

A Comparative Study of Using Differentiated Instructions of Public and Private School Teachers

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Abstract

The world is changing day by day and there is no profession, which can remain stuck to specific procedures and techniques. Teaching is a profession that prepares a generation for the world. So teachers have to adopt new strategies of teaching. This research was conducted to compare the differentiated instructions of public and private schools teachers. The objectives of the study were to explore the differentiated instructions of the public and private school teachers; to compare the differentiated instructions of the public and private school teachers. Population of the study consisted of teachers and students of public and private schools of Rawalpindi. Forty teachers, 20 from public and 20 from private elementary schools and 120 students, 60 from public and 60 from private elementary schools of Rawalpindi were taken as sample. A self constructed questionnaire and checklist were used as research tools. The questionnaire for teachers consisted of five parts; each part had both open and close-ended questions. The checklist constructed for cross checking purpose, which consisted of 21 items. Results of close-ended questions and checklist analyzed through independent sample *t*-test by using statistical package for social sciences. And results of open-ended questions examined through discussion. The results indicated that the teachers of private schools more differentiated their instructions as compare to the teachers of public schools. The responses showed that the teachers of public schools were also aware to the importance of differentiated instructions but due to some problems like overcrowded classrooms, lack of teachers' training, lengthy syllabus and to some extent lack of teacher's interest, teachers of public schools could not differentiate their instructions. In the light of the present study it was recommended that the teachers should be flexible and open minded to accept the change and to incorporate new teaching approaches. They should also exhibit personal interest for implementing the new strategies and techniques rather than to teach in the conventional ways.

Keywords: Differentiated instruction, public school, private school, comparative, teacher

Abstrak

Dunia kekal berubah setiap hari dan tidak ada kerjaya yang boleh kekal dengan prosedur dan teknik yang sedia ada. Perguruan adalah kerjaya penting yang menyediakan sesebuah generasi untuk masa hadapan. Oleh itu, guru perlulah sentiasa mengadaptasi strategi pengajaran yang baru. Kajian ini dilakukan untuk membandingkan penggunaan kaedah pengajaran yang pelbagai di antara guru-guru sekolah awam dan swasta. Objektif kajian adalah untuk meneroka sejauh mana serta membandingkan kaedah pengajaran dipelbagaikan oleh guru-guru sekolah awam dan swasta. Populasi kajian adalah meliputi guru dan pelajar sekolah di Rawalpindi iaitu seramai 40 guru, masing-masing 20 orang daripada sekolah rendah awam dan swasta, serta 120 pelajar; masing-masing 60 orang pelajar daripada sekolah rendah awam dan swasta. Alatan kajian merangkumi soal selidik yang dibina sendiri dan juga satu senarai semakan. Soal selidik untuk para guru mengandungi lima bahagian; setiap bahagian mengandungi kedua-dua soalan berbentuk terbuka dan tertutup. Senarai semak digunakan untuk tujuan semakan silang dan mengandungi 21 perkara. Hasil daripada soalan berbentuk terbuka dan senarai semak dianalisis melalui ujian-*t* untuk sampel bebas menggunakan SPSS. Manakala hasil soalan berbentuk terbuka dilihat melalui perbincangan. Keputusan menunjukkan bahawa guru-guru di sekolah swasta lebih cenderung untuk mempelbagaikan kaedah pengajaran mereka berbanding guru-guru di sekolah awam. Walaupun hasil kajian menunjukkan bahawa guru-guru di sekolah awam juga sedar tentang pentingnya kaedah pengajaran yang pelbagai tetapi mereka berdepan dengan halangan seperti bilik darjah yang sesak, kurang latihan perguruan, sukatan pelajaran yang lebih berat dan tidak kurang juga ketiadaan minat yang akhirnya mengakibatkan tiada kepelbagaian dalam kaedah pengajaran. Oleh itu, kajian ini mencadangkan bahawa guru-guru seharusnya lebih fleksibel dan terbuka untuk menerima perubahan serta menerapkan penggunaan pendekatan pengajaran yang terkini. Guru-guru juga perlu menonjolkan minat mendalam untuk menggunakan strategi dan teknik pengajaran yang terkini dan bukannya kekal dengan kaedah konvensional.

