

Differentiated instruction in the EFL classroom: Discrepancies between teachers' self-report questionnaires and actual practices

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Abstract

This paper aims at examining the classroom implementation of differentiated instruction (DI) in the Greek state primary school. Data were collected via a self-report questionnaire and classroom observations. The questionnaire was completed by 149 teachers of English. Ten teachers were also observed during their actual classroom teaching practices. The findings indicate that, despite the participants' positive attitude towards DI, the Greek primary classroom remains a teacher-centered learning environment. Moreover, the participants' observed use of DI strategies (e.g. group-driven activities) was less frequent than their reported use. This could be attributed to teachers' misconceptions of what DI entails for classroom implementation, as well as to classroom contingencies.

Keywords: differentiated instruction, differentiated strategies, Greek state schools, primary education, English language teaching

1 Introduction

Due to recent developments in the socio-economic, political and technological context worldwide, educators are required to abandon well-established, teacher-centered methodologies and to exhibit increased flexibility in their choice of instructional practices, so as to maximize learning opportunities for all their students (Lawrence-Brown 2004; McQuarrie & McRae 2010). Differentiated instruction (DI) has been proposed as an educational framework that facilitates teachers' efforts to address the

needs of individual learners (Smith & Throne 2007; Tomlinson 2005; Westwood 2016). Teachers can design appropriate learning experiences, bearing in mind the students' level of attainment, interests and learning styles (Chick & Hong 2012; Hall et al. 2003; McCarthy 2017; Theisen 2003; Westwood 2016).

2 Theoretical background

2.1 Definition of differentiated instruction and main differentiated strategies

Differentiated instruction (DI) has been described as a framework that heavily depends upon teachers' "making sure that the right students get the right learning tasks at the right time" (Earl 2003: 86-87). More specifically, teachers are encouraged to discover individual students' level of attainment and preferred ways of learning, so as to enable learners to build on what they already know and acquire new knowledge and skills along a learning continuum (Chick & Hong 2012; Theisen 2003). As Earl (2003: 86-87) aptly put it, once teachers become familiar with their students' prior knowledge, needs and learning styles, designing differentiated lessons "is no longer an option. It is an obvious response" for the purpose of effective instruction.

A number of differentiated strategies can be employed by teachers in their effort to maximize learning outcomes for all students. The following list is by no means exhaustive, as it includes the ones that are more closely related to the findings discussed in the present paper. Many more strategies can be found in the relevant bibliography (c.f. Dooley 2009; Huebner 2010; McCarthy 2017).

- (1) Teachers may use appropriate combinations of pair-, group- and individual work, depending on the task at hand and learners' individual characteristics (Smith & Throne 2007). Within the framework of DI, collaborative work (in pairs or groups) is greatly valued, since it promotes student cooperation and the development of an all-inclusive learning environment. Flexible grouping is an important differentiated strategy, as working with different classmates on various tasks enables learners to become aware of their individual strengths and weaknesses, to benefit from their classmates' talents, as well as to improve their social skills (Βαστάκη 2010; Huebner 2010; Nicolae 2014). Moreover, individual work allows students to learn how to organize their ideas, time and

energy more effectively and instills in them a sense of achievement for their own accomplishments (Βαστάκη 2010).

- (2) Teachers may differentiate the *content* of the lesson, so as to accommodate the needs of students with different levels of attainment (Βαστάκη 2010; Lawrence-Brown 2004). This essentially means that the ideas or information the students must learn may not be the same for all class members. Learners facing difficulty can be provided with less complex materials, tackle less demanding tasks or have more opportunities to practice new skills, whereas students who master the subject matter at a faster rate can work on more challenging activities. Varied reading texts and tiered tasks are examples of content differentiation (Hall et al. 2003; Theisen 2003).
- (3) In addition to this, the *process* of the lesson can be differentiated, i.e. the students may follow different paths to make sense of the subject matter. For instance, learners may be provided with many homework options to choose from, depending on their interests and individual strengths (Carr 2013; Xu 2011). Simultaneous activities and flexible grouping constitute other forms of process differentiation (Βαστάκη 2010; Dooley 2009; Huebner 2010).
- (4) Early finishers, i.e. learners who complete their assignments consistently earlier than their classmates, can be provided with additional materials or project work, in order to maintain their motivation and to avoid boredom. It has also been suggested that the pace of the lesson may be accelerated for them, allowing them to go through the curriculum faster than their classmates (Chalupa 2004; Dooley 2009; Winebrenner 2001).
- (5) Teachers need to abandon their traditional role of omniscient controllers of activities and function as guides and monitors of students' progress. DI proponents place considerable emphasis on the development of learner autonomy. This change in teacher roles could result in increased student responsibility for individual learning and greater motivation (Hall et al. 2003; Παντελιάδου 2008; Smith & Throne 2007).

