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THE EFFECTS THAT A PROGRAM OF PLAY-GAME TYPE  
ACTIVITIES HAS ON THE ATTITUDES OF HIGH SCHOOL  
DEVELOPMENTALLY HANDICAPPED STUDENTS TOWARDS  
SCHOOL,

MASTER'S PROJECT

Submitted to the School of Education University  
of Dayton, in Partial Fulfillment of the  
Requirements for the Degree Master  
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by

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High School Developmentally Handicapped Students  
Before and After a Play -Game Activity Program.

## DEDICATION

I would like to dedicate this study to my father, Mr. Dwight A. Chester, who died of cancer before seeing the completion of my master's program.

## CHAPTER I

### INTRODUCTION TO THE PROBLEM

#### Purpose of the Study

Many authors in the field of special education agree that there is a growing lack of interest by special children towards their schooling. This lack of interest, in turn, leads to the students forming a bad attitude towards education. Most of these students see no great value to attending school. This writer agrees on what was stated by Erickson (1985):

Almost everyone, who has the responsibility of teaching the special child, faces the problem of student apathy towards their schoolwork. There is not any universal answer to this problem. Every educator, within their own classroom, must find a way to keep student motivation high.

Finding that motivational device is not as easy as it seems. Not all handicapped students respond to the same treatment. The wide range of achievement levels also has to be taken into consideration. Most of these children come from homes where either one or both parents do not work. The majority receive no motivation from the home at all.

This is why the writer chose to study how a program of play-game type activities might help. As Zipkin (1985) writes:

Play is a natural activity of the child wherein he tries out ways of coming to grips with his environment and with others. There is some discussion of how play helps the child: A release of energy, increased efficiency in the classroom, tension reduction, instinct practice, and cultural recapitulation.

What effect could a play-game program have on student attitudes? Can you realistically combine fun and exciting play and games with the academic learning of the developmentally handicapped students?

The writer believes that these questions were answered by using a play-game activity program within the classroom for fun and as an aid to learning.

#### Statement of the Problem

The purpose of this study was to determine what effect an organized program of play-game activities had on the attitudes of high school developmentally handicapped students towards schooling.

#### Hypothesis

There was no significant difference between the mean pretest scores and the mean posttest scores of high school developmentally handicapped students attitudes towards schooling when given the opportunity to participate in a play-game activity program during school.

#### Assumptions

In carrying out the study, several assumptions were

formulated. The first assumption was that the students in the class were sincere and honest when filling out the questionnaire. Another assumption was that the questionnaire used (a modified semantic differential) was reliable in the form of test-retest reliability. The same test or questionnaire was used a second time. There was no change in the questions or the way it was administered.

#### Limitations

There were several limitations that had to be taken into consideration when doing this study. The writer was limited in the number of students who participated in the study. A second limitation was that a few factors could have affected the internal validity. One was the effect of history. There might have been other events the writer had no control over that may have contributed to the outcome. Another factor was the influence of the pretest. Some students probably understood the questionnaire better the second time or during the posttest. A third factor was maturation of the students. The students grew older during the study. As a student grows older, he hopefully becomes a more mature person who would then possibly see the value more in school.

#### Definition of Terms

The following terms used in the study need to be

defined for better understanding. A developmentally handicapped student is a student who has been tested to have an intelligent quotient of 80 or below. The term special child or children was used in place of the developmentally handicapped student. Cultural recapitulalation was a term used to mean that the student becomes a valuable member of society. And last instinct practice was used to help define the developing fine motor skills along with the proper social skills exhibited by the student.

## CHAPTER II

### REVIEW OF THE RELATED LITERATURE

The literature in the area of using a play-game approach in teaching the developmentally handicapped student is discussed.

#### Types of Play-game Activities Used with Handicapped Students

One type of play-game approach is to involve the student in an intramural program such as participating in the different sports. The special child, like most children, likes to run, play, and be involved in competition. Sports and games are a very useful way of getting the handicapped student playing and competing.

The idea is to incorporate sports into the curriculum so the student becomes more interested in school. Sports used as intramurals can allow the student to become a member of a team and compete without the pressure of winning and losing. Sports also helps the student see how the relationship of the members on a team serves to achieve a common goal.

