how feasible each adaptation was perceived to be. Responses were rated as: frequently, rarely or never. For each adaptation, if the teacher responded either frequently or rarely, then s/he was asked to report –based on her/his experience- on how effective the adaptation was perceived to be. If the teacher reported that she had rarely or never used an adaptation, then she was asked to report on whether the adaptation was desirable.

The second phase involved a semi-structured mode of discussion. Reflecting back on their initial responses, the interview discussion unfolded around teachers' reasoning behind their ratings. For instance, the topics of discussion involved: (1) teachers' reasoning of not using or using rarely specific adaptations; (2) teachers' reasoning behind the reported

desirability of an adaptation or why a desirable adaptation was not practiced. Throughout the interview, follow-up questions were used to clarify and verify the information being recorded, and to focus the respondent on the topic being addressed.

Data Analysis

All interviews were transcribed verbatim, creating a numbered interview protocol for each participant teacher. The analysis and coding of responses proceeded in two phases. The first phase referred to the analysis of responses to closed-form interview questions in which descriptive statistics were calculated in order to analyze demographic information and teacher ratings of instructional adaptations.

The second phase referred to the analysis of responses to open-form questions concerned mainly with teachers' reasoning for their ratings. To develop a category system for the responses to the open-form questions all the transcribed interviews were content analyzed in terms of emergent categories and sub-categories on the one hand and the research questions on the other (Merriam, 1998). At this stage, ten transcripts were also coded by a second person to enhance credibility of coding. More than 85% agreement was found between the two researchers' coding following manual calculations of percentage of agreement as to the presence of the coded theme (Boyatzis, 1998). Guidelines developed by Guba and Lincoln (1981) were used to develop the categories and sub-categories and ensure that they were illustrative and illuminating.

Results

Table 1 provides a synopsis of teachers' responses towards the feasibility and desirability of instructional adaptations in different domains. All these domains, as well as teachers' main reasoning, are subsequently analyzed.

Classroom Management Strategies

Almost all of the teachers participated in the study, reported frequently teaching the class as a whole (95.6%, n=43), meeting the needs of *all* their students (93.3%, n=42) and establishing norms rules and routines (88.9%, n=40). The majority of respondents also indicated that they frequently rearrange the physical layout in the classroom (80%, n=36) and meet personally the needs of some students (84.4%, n=38), while a smaller number (62.2%, n=28) reported that they frequently meet individual and group needs at the same time.

Qualitative analysis indicated that whole-class teaching was a dominant instructional approach, while the text-book constituted the main instructional tool used. Almost one third of teachers, who relied heavily on whole-class teaching, addressed the restrictions of such an approach in meeting students' divergent needs, levels of performance, interests and levels of motivation. They argued that more individualized responses to learning might have been more effective but still they considered such kind of responses as being highly demanding in terms of time and energy. Further, while almost all of the teachers reported that they respond to the needs of *all* their students, a more critical analysis of their qualitative responses revealed that teachers often perceived whole-class, undifferentiated teaching as a means for meeting the needs of all their students. Such a perception lied on their belief that «sameness» and «same treatment» secures and promotes equality. Thus, they were more concerned of treating students similarly than meeting their divergent needs through varied instructional provision.

The majority of teachers reported that they meet personally the needs of some students by (a) adopting an atypical counselling role, (b) displaying empathy and concern for students' problems, and (c) providing additional academic support or extra teaching beyond official instructional hours (i.e., during break time). The participants prioritized the development of a close pedagogical relationship with their students, emphasizing on students'

social and psycho-emotional rather than academic problems and difficulties. The majority of those reporting rarely (85.6%, n=6) (13.3%, n=6) or never (2.2%, n=1) meeting personally the needs of some students indicated that they desired to do so and identified some main obstacles/reasons preventing them from implementing such a desirable adaptation: time restrictions and curricular demands as well as limited professional training in individualised interventions. Also, fewer teachers reported that they meet individual and group needs at the same time. Even in these cases, teachers found this adaptation to be extremely difficult in terms of its implementation; they reported great difficulties in reaching a balance between group and individual demands and they prioritized the need to respond to the majority. This adaptation was not considered desirable by half of the participants (52.9%, n=9) who rarely (22.2%, n=10) or never (15.6%, n=7) used it, mainly due to their perception that it is not feasible, it may cause classroom management problems and most importantly, results in constructing mechanisms of negative differentiation and discrimination. The main reasons offered by the remaining half, for not implementing a desirable adaptation were: (a) pace and curricular pressures, especially in subjects such as Language and Math, and (b) lack of knowledge concerning its implementation.