Research findings from a number of studies have attested to the beneficial effect of differentiated strategies on students' learning outcomes and attitude towards school. More specifically, differentiated techniques have been found to lead to improved academic performance and motivation for more proficient learners (Brighton et al.

2005; Tieso 2005), students with learning difficulties (McAdamis 2001; McQuarrie & McRae 2010), as well as for primary school (Reis et al. 2011; Valiandes 2015) and secondary school students (Muthomi & Mbugua 2014; Rejeki 2014).

2.2 Differentiated instruction in the context of the Greek state school

English language teaching in state schools across Greece is currently carried out according to the guidelines of the Integrated Foreign Languages Curriculum (IFLC). First published in 2011, the IFLC became the official curriculum in September 2016. As claimed by the developers of the IFLC, DI plays a central role for successful foreign language instruction. Teachers are encouraged to differentiate various components of the lesson (e.g. the *content*, the *process*, etc.), in order to maximize learning opportunities for all students in highly heterogeneous classrooms (Καραβά & Ζουγανέλη 2013).

The English textbooks used in the 4th, 5th and 6th grades of primary state schools across Greece were written according to the specifications of the previous curriculum i.e. the Cross-Thematic Curriculum (Presidential Decree Φ.Ε.Κ. 303/13-03-03). The Cross-Thematic Curriculum placed great emphasis on the acknowledgement of learners' differences by the teacher and on the importance of taking students' individual characteristics into account when preparing a lesson. Although implementing DI in the English language classroom did not constitute the aim of materials developers, certain elements in the textbooks were designed in accordance with DI principles (e.g. appendices containing tiered tasks) (Κολοβού & Κρασιώτου 2009).

2.3 The role of teachers for the successful implementation of DI

In the light of the above, it can be said that DI has been recently introduced in the Greek educational system and that curriculum planners view it as a promising framework for effective instruction in today's highly diversified classrooms. However, teachers' attitudes towards any new idea or practice also constitute a key element in determining whether it will be adopted or discarded. Teachers may implement an innovation faithfully, adapt it or reject it altogether. As a result, it is crucial that they are positively predisposed towards it (Avidov-Ungar & Eshet-Alkabay 2011; Carless 1998; Erguvan 2014).

Nevertheless, other studies indicated that teachers may sometimes state that they are favorably inclined towards a new idea or practice without implementing it in the classroom (Gardner 2008; Karavas-Doukas 1996; Razmjoo & Riazi 2006). It may be the case that teachers lack a deeper understanding of the principles of the educational innovation in question, therefore, fostering vague or misconstrued ideas of what it entails for classroom implementation (Karavas-Doukas 1996). This, however, can lead to superficial changes in teaching practices or to the use of a distorted version of the intended changes, as well as to teachers' disenchantment with and eventual rejection of the new ideas (Gardner 2008; Razmjoo & Riazi 2006).

Lastly, it becomes clear from this discussion that studies which aim at evaluating the implementation of recently introduced educational frameworks must elicit teachers' attitudes towards the new elements, but also include observations of teachers' performance in the classroom in order to "gain some knowledge of actual, rather than reported behavior" (Kennedy & Kennedy 1996: 360). This greatly influenced the research design of the present study, as will be shown below.

