

Prospective Kindergarten and Primary school teachers' attitudes and beliefs on Differentiated Teaching during their Teaching Practice

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ABSTRACT

The aim of this proposal is the investigation of the beliefs of fourth year students in the Department of Primary Education and the Department of Pre-School Education at the University of Ioannina – who constitute our research sample – on the issue of the implemented functionality of Differentiated Teaching within the context of Teaching Practice. The structured questionnaire was used as our research tool. The research conclusions showed that future teachers receive adequate training in the theoretical and implemented functionality of differentiated teaching but nevertheless they also revealed the limited use made of differentiated teaching during Teaching Practice and ultimately the adoption of traditional forms of instruction. While the research findings are limited, they constitute a trigger for further investigation of the issue in the teaching departments of our This would be especially important since Curriculum in the Teaching Departments of the Universities, and Teaching Practice too, could be reshaped in such a way that future teachers are well prepared to implement the things they were taught during their undergraduate studies.

Introduction

The prevailing shaped perspectives of the constantly changing social reality demonstrate the need for a continual search for innovative and alternative forms of teaching and learning capable of responding to the complexity and polytheism of teaching, and contributing decisively to the

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formation of a multi-level integrated social personality (Fykaris & Mitsi, 2014). It would appear that these challenges can be faced effectively through Differentiated Teaching which respects diversity and meets the needs of all pupils, maximizing the learning outcomes (Valiandes, Koutselini & Kyriakides, 2011). The teacher's role is decisive and his responsibility for the successful achievement and application of differentiated teaching (Valiandes & Koutselini, 2009· Valiandes & Koutselini, 2008), which takes into account the degree of readiness, interests, learning profile (Tomlinson, 2003), the socio-economic and cultural level as well as the various psych-emotional characteristics of each pupil, is great (Koutselini, 2008· Koutselini & Valiandes, 2009).

On the basis of this reasoning, the education and adequate training of future teachers for effective teaching, is essential, a fact which highlights the central role played by Teaching Practice in the Curricula of the Teaching Departments around the country (Androusou &Avgitidou, 2013). The potential for the utilization of the theoretical and research approach of scientific knowledge by future teachers for the design, organization and implementation of the educational act and ultimately the acceptance or rejection of scientific data when confronted with school reality as well of course as the acquisition of teaching experience, constitute the fundamental axes of Teaching Practice (Economides, 2013). The common objective of Teaching Practice in the country's Teaching Departments is the students' contact with daily educational practice and for them to practice means of managing the classroom as well as the acquisition of experience in means of organizing and conducting teaching (Darling-Hammond, 2010 -Ecomonides, 2013).

Within the framework of Teaching Practice, the issue is not only familiarization with the classroom but also the achievement of successful involvement in the teaching process which

requires a critical approach, reflection for the modification or improvement of aspects of school practice, opportunities for experimentation and upgrading practices, preventing the sterile reproduction of traditional teaching principles (Ecomonides, 2007· Kossyvaki, 2003). Hence, Teaching Practice for future pre-school and primary school teachers constitutes a reliable tool for the highlighting of attitudes and beliefs on teaching and learning (Chrysafides, 2013).

2. Attitudes and beliefs of Kindergarten and Primary school teachers concerning the implemented functionality of Differentiated Teaching

Research interest lies in the highlighting of those elements of the implied theories that the teachers understand as important for the design, teaching and evaluation and which influence their beliefs and attitudes (Erdiller & McMallen, 2003· Pajares, 1992· OECD, 2009· Charlesworth et al., 1993· Palenzuela, 2004· Smith & Croom, 2000· McMullen, 1999· Liu, 2007·Ruto-Korir, 2010· Wang et al., 2008· Phillips, 2004· Sakellariou & Rentzou, 2013).

Teachers' attitudes and beliefs occupy a large part of the research on issues related to teaching and learning, the teaching of specific cognitive objects, communication and interaction, and the pedagogical atmosphere (Kagan, 1992·Richardson, 1996·Borg, 2003 ·Gritzios, 2010).