Kata kunci: Kenyataan pembezaan, sekolah umum, sekolah swasta, perbandingan, guru

Introduction

Teaching is a very challenging and enriching profession. A teacher is the heart of a class that keeps a lesson lively and engaging. The teacher plays a critical role in fostering the spirit of innovation and passion for learning among students and grooming them as individuals. In turn teachers can grow as personnel and professional.

In teaching and learning process ‘how’ to teach is also as important as ‘what’ to teach. How to teach means the methods and learning activities teachers use to teach the learners. The teacher can make teaching effective by adopting different strategies and techniques.

In education students are the most crucial element. In a class all students are not alike. They possess different aptitudes, abilities, capabilities, etc. Today, a new term has appeared in the educational scene regarding individuals’ needs of students, which is ‘differentiated instructions.’ Differentiated instruction is an approach to planning, so that one lesson may be taught to the entire class while meeting the individual needs of each child. Still many teachers are unaware of this new term.

Differentiated instruction is a teaching philosophy based on the idea that teachers should adapt instruction to student differences. Rather than teaching students through the same way, teachers should modify their instruction to meet the students’ varying readiness levels, interests and learning preferences.

The aim of this study was to explore the differentiated instructions of the public and private schools teachers. This was a comparative study, which was aimed to investigate, whether the teachers of public schools or the teachers of private schools provide more differentiate instructions. The objectives of the study were to explore the differentiated instructions of the public and private school teachers; to compare the differentiated instructions of the public and private school teachers.

Statement of the Problem

The study aimed at comparatively exploring the use of differentiated instructions of public and private school teachers.

Objectives

The research was based on the following objectives:

1. To explore the differentiated instructions of the public and private school teachers.
2. To compare the differentiated instructions of the public and private school teachers.

Hypothesis

The private school teachers use differentiated instructions more frequently, as compare to the public school teachers.

Literature Review

According to Moore (2005) the more the teachers knows about their students the easier their job.

Pollard (2002) stated that differentiation means “to use different strategies to meet the academic needs of the students.” Through this teachers can know the students and their different characteristics because; two individuals are not similar although they have some similarities, but also possess some unique features which are contrasted to each other.

Hall (2002) described differentiated instruction to recognize students varying backgrounds (e.g., knowledge, readiness, language, preferences in learning, interests) and to react responsively. Differentiated instruction is a process to approach teaching and learning for the students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student’s growth and individual success by meeting each student where he or she is, and assisting in the learning process.

Hart (1996) narrated that the idea of differentiation has penetrated in teachers' professional language in late 1980s, and acknowledged by numerous teachers and educationalists. According to Pollard (2002), differentiation means to use different strategies to meet the academic needs of the students. Through this, teachers can know the students and their different characteristics because two individuals are not similar although they have some similarities, but also possess some unique features, which are contrasted to each other. Differentiation helps teachers to become creative, because when they try to teach according to the multiple needs of the students, they try to incorporate new ideas in their teaching and attempt to use innovative strategies and techniques in the classroom practice.

According to Smutny and Fremd (2010) every student who walks through the door of the classroom brings special gifts to the learning table. Each one has some hidden strength that enables him to learn. In preparing to differentiate, you have a significant advantage if you know who your learners' are—what abilities, interests, and experiences have shaped them.

Bottle (2005) argued, if the teacher is aware about the possibilities of the differentiation that will be helpful for the teacher to plan suitable tasks for the students. It calls teacher for arranging those techniques and strategies, which are suitable for individualized learning. It is very much depending upon the teacher, how he/she differentiate his/her instructions.

The Learning Cycle and Decision Factors Model adapted by Oaksford and Jones (2001) clearly describes the learning cycle and modes of differentiated instructions.