3 The study

3.1 Research questions

This paper presents findings from a larger scale research (Mavroudi 2016) whose purpose was to provide answers to the following research questions:

- (1) Do EFL teachers in Greek state primary schools foster favorable attitudes towards DI?
- (2) Has DI influenced primary EFL teachers' classroom practices and to what extent?

To this end, a self-report questionnaire on teachers' attitudes towards DI was designed and distributed. In an attempt to uncover the degree of consistency between self-reported and actual teaching practices, classroom observations of questionnaire participants were also carried out.

3.2 Participants

With regard to questionnaire respondents, 149 teachers of English working in state primary schools completed the survey. The schools were situated in the area of central Macedonia, in northern Greece. The aforementioned region was selected on account of its geographical diversity and population size. Moreover, state school teachers in central Macedonia resemble their colleagues working in schools throughout Greece with respect to educational background, formal qualifications, age and other characteristics. They also follow the same guidelines regarding the curriculum, hours of instruction, materials, etc., since these recommendations are made by the Greek educational authorities. As a result, neither their attitudes towards DI nor the frequency of use of differentiated strategies were expected to differ significantly from those of their colleagues working in other parts of Greece.

Since 149 out of a total of 637 English teachers completed the questionnaire, the response rate was 23.5% of the target population. To ensure the fair representation of all parts of the region, the population was divided into groups according to the area they worked in and a random sample was then chosen from each group [i.e. *area/cluster/stratified random sampling*, as termed by Dörnyei (2003)].

As far as the participants' profile is concerned, the largest age group was 41-50 year-old teachers (47.9%), whereas 31-40 year-old respondents (29.1%) constituted the second largest age group. Moreover, 6.8% of participants were young teachers (30 years of age or less). The majority of teachers (73.2%) reported that the highest educational qualification they had attained was a university degree, whereas the remaining 26.8% had also completed postgraduate studies. Lastly, most of the respondents (63.1%, N=94) had an overall teaching experience that exceeded 16 years. The number of teachers with 11-15 years of experience was lower (16.8%, N=25). The percentage of less experienced participants, who had taught English for 10 years or less, amounted to 20.1% (N=30) of the respondents.

Furthermore, ten respondents who worked in state primary schools located in various areas of the city of Thessaloniki participated in classroom observations. Their individual characteristics (age, education, teaching experience, etc.) were similar to those of the other questionnaire respondents. Each of the participants was observed while teaching two of his/her classes, since instructional choices may be affected by the individual characteristics of a specific group of students. Therefore, the total number of observations amounted to twenty (20). In order to maintain the observed

teachers' anonymity, each participant was assigned a number; the first teacher will be henceforth referred to as T1, the second one as T2, etc. The observations took place over a three-month period.

3.3 Instruments and data analysis

The questionnaire comprised three parts, which made use of (i) Likert scales, (ii) multiple choice items, and (iii) open-ended questions. In this way, data were elicited with regard to teachers' understanding of DI principles, their frequency of use of DI techniques and personal information (e.g. age, gender, education, etc.).

A special observation form was designed with the aim of collecting data on the degree of implementation of differentiated strategies in the Greek state primary classroom. Personal information (e.g. age, formal qualifications, etc.) was also elicited. The observation form used the activity as a unit of analysis, as teachers conceptualize their lessons in terms of the activities carried out (Karavas 1993). During the process of classroom observations, 122 activities were recorded. On completion of the observation process, the data collected via the two research instruments were analyzed. Descriptive statistics were used and results were expressed as frequencies and percentages for nominal and interval data. The analysis of questionnaire data was performed using the Statistical Package for the Social Sciences (SPSS), version 17. The findings from the two research instruments were compared and contrasted, leading to a number of conclusions discussed in the following section.

4 Findings and discussion

Although the findings from self-report questionnaires were in agreement with the data collected via classroom observations regarding many differentiated techniques (e.g. the differentiation of reading texts), discrepancies were identified in other cases. The main conclusion drawn is that, despite the respondents' positive views of DI, few instances of differentiated activities were observed.