In contrast to the above, teachers felt much more comfortable with establishing norms, rules, and routines. This adaptation was perceived as part of their routine practice, throughout the school day and in most academic subjects. Establishing rules and routines was considered necessary for running the classroom smoothly and ensuring an orderly atmosphere, which in turn, was perceived as necessary for facilitating learning.

Grouping Strategies

The majority of teachers reported that they frequently implement within-class grouping (75.6%, n=34) followed by pairing students with S.E.N with a classmate (68.9%, n= 31), and grouping all students in pairs (60%, n=27). None of the teachers forwarded between-class grouping, that is grouping students with pairs from other classrooms.

Further qualitative analysis indicated that within-class grouping was often identified with working in the group rather than working as a group and according to teachers' responses this adaptation was implemented more in non-core subjects, such as Environmental Studies/Geography, Flexible Zone, Science, History and Arts. This particular adaptation was desirable by the majority of those teachers (72.7%, n=8) reported using it rarely (24.4%, n=11) while the main reasons offered for not implementing such a desirable adaptation were: (a) lack of knowledge and skills on grouping arrangements, (b) limitations in terms of students' cooperation skills, especially in younger ages, and (c) time restrictions, due to pace and demands. The latest reason was considered to be one of the main obstacles, teachers addressed for not applying within-class grouping in core subjects (i.e., Language and Math).

Interestingly, none of the teachers implemented between-class grouping, while almost one third of the participants (35.6%, n=16) did not desire to implement this adaptation. Teachers considered this particular adaptation to be highly demanding and time consuming on its implementation, since it relies heavily on a culture of cooperation and coordination among different classroom teachers – which was not perceived to be a dominant practice in the case of Greek schools. Many teachers argued that this adaptation could be implemented in non-core subjects or at school based events. However, the nationally prescribed curriculum coupled with the widening range of students' levels of mastery skills, that such an arrangement involves, prohibited teachers from implementing this adaptation, even in those cases (64.4%, n=29) where it was desirable.

Additional teaching

The majority of the teachers (84.4%, n=38) reported that they frequently provide additional teaching to the whole class, followed by additional teaching to a particular student (73.3%, n=33) and, in fewer cases, to certain subgroups in the class (55.6%, n=25). Whole-class additional teaching was provided exclusively on core subjects at the expense of non-core subjects. Specifically, the vast majority of teachers (93.3%, n=42) reported that additional teaching in language and/or maths was practiced during instructional hours that were officially devoted to non-core subjects. Whole-class additional teaching involved lesson repetition or repetition of specific sections/concepts of a lesson. It was rarely carried out through the application of alternative, modified instructional ways for supporting students to gain access to new information and knowledge and it was mainly based on «some extra provision of much of the same».

Additional teaching to particular students involved unsystematic, sporadic support and advice to individual students mainly during break hours, while additional teaching to certain subgroups in the class was considered difficult and, in some cases, not feasible in its applicability. Furthermore, additional teaching to particular students and/or to certain subgroups in the class was not practiced often and, in some cases, was not even perceived to be desirable [i.e., by the 60%, n=12 of the teachers who reported that they rarely (n=11) or never (n=9) provided additional teaching to certain subgroups in the class] party, due to the perception that such modifications will create mechanisms of negative differentiation and stigmatization.

Activity Adjustment

Almost all of the participants (95.6%, n=43) reported that they give more time to particular students for completing a classroom assignment followed by breaking down activities (97.8%, n= 44), using alternative material for some students (55.6%, n=25), implementing activities at various levels of difficulty (44.4%, n=20), using computers for supporting learning (28.9%, n= 13), forwarding diverse activities during the same instructional hour (26.7%, n=12) and using specific resources (2.2%, n=1) such as perforated boards or resource room settings.

Qualitative analysis indicated that the initial two minimally adaptive strategies (give more time & break down activities) were used mainly in the area of Language and Math. Breaking down activities was considered part of the guided practices used by the teachers for supporting students' learning, while providing extra time to some students was perceived as an absolute necessity. Teachers, who reported usage of alternative material, referred more to regular-routine material such as geographical maps, cubs, abacus, field trips or extra assignments rather than modified materials. This adaptation was perceived as desirable by half of the teachers (55%, n=11) who stated that either rarely (13.3%, n=6) or never (31.1%, n=14) used alternative material. The main reasons offered for not using such a desirable adaptation were: (a) lack of material at the school level, (b) the existence of old and out-dated school material and in some cases (c) lack of need for using such material. A minority of teachers did not desire to use alternative material, due to negative differentiation.