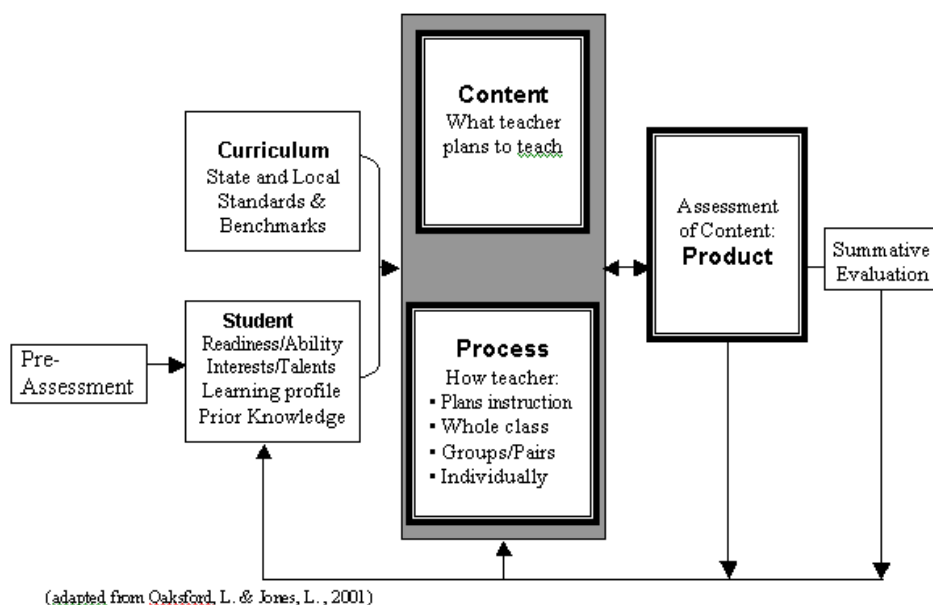


Figure 1 Learning cycle and decision factors used in planning and implementing differentiated instruction

Heacox (2002) said that differentiated instruction enhances learning for all students by engaging them in activities that better respond to their particular learning needs, strengths, and performances. He identified some goals of differentiated instruction.

1. To develop challenges and engaging tasks for each other.
2. To develop instrumental activities based on essential topics and concepts, significant processes and skills, and multiple ways to display learning.
3. To provide flexible approaches to content, instruction, and products.
4. To provide opportunities to the students to work in varied instructional formats.
5. To meet curriculum standards and requirements for each learner.
6. To establish learner- responsive, teacher- facilitated classrooms.

Key Principles of Differentiated Instructions

Tomlinson (2006) narrated that there are some principles for initiating the differentiation of instructions, which are although not fixed.

Proactive

This principle requires by the teacher the ability of modifying the planned lessons and teaching strategies according to the unpredictable classroom situations.

Clear about content

The teachers should have full understanding of the content knowledge, its principles, concepts, facts etc.

Respectful tasks

This principle makes it possible that all the students put their understanding, skills, knowledge and thought in the given work and after achieving their goal they feel self worthy.

Continual assessment

If a teacher evaluates and assesses the students' progress continuously and get feedback about their learning, this practice will provide the teacher important information and knowledge about the effectiveness of his/her teaching as well as about the students' level of understanding.

Community

Another principle of differentiated instruction is to foster sense of community among all the students. In a classroom, they have to live cooperatively regardless the difference of their cultures, values and believe.

Adaptability, flexibility

The teacher has to be flexible in adopting the lessons and activities according to the varying needs of the students.

Benjamin (2005) is of the opinion that differentiated instruction is complex. For it to work, resources need to be available. These resources include a variety of reading materials, supportive learning aids, the architectural structures (such as study carrels) necessary for students to work quietly, and reliable computers. Additionally, human resources must be available.

Beginning the Process of Differentiation

Tomlinson (2006) suggested some strategies through which teachers can begin the process of differentiation. Differentiation is an important element of successful teaching. Teachers are also different from each other's in their qualities and characteristics. Some individuals have the natural guts of teaching and they have the skills to differentiate among student and try to incorporate innovative strategies in their teaching. Some teachers feel it very challenging to structure a responsive classroom. There is a no fixed procedure for beginning the process of individualization and differentiation. However, some guidelines are available for teachers to start this process. No doubt, every teacher has to face the challenge of diversity among the learners. Teacher has the responsibility to make sure, that learning of all the students is taking place. To be the successful professionals, teachers have to plan their instructions according to the students learning needs. Teachers should follow the principles of differentiation, and differentiate what to teach, whom to teach, when to teach and where to teach. Differentiated instruction enables the teachers to deal these problems in more efficient way.