4.1 Teachers' positive attitudes VS limited classroom implementation of DI

The teachers' favorable attitudes towards DI became apparent in their answers to an open-ended question found in the first part of the questionnaire. The respondents were asked to point out the best way to teach highly diversified classes. Each participant could write down one or more suggestions. The majority claimed that DI constitutes the most effective approach to dealing with learner heterogeneity. All answers are presented in Table 1 in the order of the participants' preference.

<i>Best way to deal with learner heterogeneity</i>	N	%
Differentiated instruction	55	41.7
Grouping students according to level	30	22.7
Collaborative learning	30	22.7
Focus on weaker students	18	13.6
Use of various teaching methods and resources	15	11.4
Supplementary tuition	11	8.3
Individualized instruction	9	6.8
Teacher-centered approach	5	3.8
Assistant teacher in the classroom	4	3.0
Differentiated instruction, but need for more teaching hours and/or training	3	2.3
Positive classroom atmosphere	3	2.3
Designing lessons to cater for average learners' needs	2	1.5
Learner-centered approach and teacher flexibility	1	0.8
Students' taking more initiative	1	0.8
Total	187	141.7

Table 1. Participants' opinions on the best way to handle classroom heterogeneity

The preference for differentiated strategies can be seen at the top of this list. The percentage of participants who selected DI was approximately twice as high as the percentages of respondents opting for collaborative learning (22.7%) and grouping students according to their level of attainment (22.7%).

Nevertheless, these findings were not corroborated during classroom observations. Few instances of differentiation of the *content* (5.7%, N=7) or the *process* (9.8%, N=12) of the lesson were observed. With regard to content differentiation, it was found that students were expected to learn the same ideas, information and skills in almost all cases. During seven (7) activities, however, they produced writings of varying complexity, depending on their level of attainment. For

example, T2 asked her students to write their own fairytales and T10 suggested that learners prepare roleplays. As far as the process of the lesson was concerned, there were eleven instances (9%, N=11) whereby teachers encouraged students to choose how to work (e.g. alone, in pairs, etc.). An interesting example of process differentiation was observed in one of the classes taught by T7. Students were offered a choice between writing their homework in their notebooks and preparing a PowerPoint presentation to share with the rest of the class.

Moreover, many DI principles were highly regarded by the vast majority of questionnaire respondents, yet there was limited or no evidence from classroom observations to suggest that these ideas influenced teaching practices. Examples of widely accepted tenets can be seen in Table 2:

<i>Activities selected in the classroom</i>	Strongly Disagree		Disagree		Agree		Strongly Agree	
	N	%	N	%	N	%	N	%
Different activities based on students' level of attainment	2	1.4	17	11.6	106	72.0	22	15.0
Same activities, additional support for students facing difficulty	1	0.7	10	6.7	91	61.5	46	31.1

Table 2. Participants' views on the differentiation of activities

More specifically, the idea of students working on different tasks depending on the learners' level of attainment was viewed in a positive light by 87% of the respondents (N=128). Furthermore, respondents were asked to express their opinion on having all students work on the same task, while the teacher provided additional support to learners facing difficulty. The idea was almost unanimously accepted (92.6%, N=137). It may therefore come as a surprise that, in a total of 122 activities, no instances of the students' working on different tasks were observed. In addition to this, there was only one example of the teacher (T3) working with less proficient students, while the rest of the class worked individually.

As a result, it may be said that the aforementioned ideas are accepted in principle, yet teachers may have been dissuaded from altering their classroom practices accordingly due to practical considerations (e.g. lack of time or resources) or the increased preparation time required for their implementation. As Carless (1998)

noted, the responsibility of designing their own materials (e.g. tiered tasks) may lead teachers to feel overburdened and have an adverse effect on the adoption of innovative elements.

4.2 Teachers' positive attitudes towards pair / group work VS few instances of use

Based on the findings presented in Table 1, pair/group work is highly regarded by state school teachers of English. Collaborative learning was seen as the best way to deal with highly diversified classes by 22.7% (N=30) of the respondents, being the second most popular option after the use of differentiated strategies. Participants also seemed to have clear preferences on how pair/group-driven activities should be organized, so as to yield better learning outcomes (c.f. Table 3).