However, almost half of the teachers (44.4%, n=20) indicated that they frequently implement activities at various levels of difficulty based mainly on ability levels. The majority of the teachers (68%, n=17), who either used rarely (24.4%, n=11) or never used this adaptation (31.1%, n=14), indicated their desire to do so. The main reasons offered for not using a desirable adaptation were: (a) the need for extra preparation time during the phase of planning, (b) lack of time in the implementation phase, and (c) overburden syllabuses for core subjects. Similar reasons were also offered by the teachers (32%, n=8) who indicated that this strategy was not desirable.

The implementation of diverse activities and the usage of computers seemed to be more desirable than feasible. According to teachers responses, diverse activities could be implemented in non-core subjects such as Art, History, Environmental studies/Geography and Flexible Zone. These subjects were considered to be less demanding, due, in part, to the perception that instruction involved more experiential learning, less reliance on reading and more project-based activities. Diversifying activities was not considered to be feasible and was not implemented in core subjects such as Maths and Language, within which teachers

were bounded by pace and curricular pressures. At the same time, however, the majority of the teachers (60%, n=20), who either rarely (42.2%, n=19) or never (31.1%, n=14) used this adaptation, reported its desirability. The main reasons offered for not using a desirable adaptation were: (a) lack of time in both the planning and teaching phase, (b) lack of knowledge, skills and previous experience of its implementation, especially in areas such as Maths and Language, (c) classroom management problems and fear of losing control of classroom order. A minority of teachers (30.3%, n=10), who did not desire to diversify activities, either were not in favor of this accommodation or they believed that diversifying activities will promote negative differentiation and discrimination.

In regards to the usage of computers, this adaptation was desirable by the vast majority of teachers (71.9%, n=23), who either used it rarely (28.9%, n=13) or had never used (42.2%, n=19) computers. Resource availability, difficulties in accessing both equipment and software material, as well as lack of training and skills in using computers were the major barriers of not applying this adaptation. On the other hand, teachers who did not desire to use computers (28.1%, n=9), also reported not being well-equipped on how to do so and also were not willing to undertake any training on this matter. In few cases, teachers did not want to use computers due to their perception that computers are not a constructive medium of instruction. Finally, almost none of the participant teachers used any specific resources. As one teacher indicatively stated: «We don't have disabled students at school. But even if we had, we don't have any specific resources. But to tell you the truth, even if we had disabled children and the resources we would not know how to use them because we have no training in disability related issues».

Formative Assessment

Almost all teachers reported that they frequently check students' previous mastery and skills (97.8%, n=44), and monitor their progress (91.1%, n=41) while the majority (86.7%, n=39) plan according to the results of the assessment and check if the objectives are within the student range (80%, n=36).

Qualitative analysis, revealed that: (a) almost half of the participant teachers intensified their internal assessment at the beginning of the school year in order to identify students' previous knowledge and skills and/or to capture the level of academic performance of the majority, (b) 55.6% (n=25) of participants placed greater emphasis on assessing knowledge and skills on core subjects such as Language and Math, while during the school year (c) the assessment strategies used (i.e., retrieval/knowledge oral questioning) mirrored instructional practices that occur in the classroom rather than specifically constructed tools of formative assessment. Even though teachers indicated that they monitor their students' progress and they used the results of assessment to ensure effective teaching or reteaching and error recognition still emphasis was placed more on how learners perform rather than on how the results of internal assessment could be used for more immediate learning. Further, more than half of the participants (55.6%, n=25) reported that they use tests/evaluation sheets, assessment diaries or student portfolios to award finally graded attainment levels and to inform parents.

Interestingly, while 80% of the participants reported that they check whether their teaching objectives are within students' range, at the same time the vast majority indicated that their objectives do not respond to students' needs and diversity. They strongly identified instructional with textbook objectives and reported that they can do nothing or they can proceed in minor interventions in terms of modifying instructional objectives. They indicated a strong obligation to implement the textbook and follow the textbook requirements and offered a civil servant perception of their role; as «executors» rather than «co-constructors» of the curriculum. According to their responses this was the way they were perceived and treated by the National policies and practices as well. The remaining 20% indicated that they either rarely (2.2%, n=1) or never (17.8%, n=8) check whether their objectives are within the students range. They saw no point in doing so, partly due to their perception that the Ministry of Education and the experts involved have already done that in the process of constructing the textbooks so «They [the experts] know better» as a teacher put it.