Methodology

Exploratory research design was used. Forty teachers and 120 students of class 7th from the public and private schools were selected as sample from the population by using simple random sampling technique. Self constructed questionnaire and checklist were used. Questionnaire was developed to collect the data from the teachers of public and private schools, and checklist was constructed for cross-checking purpose to gather the data from the students. The questionnaire consisted of five parts. Each part had both open and close-ended questions. First part had 11 close ended and 3 open ended questions, second part included 7 close ended and 2 open ended questions, there were 4 close ended questions and

1 open ended question in third part, fourth part contained 6 close ended and 2 open ended questions and the last part was contained 8 close ended and one open ended question. Two options of ‘Yes’ and ‘No,’ were given against each close-ended question and these options were assigned numbers as 0 to ‘No’ and 1 to ‘Yes.’ For cross checking purpose a self constructed checklist was used. It was consisted of twenty items. All statements were also had two options of ‘Yes’ and ‘No.’ ‘No’ was considered as 0 and ‘Yes’ as 1.

Data Analysis
Questionnaire for the teachers

The questionnaire for the teachers was consisted of 44 questions. There were 35 close-ended questions, while 9 questions were opened ended. Forty teachers of public and private schools filled the questionnaire.

Responses of the teachers in close-ended questions were the following:

Table 1 Teaching practices

Group	Mean	SD	<i>t</i> -value	<i>p</i>
Private	11.50	.889	6.517	.000
Public	7.70	2.452		

df: 38 *p*: 0.05

Table 1 demonstrates that there was a highly significant difference between the teaching practices of the public and private schools teachers. The teachers of private schools differentiated their instructions more than public school teachers.

Table 2 Learners and teaching practices

Group	Mean	SD	<i>t</i> -test	<i>p</i>
Public	6.35	.745	8.112	.000
Private	4.35	.813		

df: 38/*p*: .000

The above table shows that *p* value is less than 0.05 which means it is highly significant. The results indicate that there is a great difference

between the teaching practices of the public and private schools teachers for slow learners. And teachers of private schools more differentiate their instructions for slow learners as compared to public school teachers.

Table 3 Average students and teaching practices

Group	Mean	SD	<i>t</i> -value	<i>p</i>
Private	3.85	.366	13.413	.000
Public	2.20	.410		

df: 38 *p*: 0.05

Table 3 shows that the mean of private schools teachers is greater than the mean of public schools teachers, so there is difference between the teaching practices for average students between both sectors.

Table 4 Gifted and hyperactive students

Group	Mean	SD	<i>t</i> -test	<i>p</i>
Public	2.90	.912	9.028	.000
Private	.75	.550		

df: 38/*p*: .000

The above table depicts that there is difference between the teaching practices of public and private school teachers for the gifted and hyperactive students. The *p* value is .000 and degree of freedom is 38. So it can be said that private school teachers more differentiate their instructions by keeping in view individual differences of the learners.

Table 5 Miscellaneous

Group	Mean	SD	<i>t</i> -test	<i>p</i>
Public	7.65	.587	15.572	.000
Private	4.50	.688		

df: 38/*p*: .000

Results of the above Table 5 explains that the mean of private school's respondents is high as compared to the public school respondents, which

shows that results are significant and teachers of private sectors more differentiate their instructions.

Table 6: Overall Comparison Score: Mean score, standard deviation and *t*-test of total scores of public and private schools teachers on differentiated instructions ($n=40$, private school teachers=20, public school teachers=20)

Table 6 Overall comparison score

Group	Mean	SD	<i>t</i> -test	<i>p</i>
Public	36.25	1.618	20.962	.000
Private	20.10	3.042		

df: 38/*p*: .000

This table explains the overall total scores of teacher's responses of both public and private schools. The results shown in this table indicate that Private school teachers differentiate their instructions more than the public school teachers.

Checklist for Students

Data was collected through the checklist for cross checking purpose by the students of elementary level from public and private schools of Rawalpindi. The purpose of checklist was to explore that whether the teachers of public and private schools differentiate their instructions or not.