<i>Group/pair work</i>		Always	Usually	Often	Rarely	Never	Total
Grouping students according to level of attainment	N	2	15	32	53	42	144
	%	1.4	10.4	22.2	36.8	29.2	100
Grouping students according to interests	N	21	59	49	10	5	144
	%	14.6	41.0	34.0	6.9	3.5	100
Pairing students with the same level of attainment	N	2	23	57	33	6	121
	%	1.6	19.0	47.1	27.3	5.0	100
Pairing students with different levels of attainment	N	12	56	54	14	3	139
	%	8.6	40.3	38.8	10.1	2.2	100

Table 3. Participants' preferences regarding the use of pair/group-driven activities

As shown in Table 3, respondents were asked to report how often they grouped their students according to their level of attainment. Groups of more proficient students could then be assigned more complex tasks and groups of students facing difficulty could tackle simpler ones. Participants also commented on how frequently they formed groups based on the learners' shared interests. In this case, group members could contribute to the team effort by making use of their individual talents and strengths (Βαστάκη 2010; Huebner 2010). The findings in Table 3 illustrate that respondents prioritize the criterion of students' shared interests over the learners' level of attainment; 75% (N=108) of the participants claimed that they usually/often group students based on their interests. On the other hand, the majority of the respondents

(66%, N=95) stated that they rarely/never form groups of students according to their level of attainment.

Conversely, pair work is largely viewed as an opportunity for peer learning, i.e. pairing students with different levels of attainment, so that students facing difficulty can learn from more proficient classmates and the latter can become more self-confident through peer-tutoring (Βαστάκη 2010). Nearly half of the respondents (48.9%, N=68) reported that they always/usually pair up students with different levels of attainment, whereas 20.6% (N=25) of the participants claimed that they always/usually pair up learners with the same level of attainment.

All in all, the respondents exhibited a high degree of familiarity with pair/group-driven activities, which could lead one to expect an extensive use of these strategies during classroom observations. Nonetheless, only ten (10) group-driven and two (2) instances of pair work were observed (8.2% and 1.6% respectively). Individual work and whole class instruction were found to be the prevalent modes of work in the language classroom (83.6%, N=102). This discrepancy between the findings of questionnaires and classroom observations could be attributed to teachers' concerns about establishing an orderly learning environment, where all students concentrate on the lesson. This can be more easily accomplished through frontal instruction and individual seatwork than collaborative learning (Gillies & Boyle 2010).

Furthermore, although the seating arrangements in all but one of the observed classrooms were well suited for student-to-student interaction [i.e. thirteen classrooms (N=13, 62%) had clustered desks and six (N=6, 28%) had a horseshoe arrangement], teachers may have been unwilling to cause disruption by asking students to change seats and form different pairs/groups. As a result, pair/group activities end up serving as occasional treats for the learners, instead of an integral part of the learning process.

4.3 Discrepancies between reported and observed teacher roles in the classroom

Developing learner autonomy and instilling in students a sense of responsibility for their own learning are regarded as important goals of DI (c.f. 2.1). For this reason, teachers are encouraged to act as monitors of students' work, relinquishing the traditional role of omniscient authority (Παντελιάδου 2008; Smith & Throne 2007).

Questionnaire respondents were positively predisposed towards this change in teacher roles, as demonstrated in Table 4:

<i>Teacher roles</i>	Strongly Disagree		Disagree		Agree		Strongly Agree	
	N	%	N	%	N	%	N	%
Teacher acting as monitor	2	1.4	1	0.6	72	48.6	73	49.4

Table 4. Teacher roles in the differentiated classroom

The idea that the teacher may provide tasks for the students to work on and then monitor the class and interfere only when necessary was almost unanimously accepted (98%, N=145). However, the findings from classroom observations demonstrated the prevalence of traditional teacher roles. The vast majority of observed activities (N=89) were carried out by means of frontal instruction, with the teacher acting as the dominant figure who controlled the lesson.