Approaching the concept of attitudes semantically, we could define it as the construction that includes cognitive, emotional and behavioural information concerning the subject of the attitude and can be evaluated through cognitive, emotional and behavioral self-reporting responses. It is a latent variable, which interprets the connection between observable stimuli and behaviors. It comprises an evaluative opinion which is the result of the processes that the stimuli and the responses go through, the continual interchanges between like and dislike, desirable and undesirable (Kokkinaki, 2005. Cheung, 2009). This attitude may well influence an individual's

cognitive functions, emotional responses and future behaviors. The emotional element of the concept of attitude refers to attractions and repulsions for each issue and reflects the feelings about it. The behavioral element includes the observable behavior, which constitutes a means of expression of our beliefs and feelings on an issue. The cognitive element includes the thoughts and beliefs which an individual expresses on a particular issue (Zimbardo & Leippe, 1991).

Beliefs have been characterized as dynamic individual structures which resemble a "messy construct" (Pajares, 1992 · Sakellariou & Rentzou, 2013), which undergoes changes due to the enrichment of experiences and knowledges, something which makes their clear semantic approach, the location, the quantifying as well as their highlighting unfeasible, even though they constitute a guarantee for the understanding of practices the teacher adopts in the classroom (Nespor, 1987: Pajares, 1992: Richardson, 1996: Stipek & Byler, 1997: Vartuli, 1999: Maxwell et al., 2001· Hedge & Cassidy, 2009α· 2009β· Palenzuela, 2004· Smith & Croom, 2000· Liu, 2007 · Ruto-Korir, 2010 · Wang et al., 2008 · Phillips, 2004 · Sakellariou & Rentzou, 2013). VandenBos (2007: 112) defines beliefs as "a general acceptance of the truth, the reality or the reliability of some event". Teachers' beliefs constitute a total of ideas, perceptions, interpretations of teaching practices which concern acquired knowledge, the pupils, the manner of teaching and learning, the teachers and the school environment. In addition, through beliefs, one can understand the part of the Curriculum that has been selected for instruction, the teaching methods adopted as well as the correlation between the learning content and the pupils and the teaching act (Murphy, Delli, Edwards 2004:71). Besides the beliefs, there are also "systems of beliefs" (Bryan, 2003, σ . 838), in other words groupings of beliefs, which don't require the individual's general affirmation. Their chief feature is their stability and resistance to change due to the interpretations that have been assigned while however it is possible for them to be

overturned and abruptly restructured since the individuals evaluate them in relation to their experiences (Gritzios, 2010). Understanding the teachers' system of beliefs is of great importance as it contributes to the strengthening of teaching efficiency (Fang, 1996 Maxwell et al., 2001 OECD, 2009 Sakellariou & Rentzou, 2013).

The investigation of the attitudes and beliefs of pre- and primary school teachers on the implemented functionality of Differentiated Teaching constitutes the central axis of the present study as it is quality teaching which constitutes the crown of pedagogical quests since its aim is the exploitation of the potential of all the pupils so as to achieve the best result (Theofilides, 2009). According to Tomlinson (2010), "differentiation" means adaptation of the teaching, it is more a philosophy than a tool, permitting the teacher to effectively design teaching which meets the pupils' particular individual needs (Gregory & Chapman, 2007). It is the reshaping of the learning process with the application of alternative teaching methods in order for it to be adequate in relation to the learning readiness, the needs and the learning profile of the pupils (Tomlinson, 2010).

Teaching design based on the differentiation of teaching focuses on the selection of the best practices, recognizing the multiple variables that shape the diversity of the school classroom today, on a level of needs, readiness and interests (Hanson & Ahron, 2008). The variables that differentiate today's pupil population in the event that they are not taken into consideration are capable of making even the best designed curriculum ineffective (Stanford, Crowe, Flice, 2010).