In other instances, teachers found no reason/no meaning in checking their objectives because even in cases where the objectives were not responsive to students' range still they strongly believed that they could do nothing in altering or modifying them.

Emerging issues and concluding remarks

Before discussing final inferences, it is important to address some of the limitations of the study. First, the exploratory analysis was based on a small sample size and thus it restricts the generalizability of the findings. A second limitation relates to the nature of the instrument used. As Cardona-Molto (2003) indicates the TAS, which in the present study was used as a starting point of the interview, is still undergoing revision. Clearly, the 24 instructional procedures used in the interview did not cover all possible adaptations, especially the ones that are not planned in advance but are made on the fly while teaching. Most importantly, all the information was based on teacher self-reports. Certainly, the study would be more interesting and stronger, if there was a combination of interviews and on-line observations, over extended periods of time, that would enable us to understand how instructional changes and to know the forces or conditions that motivate those changes. However, despite the study's acknowledged limitations (and although it represents only an initial foray into the situation in Greece), it does appear that we can come to some preliminary conclusions regarding teachers' responses to routine instructional adaptations.

From an overall point of view, the majority of teachers reported that they use frequently most of the adaptations included. The adaptations that were used rarely or they were never used by most of the teachers were: between class grouping, activities at various levels of difficulty, diverse activities, specific resources and computers. These were also the adaptations –with the exception of using specific resources- that deemed to be more desirable than feasible. At the same time, however, some adaptations were not desirable by a minority of teachers, who reported that they use rarely or never use them. These adaptations were: meeting individual and group needs at the same time, between-class grouping, grouping all students in pairs, providing additional teaching to certain subgroups in the class, implementing activities at various levels of difficulty, forwarding diverse activities, and using alternative material, specific resources and computers. The main factors identified as barriers for not implementing particular adaptations were: (a) lack of time, (b) pace and curricular/textbook pressures, (c) lack of knowledge and training, (d) the perception that some adaptations are not feasible or they are time-consuming, (e) lack of material and resources, (f) the strong tradition of prioritizing the needs of the majority, and (g) fears of creating mechanisms of negative discrimination coupled with the belief that «sameness» and «same treatment» secures equality.

Further analysis, however, of teachers' qualitative responses, indicated that academic area may influence the pattern of teachers' responses in relation to particular adaptations. Previous research has highlighted the importance of subject matter to the formulation of effective strategies but most of this work focus mainly on reading and math instruction (Borko *et al.*, 1990; Fuchs *et al.*, 1993). In the current study, teachers' responses revealed a broader strong distinction between the so called «core» and «non-core» curriculum subjects, with core subjects involving Language and Math and non core-subjects Environmental studies/Geography, Science, History, Religion, Arts and Flexible Zone. In many cases, the curriculum was restricted only to core subjects that were prioritized in any grade level, while non-core subjects considered as less demanding and of a lesser importance. In this context, adaptations which were considered as part and parcel of teachers routine practices (i.e. whole-class teaching, whole-class additional teaching, give more time, break down activities) tended to be applied mainly in core subjects. More time-consuming and of higher complexity adaptations (i.e. between and within-class grouping, diversifying activities, meet individual

and group needs at the same time) were considered as having greater possibilities for implementation in non-core subjects.

Substantively, the most salient recurring finding of this study was that all of the participant teachers, mainly in the subject areas of Language and Math, were strongly bounded by the prescribed curriculum, text-books and pace. In congruence with previous findings, teachers allowed the curriculum to be their instructional tool (Parker, 2006), while lack of time or time/pace pressure and the overloaded syllabuses were reported as some of the main barriers prohibiting the implementation of modifications, even those which were perceived as desirable. One implication of this, was that teachers' endeavor was in the direction of managing to complete the curriculum/text-book and adjust students to the nationally predefined requirements, perpetuating in this way the detrimental «one size must fit all» approach.