The idea of using sports as an intramural device was studied by Daughtrey and Woods (1976). They stated that almost every teacher should take time out of the school-day to teach the handicapped child some form of a sport

and use it in an intramural program. They believe that the use of sport teaches the student the idea of being a valuable member of a team. They state, "Sports will be with them, in one form or another, throughout their lifetime. So use it wisely, and keep student interest alive."

Another valuable type of play-game activity that can be used are recreational activities. According to Brace (1986), recreational activities such as outdoor fun helps the developmentally handicapped student see the vast assortment of activities available to him. Recreation also allows the student time to get away from the school routine and participate in an enjoyable activity. This will hopefully lead to a more interested student which in turn leads to a better student.

Special children need time to discover new interests they might have. Recreation provides this time. It was also stated by Brace that a special child needs to know how one can use the outdoors to further enhance their lives. Such activities as boating, camping, hiking, or even just cook-outs can be done for as long as one wants during their life.

Recreational activities used as a way to keep student interest alive were also examined by Brace (1986). He said that recreation is outdoor learning, but it can also be as simple as just playing cards with friends or even just by

yourself. Recreation also includes the everyday acts of getting out and walking or riding bicycles. According to Brace, the possibilities are endless. He went on to say, "Recreation is just down right fun, and should be in every classroom of the special child in the country."

Physical fitness can also be used as a type of play-game approach for the developmentally handicapped child. Whenever someone hears the phrase, physical fitness, they immediately think of hard work. This does not always have to be the case. As was stated by Sengstock (1966), physical fitness, when used in the form of games, can add a very exciting time to the child's day. Relay races have been used numerous times as a way to get handicapped students running and thus having fun at the same time.

Many teachers of the special child are now taking time out to just get out and walk with their students. Walking is now seen as one of the very most important physical activities available according to Sengstock. He also went on to say that walking is fun and exciting when done as a group.

Other areas of physical fitness such as strength, flexibility and agility can also be incorporated into a fun program for the special child to do. According to Sengstock (1966), the trampoline is a very valuable tool to use for

flexibility and agility. It is also fun. Relay races carrying an object helps in the area of stamina and strength. Sengstock went on to write:

Everyone needs physical fitness in one form or another especially the handicapped child. All teachers should use physical activities, apart from the required physical education class, to insure a healthy future. Physical fitness, important as it is, can also be fun and exciting if made that way.

Play-game activities can be incorporated into almost every activity done in the classroom. This is yet another type or approach to help keep student interest alive in the classroom. Every teacher, including the teacher of the handicapped child, uses a variety of review techniques so that the students remember important facts and material. Why not make this review fun by using play-game activities? Children will remember facts longer if fun is attached to learning them. The concept of using play-game activities in the classroom was researched by Rappoport (1989). She said that review for the handicapped student must be put in a way so the child wants to learn. Play-game activities are very important for this reason. One example given was using take-offs on television game shows as a possible suggestion.

According to Barret and Bailey (1988), one of the most common types of play-game activity used with the developmentally handicapped student is to use basic everyday movement patterns. Most special children find it hard to sit

in a chair for an hour class. They need movement in one form or another. It can be either just getting up and walking around or a play or game activity that involves fundamental basic movement.

Some examples of how basic movement can be used are coordination activities such as rope jumping, tumbling, and doing apparatus activities. Games can also be used within these activities to add needed variety.

This area of basic movement was studied by Barrett and Bailey (1988). They looked into basic movement as probably the most important aspect of a handicapped child's learning. They state, "The knowledge gained through basic movement helps the child better understand himself." Play, in the form of movement, should be taught at the beginning of the school year so the student can build upon it. The authors went on to say that this not only helps learning but also, "Gets the child out of his chair and allows for individual freedom." When a child can express himself, he now becomes interested in what he is doing.

The author has discussed that there are many types of play-game activities that can be used within a program for the developmentally handicapped child. Each teacher must find the type that is best used in his or her situation to get results. Next the author discussed the advantages to using a play-game program in the classroom.

## Advantages of Using Play-Game Activities with Handicapped students

One advantage of using a play-game approach is that it allows the student a chance to relax and enjoy himself more. Handicapped children often experience high levels of tension and anxiety. Although some tension may be due to physiological problems, additional anxiety may be the result of academic and social conflict within the child. Allowing the child freedom to play, as in games, frees his mind from schoolwork and his other problems. When a special child is involved in play, he no longer thinks about grades and his social situation. Most children, not only the handicapped child, can learn more when they are relaxed and are enjoying what they are doing. Relaxation in education was examined by Zipkin (1985). He said, "that relaxation exercises, in the form of play, decrease tension thereby increasing the school performance and student attention span." Zipkin also stated that less tension leads to more interest and fun in learning. It was also stated, "Teaching the special child relaxation techniques, in the form of play and games, could be a vital treatment in restoring interest."