The research designs, which aim to examine the correlations between the teachers' beliefs and their practices in relation to Differentiated Teaching, have revealed two different structures of differentiation. On the one hand, there are those studies that refer to the effectiveness of differentiated instruction in pupils' individual growth and progress. Most of this research

documents the effectiveness of the basic principles and preconditions of differentiated teaching and confirms the maximization of the learning outcomes of all the pupils, regardless of their level of readiness, their sex or their socio-economic level. The teachers who implement differentiated teaching mention difficulties and express the view that it demands time and effort to implement differentiated teaching in school practice. Nevertheless the teachers' attitude was particularly positive and enthusiastic and they expressed their desire to see it continue and expand. On the other hand, it appears that the briefing of the teachers on the theoretical and applied functionality of Differentiated Teaching is limited and in combination with other reasons, it is not often adopted in educational practice. The education, training and support of teachers proved to be a decisive factor for the successful implementation of differentiated teaching in mixed ability classes (Davies, 2000-Wertheim & Leyser, 2002-Berry, 2006- Chong, Forlin & Au, 2007-Forlin, 2007- Dee, 2010- Mitsi, 2012- Fykaris & Mitsi, 2012- Ruys et. Al., 2013-Wan et el., 2013-Nicolae, 2013-Erotocritou Stavrou, & Koutselini, 2015-Wai-Yan Wan, 2016).

3. The present study

The present study aims at the investigation of the attitudes and beliefs of students in the Department of Primary Education and the Department of Pre-school Education at the University of Ioannina, regarding Differentiated Teaching. More precisely, its objective was to examine the extent to which the students/trainee teachers in the sample applied the philosophy of Differentiated Teaching during their compulsory Teaching Practice in Greek primary schools and kindergartens.

For the purposes of the present study, Differentiated Teaching is defined as the systematic approach to the planning of the whole of teaching by adapting the content, the processing of the

content and final product of the curriculum for pupils with different levels of readiness, learning profile and interests (Pandeliadou & Antoniou, 2008).

Regarding the term "beliefs", for the purposes of this study, a functional definition was given, which refers to the self-referencing functional philosophies or practices' theories that are chosen by the students/trainee teachers in the sample (Rentzou & Sakellariou, 2011 · Sakellariou & Rentzou, 2011 · 2012 · 2013).

The students' beliefs constitute a valuable tool for highlighting the features of the teaching practices that are adopted as they often seem to follow practices that are familiar to them from their own teachers and they combine them in an idealized picture or model of the teacher that they themselves want to become, uniting experiences and knowledge from tertiary education (Cole & Knowles, 1993 · Sakellariou & Rentzou, 2013), which are to be found in a subtle form and emerge in the performance of the work of the teacher in the school act (Raths, 2001). The trainee teachers evaluate everything new in the context of their pre-formed attitudes and beliefs, rejecting it in the case where it is conflicting (Kennedy, 1997· Sakellariou & Rentzou, 2013). The investigation of teaching practices is of meaningful value particularly during the period of study in tertiary education (File & Gullo, 2002).

Based on the hypothesis that the examination of teachers' attitudes and beliefs can strengthen their effectiveness and bearing in mind that it is important that this process is implemented during undergraduate university study, the present study aims to examine the extent to which the students/trainee teachers are aware of and implement Differentiated Teaching, and to cover a gap in the research in this field in Greece.

4. Research Methodology

4.1 Sample

Students were chosen as our research sample since through their teaching experiences it is possible for their attitudes and beliefs to emerge, as they are shaped through their direct experience, the academic lessons, the scientific texts or other educational resources (Palenzuela, 2004). Our research population was made up of fourth year students in the Department of Primary Education and the Department of Pre-school Education at the University of Ioannina. During the period of time when the present research was being carried out, there were 227 fourth year students who had completed teaching through Teaching Practice in the Department of Primary Education, of whom 183 responded, in other words about 80.62% of the total population while in the Department of Pre-school Education there were 260 students of whom 203 responded, in other words about 78.07% of the total population of students who had completed their Teaching Practice.

4.2 Time period in which the research was carried out

The research was carried out in May of the academic year 2016-2017.

4.3 Means of data collection

The structured interview with "closed" type questions and some illustrative "open" type questions was used as our measurement instrument. The questionnaire was articulated based on the following three categories:

1st Category: "Familiarity with Differentiated Teaching"

2nd Category: "Theoretical Substantiation of Differentiated Teaching"

3rd Category: "Implementation of Differentiated Teaching"

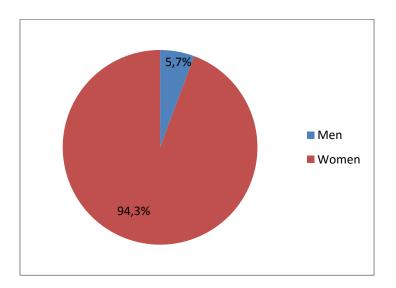
The time required to complete the questionnaire did not exceed 15 minutes. After the questionnaires had been collected, they were codified, while their statistical processing was carried out using the statistical programme SPSS 22.0 for Windows. The statistical analysis of the data was carried out based on "Descriptive Statistics-Correlations and Crosstabulations" analysis, which was judged as the most suitable for the particular research approach.