Table 7 Teaching practices

Group	Mean	SD	<i>t</i> -value	<i>p</i>
Private	14.55	.769	51.342	.000
Public	8.32	.563		

df: 118 *p*: 0.05

The above table represents that there is a difference between the mean of public and private schools. Mean of private schools is more as compare to public schools. So its mean teachers of private schools more differentiate their instructions.

Table 8 Slow learners

Group	Mean	SD	<i>t</i> -value	<i>p</i>
Private	7.85	.444	29.774	.000
Public	5.12	.555		

df: 118 *p*: 0.05

The results given in Table 8 proves that mean of private school data is 7.85 where as the mean of public school data is 5.12 which is less than the private school, so there is difference between differentiated instructions of public and private school teachers for slow learners.

Table 9 Average learners

Group	Mean	SD	<i>t</i> -value	<i>p</i>
Private	5.80	.514	33.497	.000
Public	3.10	.354		

df: 118 *p*: 0.05

The Table 9 shows that there is a difference between differentiated instructions of public and private school teachers for the average students.

Table 10 Gifted and hyperactive students

Group	Mean	SD	<i>t</i> -value	<i>p</i>
Private	5.80	.514	33.497	.000
Public	3.10	.354		

df: 118 *p*: 0.05

The above table reveals that there is a difference between differentiated instructions of public and private school teachers for the gifted students. There is a mean difference between both sectors and *p* value is also significant.

Table 11 Total scores

Sample group	Mean	Std. Deviation	<i>t</i> -value	<i>p</i>
Private	36.05	1.419		
Public	21.60	1.092	62.496	.000

df: 118 *p*: 0.05

The score of students' responses illustrates that teachers of private school differentiate their instructions more frequently as compare to the public school teachers.

Discussion

The study was conducted to explore comparatively the use of differentiated instructions of public and private school teachers. It was noted that Private school teachers addressed individual differences of the students more than public school teachers. They used different strategies to deal with below average, average, and above average students. They also plan their teaching according to the student's readiness level, interest and learning preferences. In contrast, in public schools situation was found different. There was no concept of differentiated instructions. The only focus of public school teachers was on the completion of syllabus within the specific duration.

There were many reasons behind this difference. In the public schools the number of the students in one classroom was usually more than fifty and classrooms were overcrowded. Teachers could not pay attention to each student. While in private schools, there were maximum 30–35 students in the sample classes. Another factor/reason was heavy syllabus. Teachers had a limited time and within that short duration, they have to complete the syllabus. So these were the main problems that created hurdles for teachers of public schools to differentiate their instructions.

Conclusion

It was concluded that the teachers of private schools differentiate their instructions more than public school teachers. The results of the questionnaire and feed back of the students supported the assumption of

the study. Through the responses of open-ended question of private school teachers, it was concluded that how differentiated instruction is important. The teachers who differentiate their instructions according to their student's individual demands, their classes were more vibrant and their students were more confident learners. In sum, to match teaching strategies with student's characteristics may become a critical step toward dealing with many problems of teaching and learning process.

Recommendations

Following suggestions are made on the basis of the results of this research:

1. Both sectors especially public sector must conduct in service training programs (seminars, workshops, refresher courses etc.) to introduce and discuss new methods of teaching, so that teachers can be aware of new techniques.
2. Opportunities should be provided to the teachers to upgrade their knowledge, to enhance their skills and practices.
3. The school authority should provide appropriate resources to teachers for differentiated instructions. And for this purpose there should be resource centres in schools.
4. The focus of the schools/teachers should be on quality rather than on quantity.
5. The teachers should show/exhibit personal interest for implementing new strategies and techniques rather than to teach in the conventional ways.
6. The burden of the syllabus should be less.
7. The focus of the teaching and learning process should be on creativity and application of the learning, rather than the rote memorization.
8. The classrooms must be student centred despite of teacher centred.
9. There should be continual evaluation of the teacher's performance.