A further implication was that teachers identified their instructional objectives with the nationally prescribed curricular objectives to the degree of assuming that the former were imposed by the Ministry of Education via textbooks and it was nothing they could do in order to modify them. From this perspective, they conceived their role more as «servants/deliverers» rather than as «co-constructors» of the curriculum via its implementation. This may be connected with the fact that Greece exercises the strongest control over textbooks among EU member states and also that pedagogic practice in most educational phases is heavily textbook-centered (EURYDICE, 1994). It may also indicate that in a climate which does not foster participative decision making and does not acknowledge the importance of teacher opinions in formulating school and classroom decisions (see Moutsios, 2003), teachers may be less willing to «go the extra mile» to implement instructional adaptations -not even to mention more specialized instructional activities- to support the achievement of their low-performing students.

In another educational context, however, McLeskey and Waldron (2002) also found that teachers felt that they were not «permitted» to proceed with certain curricular and/or instructional changes but could not identify who told them that they could not make adaptations. The authors suggested that this lack of 'permission' seemed to be a generally accepted fact of life in general education classroom. This is also true for the teachers of the current study as well. For instance, even though the Greek education system has been extremely centralized and firmly controlled by the state still individual schools and teachers, if compared with schools of other European countries, are more autonomous in certain areas. In particular, teachers, since the abolition of the School Inspectorate in 1983, have enjoyed a great deal of autonomy in their classrooms. Efforts to reinstate some measures of teacher appraisal have been fiercely and successfully opposed by their Union. The state holds a very limited role over what has been traditionally perceived as 'internal school affairs' such as classroom organization, teacher accountability, pupil testing and assessment of school quality. From this perspective, even though there is a strong sense of top to down enforced policy there are a number of occasions that confirm Fulcher's (1997) model of policy made at different levels. As Thomas and Loxley (2001) point out it is far too simplistic to see schools as implementing a set of national policy directions: «In education...the directions are interpreted by everyone from civil servants to local administrators to teachers, and intent is attenuated and compromised as directives, instructions and ideas move from one person to another» (Thomas & Loxley, 2001, p. 101)

Within this complex array of directives and interpretations, it is important to note that certain adaptations (i.e., using alternative material for some students, implementing activities at various levels of difficulties or forwarding diverse activities) were either not used or were perceived as not desirable by some teachers on the basis of promoting equality. But equal does not mean the same. Although the idea of uniformity may reflect efforts towards strengthening equality and establishing democratisation of education, it may also demonstrate the unwillingness of an inflexible and under-resourced system to negotiate educational processes and outcomes and meet the diverse needs of its pupils (Moutsios, 2003). At the same time it might reveal teachers' genuine concern of the dilemmas involved in the process of differentiation and the danger of creating overt or hidden mechanisms of streaming and

negative discrimination. In daily educational praxis, some adaptations may indeed involve what Martha Minow (1990) has called the dilemma of difference, where ‘special’ treatment is both a remedy for and a perpetuation of the stigma of difference. This dilemma needs to be explored further in relation to the way(s) differentiation is being conceptualized, understood and practiced. As Evans and Waring (2008) indicate, the more the teacher considers differentiation to be an appendage, something of an «add on» in their planning and preparation for teaching and learning, the more the awareness, flexibility, malleability, understanding, choice and challenge is reduced.

From this perspective, a final notable finding of this study was the importance of examining not only teachers’ perceptions of different instructional modifications in terms of their feasibility and desirability but also the meaning that teachers ascribed to different adaptations and how they translated these adaptations in the everyday practice. Even though this was not a predefined aim of the study, the qualitative analysis of teachers’ responses revealed that teachers hold a number of misconceptions in relation to different adaptations. For instance, many teachers identified strongly formative with summative assessment, alternative with regular material, within class grouping with working in groups, diverse activities with negative differentiation and a whole class undifferentiated approach as a means of securing equality. These findings reveal lack of knowledge and have serious implications in the development and implementation of teachers’ training programs. That is, teachers cannot be asked or trained to implement new curricula and use new instructional methods or undertake modifications without considering that teachers, too, need to take ownership of their learning by constructing an understanding of new curricula and methods using their prior knowledge, as well as their prior misconceptions (see also: Hacker & Tenent, 2002). Due to its importance, the way teachers interpret different instructional modifications need further exploration by using both interviews and on-line observations in general education classrooms. After all, the most critical factor for inclusive education is the teacher –what teachers think and believe- and the most important arena for inclusive education is the regular classroom or the regular arena for school activities.