4.4 Limitations of the research

In the case of the present research, the chief restriction was the fact that the sample was taken from only one of the country's Universities.

4.5 Presentation of the research results

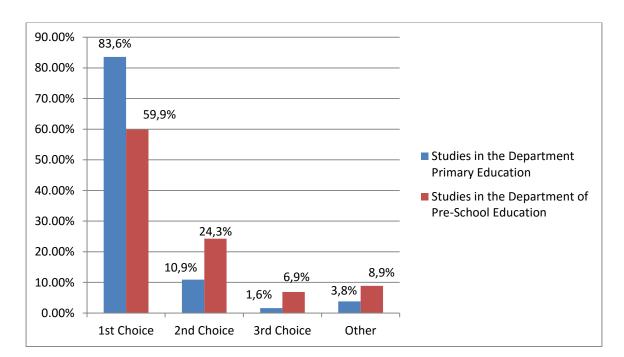
Concerning the profile of the sample, it was noted that the vast majority of the sample were women 94,3% and only the 5,7% were men (Pie chart 1).



Pie chart 1: Students' sex

Most, about 94% percent of the future teachers of Primary school and pre-school education belong to the age group 18-23 years old. Noteworthy is the percentage 83,6% of future primary

school teachers and 59,9% of future kindergarten teacher who stated that studies in this Department was their first choice (Bar graph 1).



Bar graph 1: Studies in the Department Primary Education and in the Department of Pre-School in Education.

In addition, the percentage of students who knew at least one foreign language at a high level, is significant.

As far as the 1st Category regarding familiarity with Differentiated Teaching and in particular with whether the students are informed about it, is concerned, their response was affirmative (89,9% for Yes and 10,1% for No) (Table 1).

Table 1: Familiarization with Differentiated Teaching

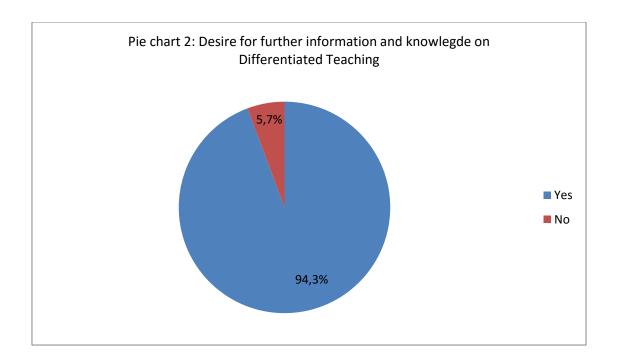
_		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	346	83,6	89,9	89,9
	No	39	9,4	10,1	100,0
	Total	385	93,0	100,0	
Missing	System	29	7,0		
Total		414	100,0		

University lectures are the main source of information on Differentiated Teaching, the percentage for the future primary school teachers was 86,9% and for the future kindergarten teachers was 93,6%, beyond other sources like relevant articles, workshops, conferences or other sources such as the Internet (2,2% for the future primary school teachers and 5,4% for the future kindergarten teachers). Knowledge of the theoretical background of Differentiated Teaching amounts to 83,9%, while of its applicatory context amounts to 81,3% (Bar graph 2).

81.3%% 83.9% 90.00% 80.00% 70.00% 60.00% ■ Knowledge of the theoritical background of the 50.00% Differentiated Teaching 40.00% 18.7% ■ Knowledge of the applicatory 30.00% 16.1% context of the Diffferentiated 20.00% Teaching 10.00% 0.00% Yes No

Bar graph 2: Knowledge of the theoretical and applicatory context of the Differentiated Teaching.

The percentage of students who desire further information and knowledge on Differentiated Teaching is extremely high and amounts to 94,3% (Pie chart 2).