Play-game activities contribute to the total emotional development of the student. Play is a natural activity of all children where he tries out ways of coming to grips with his environment. When a child plays, his individual

personality comes through. Special children need this so they can express who they are. Play enhances a child's activity and at the same time he learns how to share, cooperate with others, take turns, and to look at their own talents they might have. In a research project completed by Erickson (1985), it was stated:

Adults who have not yet learned how to cooperate with others, and to be able to look at themselves in a critical manner, later fill many doctor's offices with psychosomatic illnesses.

The handicapped child needs play and games constantly so they can fulfill what they deem important to themselves. Allowing the child to participate teaches him how to play well. It would seem, then, that children's play is considered important for the emotional development of the child and future adult. Erickson stated, "Play and work and love are essential experiences for every mature adult."

A play-game activity program helps the fundamental motor skills performance of the handicapped child. It is well known that on the average a developmentally handicapped student falls below the norm when it comes to areas of coordination. Many of these students are afraid to participate with the so called "normal" students because they lack proper coordination skills. If they fail to participate, they may never improve their coordination skills. The result of this could be that they may never be able to

compete on an equal basis with others their age. Allowing the special child time to play and to be a part of the game gives them an opportunity to catch up. This, it has been found, is better accomplished within their own classroom environment. This idea was examined by Holland (1987) in a study comparing handicapped students with normal students. His idea was that educators should stop the practice of placing developmentally handicapped students into regular physical education classes. His plan calls for each special child to be assessed and then placed in a suitable program. Play and games done within the handicapped class are an important way of solving this problem.

In the above paragraphs, the author has tried to give some very important advantages in having a play-game activity program with a special class. But, along with all advantages there are possible disadvantages of using this program.

#### Disadvantages of Using Play-Game Activities with Handicapped Students

There is a possibility of misusing a play-game approach, thus hurting student development. Too much emphasis is put on the handicapped child to perform instead of just participating. If the child is expected to perform at a certain level when involved in play and games and they cannot meet that level, then they may refrain from participating at all. Does this help their overall development or does it hinder

them? To some educators, the answer is that it hurts. If the special child does not participate, then there can be no advancement in their skills. As was stated in a study done by Coleman and Skeen (1985):

Play and games represent miniature life situations in which handicapped children can learn to cope with realities of life. But if their programs are not properly run and are too competitive, work-oriented and joyless, feelings of anxiety and a general dislike of physical activity may occur.

There are people who feel that play-time steals from the real reason a person comes to school and that is to learn. Educators, usually in the administrative field, see play and games as a waste of time. They view this approach as not learning at all but as a fill-in for not being prepared as a teacher. An administrator might ask what the connections between play and reading, play and mathematics, etc. are. At the secondary level this is especially true. Many administrators, as stated by Harp (1988), have the opinion that there is not time for play and games in a teenager's school life. There are achievement tests to pass and grades to achieve. This attitude even applies to the developmentally handicapped student.

Many people in education still feel that the traditional teaching method of students in seats listening to a teacher lecture is best. These same people also believe that a quiet classroom is the best environment for learning. The

trend today, it seems, is for more quiet and organized classrooms. Play and games require moving around the classroom and thus can create noise. To many, this is not learning but chaos. To these people, play and games can be considered a disadvantage.

There are a few disadvantages of a play-game approach if not organized as an aid to learning. But the advantages outweigh these disadvantages.

## CHAPTER III

### PROCEDURE

#### Subjects

The subjects in the writer's study were sixteen high school developmentally handicapped students grades nine through eleven (all three grade levels are in one classroom). There were six girls and ten boys in the study. The grade levels were broken down into the following: One junior, six sophomores, and nine freshmen. Each student within the class had an intelligence quotient of eighty or below.

#### Setting

The school where the study was carried out is in a rural setting. The school's enrollment is relatively small. The school is the center of community activity because it is centrally located within the town. Even the people in the surrounding area outside the town's limits depend on the school for community involvement.

The school district covers a large geographic area. The students come from as far away as fifteen miles to get to the school.