TABLE I. Teachers’ responses in terms of the feasibility and desirability of instructional adaptations

| Instructional Adaptations | Feasibility | | | Yes ¹ % (n) | Desirability | |
|---|---------------------|-----------------|----------------|---------------------------|--------------|------------------|
| | Frequently % (n) | Rarely % (n) | Never % (n) | | No % (n) | Depends % (n) |
| Classroom management strategies | | | | | | |
| 1. Establish norms, rules & routines | 88.9 (40) | 8.9 (4) | 2.2 (1) | | 100 (5) | |
| 2. Rearrange the physical layout in the classroom | 80 (36) | 17.8 (8) | 2.2 (1) | 77.8 (7) | 22.2 (2) | |
| 3. Meet the needs of <i>all</i> my students | 93.3 (42) | 6.7 (3) | | 100 (3) | | |
| 4. Teach the class as a whole | 95.6 (43) | 4.4 (2) | | 50.0 (1) | 50 (1) | |
| 5. Meet personally the needs of some students | 84.4 (38) | 13.3 (6) | 2.2 (1) | 85.7 (6) | 14.3 (1) | |
| 6. Meet individual and group needs at the <i>same time</i> | 62.2 (28) | 22.2 (10) | 15.6 (7) | 47.1 (8) | 52.9 (9) | |
| Grouping Strategies | | | | | | |
| 7. Group students with pairs from other classrooms (between-class grouping) | | 4.4 (2) | 95.6 (43) | 64.4 (29) | 35.6 (16) | |
| 8. Group students of my class in small | | | | | | |

| | | | | | | |
|--|-----------|-----------|-----------|----------|----------|----------|
| groups for some activities (within-class grouping) | 75.6 (34) | 24.4 (11) | | 72.7 (8) | 9.1 (1) | 18.2 (2) |
| 9. Group <i>all</i> students in pairs | 60 (27) | 17.8 (8) | 22.2 (10) | 33.3 (6) | 38.9 (7) | 27.8 (5) |
| 10. Pair students with difficulties in learning with a classmate | 68.9 (31) | 13.3 (6) | 17.8 (8) | 64.3 (9) | 14.3 (2) | 21.4 (3) |

Additional Teaching

| | | | | | | |
|------------------------------------|-----------|-----------|---------|-----------|----------|-------|
| 11. The whole class | 84.4 (38) | 11.1 (5) | 4.4 (2) | 28.6 (2) | 71.4 (5) | |
| 12. Certain subgroups in the class | 55.6 (25) | 24.4 (11) | 20. (9) | 35 (7) | 60 (12) | 5 (1) |
| 13. A particular student | 73.3 (33) | 17.8 (8) | 8.9 (4) | 83.3 (10) | 16.7 (2) | |

Activity Adjustment

| | | | | | | |
|--|-----------|-----------|-----------|-----------|-----------|----------|
| 14. Give more time | 95.6 (43) | 2.2 (1) | 2.2 (1) | 50 (1) | 50 (1) | |
| 15. Break down activities | 97.8 (44) | 2.2 (1) | | 100 (1) | | |
| 16. Activities at various levels of difficulty | 44.4 (20) | 24.4 (11) | 31.1 (14) | 68 (17) | 32 (8) | |
| 17. Forward diverse activities simultaneously | 26.7 (12) | 42.2 (19) | 31.1 (14) | 60.6 (20) | 30.3 (10) | 9.1 (3) |
| 18. Use alternative materials | 55.6 (25) | 13.3 (6) | 31.1 (14) | 55 (11) | 45 (9) | |
| 19. Use specific resource | 2.2 (1) | | 97.8 (44) | | 88.6 (39) | 11.4 (5) |
| 20. Use computers | 28.9 (13) | 28.9 (13) | 42.2 (19) | 71.9 (23) | 28.1 (9) | |

Formative Assessment

| | | | | | | |
|--|-----------|---------|----------|----------|----------|--|
| 21. Check students' previous mastery and skills | 97.8 (44) | | 2.2. (1) | | 100 (1) | |
| 22. Monitor progress | 91.1 (41) | 6.7 (3) | 2.2 (1) | 50 (2) | 50 (2) | |
| 23. Plan according to the results of the assessment | 86.7 (39) | 4.4 (2) | 8.9 (4) | 66.7 (4) | 33.3 (2) | |
| 24. Check if the objectives are within the student range | 80 (36) | 2.2 (1) | 17.8 (8) | 55.6 (5) | 44.4 (4) | |

N=45

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