Furthermore, the teaching tasks carried out during the observations were classified according to the typology found in Cuban (2007), which is based on measuring the amount of teacher/student talk in the classroom. It was found that eighty-six (N=86, 70.5%) instances of the recorded activities were teacher-directed. This essentially means that nearly $\frac{3}{4}$ of the observed tasks involved mostly teacher talk and less student interaction. Fewer interactive activities were observed (N=24, 19.7%), where both teacher and students talked substantially. The number of student-directed activities, involving more student talk than teacher talk, was even smaller (N=10, 8.2%).

A possible explanation for this discrepancy in teacher roles could be that teachers agree with acting as monitors and facilitators of students' learning in principle, but, due to practical constraints (e.g. pressure to cover the subject matter or lack of time), they may fall back on the more familiar practice of acting as a controller. Moreover, it may be the case that the participants accept the change in teacher roles on the surface, without fully grasping the underlying principles behind it (Gardner 2008; Karavas 1993). However, an incomplete understanding of DI underpinnings is likely to prevent teachers from properly implementing this educational framework. As a result, they may not experience its advantages, leading them to develop negative attitudes towards DI and to return to well-known teacher-centered methodologies.

4.4 Discrepancies in the reported and observed treatment of early finishers

In addition to teacher roles, respondents were asked to report how frequently they provide early finishers with additional materials, so as to keep them appropriately challenged and avoid disruptive behavior due to loss of motivation.

<i>Dealing with early finishers</i>	Always		Usually		Often		Rarely		Never		Total	
Providing early finishers with extra activities	N	%	N	%	N	%	N	%	N	%	N	%
	2	1.4	19	12.8	66	44.6	52	35.1	9	6.1	148	100

Table 5. Treatment of early finishers

As illustrated in Table 5, 14.2% (N=21) of the participants claimed that they always/usually prepare extra materials for those students who finish their work consistently earlier than the rest of the class. A further 44.6% (N=66) stated that they often make use of this strategy. The percentage of the respondents who rarely/never provide early finishers with additional work was lower (41.2%, N=61). Nonetheless, classroom observations did not produce supporting evidence. A few cases of early finishers were found in six out of the twenty observed classrooms. No extra activities were provided and no action of any kind was taken by the teacher.

This could be attributed to the fact that these students appeared well-behaved and motivated and that the teachers could have seen the preparation of additional materials as unnecessary. Furthermore, teachers may have been worried that the rest of the students and their parents could perceive the differentiated treatment of early finishers as preferential and unfair (Chalupa 2004; Theisen 2003). Preparing extra materials may have been viewed as additional workload for teachers (Carless 1998). Finally, respondents may have been influenced by the *social desirability bias* when completing the questionnaire, i.e. they may have given the answer that they thought was expected of them as educators who are sensitive to their students' individual needs (Dörnyei 2003).

5 Conclusion

The aim of the present paper is to report on the findings of two research instruments (i.e. a self-report questionnaire and classroom observations) regarding the classroom implementation of DI in Greek state primary schools. Special emphasis is placed on the discrepancies in the data collected by the two instruments. The findings indicate that, despite teachers' positive attitudes towards DI, Greek state schools are predominantly teacher-centered learning environments, where systematic use of DI has not yet been implemented.

Furthermore, teachers seem to foster a number of misconceptions of DI underpinnings, accepting them in principle but being unable to put them into practice. They also attribute great importance to maintaining classroom discipline. This may impact on their use of pair/group work and their preference for traditional teacher roles. Lastly, strategies which require more time and resources or increased preparation by the teachers may be highly regarded but not often practiced (e.g. provision of extra activities for early finishers).

In the light of these findings, teachers may find training in DI useful so as to enrich their teaching repertoires with differentiated strategies and to be provided with practical tips on how to implement DI in the language classroom. Workshops providing teachers with suggestions on how to use the differentiated materials already incorporated in the school textbooks more effectively could also be helpful. Lastly, support by the educational authorities (e.g. in the form of a specialized website with differentiated materials) could alleviate teachers' preoccupation with materials design.

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