In the 2^{nd} Category the responses of the future kindergarten and primary school teachers regarding the theoretical documentation of Differentiated Teaching are recorded. More specifically, the 80,8% of the future primary school teachers and of the future kindergarten teachers agree that there is a myth about the classical picture of the "average" pupil (Table 2).

Table 2: Teachers' opinion about the myth of the classical picture of the 'average' student

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	311	75,1	80,8	80,8
	No	74	17,9	19,2	100,0
	Total	385	93,0	100,0	
Missing	System	29	7,0		
Total		414	100,0		

For the 37,2% of students in the Department of Primary Education, the learning goals should always be set according to the pupil dynamic however sometimes for the 56,9% of students in the Department of Pre-school Education. The school subjects should always for 33,9% or often

for the 32,2% of the future primary school students and seldom for 60,7% of the future kindergarten teachers engage the pupils' interest even when they sometimes diverge from the official Curriculum. In addition they stated that there should always (39, 9% of the future primary school teachers) or sometimes (59,4 % of the future kindergarten teachers) be flexibility and for the in the adaptation of teaching depending on the prevailing circumstances. There should, frequently for the 36.1% of the future primary school teachers and sometimes for the 63,9% of the future kindergarten teachers, have the opportunity for direct teaching with pupils who are less learning ready. For underperforming pupils, the gaps in their learning should be frequently (41,5% of the future primary school teachers) or sometimes (56,9 % of the future kindergarten teachers) addressed and then the new material presented. Consolidation exercises which contain knowledge and skills that the high performing pupils have already acquired should sometimes (32,8% of the future primary school teachers and 65,5% of the future kindergarten teachers) be left out. The students (60,1% of the future primary school teachers and 80,7% of the future kindergarten teachers) are in favour of mixed ability group work, regardless of the pupils' dynamic. The students from both Departments respectively are well aware of the sequence of steps necessary for the design of Differentiated Teaching. For the design of Differentiated Teaching they take the students' needs (56,3% of the future primary school teachers) and the learning profile (60,9% of the future kindergarten teachers) into account, while they are less influenced by each pupil's socio-cultural background. While designing Differentiated Teaching, the aim is to engage the pupils' attention for the 51,1% of the future primary school teachers and the 61,4% of the future kindergarten teachers.

The 3^{rd} Category refers to the implementation of Differentiated Teaching and it emerges that Differentiated Teaching was rarely (41%) and sometimes (33,5%) implemented during the

students' Teaching Practice. However the percentage of those who always implement differentiation on their teaching is extremely low only 1,6% (Table 3).

Table 3: Implementation of Differentiated Teaching during the students' Teaching Practice.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	71	17,1	18,4	18,4
	Seldom/rarely	158	38,2	41,0	59,5
	Sometimes	129	31,2	33,5	93,0
	Frequently/often	21	5,1	5,5	98,4
	Always	6	1,4	1,6	100,0
	Total	385	93,0	100,0	
Missing	System	29	7,0		
Total		414	100,0		

The main reason Differentiated Teaching wasn't always, often or sometimes implemented in practice is because the students (48,4% of the future primary school teachers and 96,5% of the future kindergarten teachers) desire to follow a manner of teaching which is familiar to them and for the 44,3% και 16,3% respectively, teaching is carried out based of the guidance and advice of the class teacher or kindergarten teacher. In teaching where Differentiated Teaching was implemented, difficulties were not present for the 78,2% of the future primary school teachers and the 92,3% of the future kindergarten teachers. However some of the difficulties that the students recorded were:

- The class teacher didn't want me to implement Differentiated Teaching (2 answers)
- The children were not familiar with this kind of teaching, as the class teacher didn't use it (6 answers)
- Insufficient time (14 answers)
- I would like to have better infrastructure (4 answers).

75,3% of the students felt satisfied with the implementation of Differentiated Teaching (Table 4).

Table 4: Feeling of satisfaction with the implementation of Differentiated Teaching.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	290	70,0	75,3	75,3
	No Total	95 385	22,9 93,0	24,7 100,0	100,0
Missing	System	29	7,0	•	
Total		414	100,0		

In fact the students stated that 78,2% of those they would implement Differentiated Teaching again (Table 5).

Table 5: Students will implement Differentiated Teaching again.