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Annexure A
Questionnaire for Teachers

Part I
Teaching practices

S.NO	Items	Yes	No
1	Do you know how many students in your class are below average, average and above average?		
2	Do you bring variations in your teaching to reach out an individual student?		
3	Do you have high but alternative expectations which are suitable for all type of students?		
4	Do you try to incorporate innovative strategies and methodologies in your teaching practices?		
5	Do you modify your teaching to address a broad range of learners' readiness' interests and abilities?		
6	Before starting a unit, do you use pre-assessment strategies to determine what students already know about the topic?		
7	Do you arrange different activities according to the content demand?		
8	Do you arrange field trips for practical experience of the content?		
9	Do you modify assignment according to student's abilities?		
10	Do you teach every child same material in the same way?		
11	Do you divide students in groups?		

Part II
Slow learners and teaching practices

S.NO	Items	Yes	No
1	Do you make extra efforts to increase the pace of slow learners?		
2	Do you repeat instructions for slow learners?		
3	Do you provide extra time to slow learners for task completion?		
4	Do you use concrete illustration of complex or abstract ideas for slow learners?		
5	Do you motivate and encourage slow learners?		
6	Do you use the strategies for social skills of students who have attention deficit disorder?		
7	Do you know those slow learners who are facing the problems of dyslexia and dysgraphia in your class?		

Part III
Average students and teaching practices

S.NO	Items	Yes	No
1	Are average students in majority in your classroom?		
2	Do you provide pace of work properly for average students?		
3	Do you provide help when they face any problem in the learning?		
4	Do you assign the tasks to a specific level of difficulty to develop problem solving skills among average students?		

Part IV
Gifted and hyperactive students and teaching practices

S.NO	Items	Yes	No
1	Do you set high expectations for gifted students?		
2	Do you assign challenging tasks to gifted students?		
3	Do you provide opportunities of creative work to gifted students?		
4	Do you think that there should be separate classes for gifted students to maximize their potential?		
5	Do hyperactive students cause problems in your classroom?		

Part V
Miscellaneous

S.NO	Items	Yes	No
1	Do you try to use instructional material according to the wide range of student's needs?		
2	Do you know the learning modalities of the student?		
3	Do you make your students to feel self worthy?		
4	Do you get help from your colleagues and staff to improve your instructions?		
5	Do you have effective physical environment of the class to better accommodate all the learners?		
6	Do you provide such environment in which gifted students tend to help average and below average students?		
7	Do you involve parents to understand and solve student's problems?		
8	Do you use ongoing assessment to check student's learning throughout an instructional procedure?		

Open Ended Questions:

1. How do you modify the assignments according to student’s abilities?
2. What do you know about differentiated instructions?
3. According to what criteria you divide the students into different groups?
4. How do you solve the problems faced by slow learners?
5. How do you handle the students with dyslexia and disgraphia?
6. How do you deal with average students in your class as compare to slow learners and gifted students?
7. Through which technique and strategies you teach the gifted students?
8. How do you reduce the hyperactivity of the students?
9. What type of test do you administer (individualized test or group tests)?

Annexure B

Checklist for students

S.NO	Items	Yes	No
1	Teacher knows how many students in the class are above average, average and below average.		
2	Teacher involves the students while making decisions about classroom activities.		
3	Teacher has high but alternative expectations to the student’s abilities.		
4	Before starting a unit, teacher uses pre-assessment strategies to determine what students already know about the topic.		
5	Teacher arranges a variety of activities according to different lessons.		
6	Teacher use audio and visual aids during instructions.		

Continued on next page

Checklist for students (*continued*)

S.NO	Items	Yes	No
7	Teacher arranges field trips for practical experiences of the content.		
8	Teacher modifies assignments according to student's aptitude and talent.		
9	Teacher uses concrete illustration of complex or abstract ideas for slow learners.		
10	Teacher makes extra efforts to increase the pace of slow learners.		
11	Teacher provides extra time to slow learners for the task completion.		
12	Teacher repeats instructions for clear understanding of the slow learners.		
13	Teacher motivates and encourages slow learners.		
14	Teacher assigns challenging tasks to the talented students.		
15	Teacher provides opportunities of creative work to gifted students.		
16	Teacher provides such an environment in which talented students tend to help average and below average.		
17	Teacher divides the students in groups according to their abilities.		
18	Teacher tries to make students to feel self worthy.		
19	Teacher involves parents to be aware of student's abilities and problems.		
20	Teacher uses ongoing assessment to check our learning throughout an instructional procedure.		
21	Teacher usually administers individual tests.		