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	301	72,7	78,2	78,2
	No	84	20,3	21,8	100,0
	Total	385	93,0	100,0	
Missing	System	29	7,0		
Total		414	100,0		

During the teaching they used multiple materials and various teaching aids (37,2% of the future primary school teachers and 43,6% of the future kindergarten teachers), the pupils helped each other in the learning activities (sometimes for the 37,7% of the future primary school teachers and for the 43,6% of the future kindergarten teachers and frequently for the 33,9% and 34,2% respectively) and developed skills for working together while the teacher's role was sometimes (38,8% for the future primary school teachers and 45% for the future kindergarten teachers) or frequently (33,3% f the future primary school teachers and 34,7% of the future kindergarten teachers) discrete during the pupils' activation. The pupils said that they were happy after the implementation of Differentiated Teaching (83,1% of the future primary school teachers and for the 90,1% of the future kindergarten teachers).

The students in the Department of Primary Education said that they implemented Differentiated Teaching more often in the Language (49,8%), Mathematics (15,6%) and Physics lessons (15,6%), and mainly in the first, fifth and sixth grade of primary school (Table 6).

Table 6: Implementation of Differentiated Teaching by the students in the Department of Primary Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Language	128	30,9	49,8	49,8
	Mathematics	40	9,7	15,6	65,4
	History	28	6,8	10,9	76,3
	Physics	40	9,7	15,6	91,8
	Environmental Study	8	1,9	3,1	94,9
	Geography	4	1,0	1,6	96,5
	Religious lesson	7	1,7	2,7	99,2
	Social and civic education	2	,5	,8	100,0
	Total	257	62,1	100,0	
Missing	System	157	37,9		
Total		414	100,0		

The students in the Department of Pre-school Education said that they implemented Differentiated Teaching more often in the Language (42%), Mathematics (16,4%) and Physics lessons (15,9%) (Table 7).

Table 7: Implementation of Differentiated Teaching by the students in the Department of Pre-school Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Language	174	42,0	42,0	42,0
	Mathematics	66	16,4	16,4	58,0
	Personal and Social Development	59	7,3	7,3	72,2
	Physical education	36	3,3	3,3	80,9
	Arts	21	5,1	5,1	86,0
	I.C.T.	21	5,1	5,1	91,1
	Environment and Education for the Sustainable Development Physics	37	4,9 15,9	4,9 15,9	100,0
	Total	414	100,0	100,0	

5. Discussion

As emerges from the theoretical approach of our present study, the scientific community investigates teachers' beliefs as through them the implied theories which dominate in their teaching can be seen (Sakellariou & Rentzou, 2013). In the present study students/trainee preand primary school teachers were selected as their teaching experience through their Teaching Practices can reveal their beliefs (Smith, 1997). There is a significant research gap in our country, as well as internationally, concerning the plethora of beliefs held by future teachers concerning education, teaching, learning as well as the role of the teacher (Bullough & Gitlin, 2001: Raths, 2001).

More analytically, the results that were presented in the framework of the descriptive statistics reveal the adequate briefing and training of future teachers as much on the theoretical as on the implemented functionality of differentiated teaching, despite its limited implementation in everyday teaching practice. The trainee teachers often choose to adopt features and practices that are familiar to them from their school years, from their own teachers and shape a picture or a model of a teacher that they wish to apply themselves (Cole & Knowles, 1993). The aforementioned is confirmed by the research results of the present study too since it appears that the assumption that there is a significant divergence between beliefs and practice, a fact which demonstrates that theory is at a significant distance from practice, and ultimately theoretical knowledge from practical application, holds true (Wang et al., 2008).

The desire for continual training and further briefing of the teachers regarding differentiated teaching, something which is revealed by the research data Logan (2008), Nicolae (2013) $\kappa\alpha$ Fykaris & Mitsi (2012), is recorded as a significant finding.

The results of the present study as much as previous research data record the need to recognize the individual and inter-individual needs of every pupil and the effectiveness of differentiated teaching. Investigating the views of the questioned trainee teachers, the majority of whom claim that the "average" pupil doesn't exist, the flexibility and alternativity that governs differentiated teaching and which appears to be able to confront the heterogeneity of the pupil population effectively, is confirmed (Hart, 1992. Santamaria, 2009. Tomlinson, 1999).

In the research it was noted that emphasis was placed on the pupils' individual needs and teaching was adapted according to the dynamic of all the pupils. In the literature it is noted that in D.T. emphasis is placed on active participation since the increase in time spent actively participating in individual projects offers the opportunity for saving teaching time which is available for individualised teaching and pupil support (Valiandes, 2015).

The research findings mention the development of cooperation strategies during teaching, the strengthening of inter-communication and the active participation of pupils with the help of the teacher's intervention when necessary. Within the framework of differentiated teaching, the teachers aim at the cultivation of pupil autonomy, shaping a suitable climate in the classroom in order to promote the active participation and activity in the learning process and maximising the learning outcomes (Assor, Kaplan & Roth, 2002). It has in any case been observed that the implementation of differentiated teaching significantly reduced the students' need for constant guidance from the teacher during teaching, while teacher talking time to the class as a whole was also reduced (Valiandes, 2015).

The data show that during the design of differentiated teaching, teachers take into account the particular individual needs of the pupils, the learning profile, their interests, their learning readiness, their callings and their talents as well as the socio-cultural background. The

aforementioned constitute fundamental prerequisites for the design of differentiated teaching in the teaching process (Hall, 2002, referred to Valiandes & Koutselini, 2008).

In addition, the implementation of differentiated teaching in teaching is expressed with satisfaction and it appears that the goals set were met (Mitsi, 2012, Fykaris&Mitsi, 2012).

The course of the research revealed that the working teachers are uncertain regarding whether teaching objects should be chosen which, while they arouse the interest of the pupils, diverge from the official curriculum. Teachers as the means for the implementation of the official educational policy often resist reforms (Bowe, Ball & Gold, 1992) and "What the teacher thinks, believes and understands has a strong impact on the ways in which the Curriculum is translated into practice" (Hargreaves, 1994: 54). Research of the bibliography presents the divergence which appears to exist between the teacher's mediation and the official Curriculum texts and in the programme which is ultimately implemented which is identified either in the content of the teaching objects or in the teaching methodology for its implementation (Kwon, 2004·Vellopoulou, 2011 'Gibbons, 2011).

The findings of this research also reveal some difficulties regarding the implementation of Differentiated Teaching in practice, the most predominant being lack of time for preparation as much in terms of getting to know the pupils, and the lack of supplementary material as the pupils' lack of familiarity with alternative teaching strategies or techniques. Hence, one of the chief requirements for the implementation of Differentiated Teaching is the creation of suitable support material for the carrying out of activities – ordered worksheets, graded projects, and so on – as this process is fairly demanding as well as time consuming (Christnsen, 1993; Valiandes & Koutselini, 2008). For implementation to be effective in practice, the trivial, the conventional

and the easy are to be rejected since it demands adequate effort, commitment, dedication and patience Valiandes & Koutselini, 2008).

The greatest proportion of trainee kindergarten and primary school teachers, as this research reveals, chose to implement DT in the Language lesson. International research on DT mention the language lesson as a choice since it offers opportunities for the development of multiple skills and offers a wide range of possibilities for the organization of mixed ability pupils (Zola, 2017-Boeve 2009-Geisler, et al., 2009).

6. Conclusion

In conclusion, this research study examined the attitudes and beliefs of trainee kindergarten and primary school teachers on the implemented functionality of Differentiated Teaching in the framework of Teaching Practice, an issue of research interest for the education and scientific community in Greece. The research data in this study revealed the adequate training of the future teachers on the theoretical and implemented functionality of differentiated teaching but also revealed its limited utilization during Teaching Practice and ultimately the adoption of traditional forms of teaching. Concluding the presentation of this research study, we propose the provision of possibilities for linking the theoretical knowledge with practical application of Differentiated Teaching. Furthermore, it is important the continuous training of teachers on Differentiated Teaching and the provision of appropriate supporting materials is required. Finally, we propose further investigation of the issue in Greece in order to provide data which will lead to proposals and recommendations on how the University Study Programmes in the teaching departments of our country can be organised, so as to shape the attitudes and beliefs of our trainee teachers in such a direction as to make them fully prepared to put into practice everything they have been taught in their undergraduate studies.

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