The community is made up of people who mainly fall into the low income salary range. It is a very friendly

community because the residents seem to know everyone else and also get along very well with each other.

The working people within the community earn their living through a variety of ways. There are quite a few families who own and work their own farms. Others must travel to surrounding counties to work in the different commercial factories. The remaining few stay within the community itself for their employment.

The community is made up of one larger village or town where about one fourth of the people live. The remaining population lives in the smaller residential areas outside the village limits.

#### Data Collection

The Construction of the Semantic Differential. The test used for the pretest and posttest was a modified Osgood Semantic Differential, which tested student's attitudes towards school. There were twelve adjective pairs that the subjects rated. Each pair had a positive side and a negative side. All pairs had a relationship to school. Both the positive pairs and negative pairs were not on one side of the scale. They were mixed up so the subjects could not rate the pairs to everything good or bad being on one side. Five blanks were assigned to each pair.

The semantic differential contains content validity. The pairs used came from reading the literature in this area

and by using Osgood's analyzed list.

The instrument was field tested. Two other high school developmentally handicapped teachers reviewed the adjective pairs and then administered the test to their classes. They both felt the test was fair and the adjective pairs were adequate in measuring student's attitudes towards school.

The administration of the Semantic Differential. The semantic differential was a written test that was administered for both the pretest and posttest. The test was given in one group setting. All of the subjects immediately returned the finished test to the writer. There was a perfect return rate from all subjects for both tests.

#### Design

The research design that was used was as follows:

(E)  $T_1 \times T_2$ . There was an experimental group which was first given a pretest. This was followed by the treatment. Then the group was given a posttest. The treatment or independent variable consisted of numerous types of play-game activities used within the classroom setting and outside the classroom.

#### Treatment

The treatment consisted of using a play-game activity program to help teach the high school developmentally handicapped student.

Many different types of play-game activities were used during the study. One type of play-game activity used were

different games such as those used in the context of competitive sports. Other types of play-game activities were incorporated into a physical fitness program. The students participated in different kinds of relay races and games involving walking.

Another way play-game activities were used was to review class material by using takeoffs from game shows the students have seen on television. Dart-a-Fortune was used in spelling. Jeopardy helped students review in English. Family Feud was a valuable review tool in health.

A very common type of play-game activity used was in the area of basic fundamental movement. Such movements as rope jumping games, mat work, the trampoline, and balance beam were used.

Recreational activities were also used in the treatment. Some activities in this area were hiking around town and having a cook-out.

## CHAPTER IV

### RESULTS

#### Presentation of Results

For the presentation of the results refer to Table I.

TABLE I

THE MEAN AND STANDARD DEVIATION  
OF SIXTEEN STUDENTS

TEST	N	$\bar{X}$	S
PRETEST	16	43.31	8.90
POSTTEST	16	46.37	7.92

$$t = 1.61 \quad p > .05$$

A  $t$  - test for a dependent sample was computed with the result being 1.61. The null hypothesis of no difference was not rejected.

#### Discussion of Results

As a result of the null hypothesis not being rejected, it can be said that the finding or results were not significant. There can be a few reasons why this occurred.

The researcher was limited in the amount of time available to incorporate the treatment. As a teacher of the developmentally handicapped student, one problem that arises

is having enough time to fully use a new teaching program. Special students need much time to get used to and fully understand a new teaching approach. Once they get used to one way, it is hard to develop another procedure. The teacher needs time to slowly bring the students along. Time is what teachers do not have. This area of time was studied by Harp (1988). He said that any program that is directed towards the handicapped student should be developed over a lengthy time period. The students need more adjustment time than many of your normal students.

Motivation can be another cause of the findings not being significant. Through the researcher's experience, motivating special students to achieve is extremely difficult. Not any one procedure or treatment works with all students. A teacher has to use a variety of approaches to motivate the majority of students. Erickson (1985) stated that a program of play-game activities will increase the motivation of some of the students.

There was another factor that could have caused the findings to be not significant. The researcher only had a small number of subjects to work with. With a larger group, there may have been more variance in their responses. Since the researcher has worked with small groups of handicapped-children, he has experienced that they tend to agree and not deviate much in their thinking when it comes to doing some-

thing new. Coleman and Skeen (1985) agreed that the majority of handicapped children will not give varying points of view when it comes to school topics. They went on to say that this is especially true in smaller classrooms.

Finally, another factor which could have affected the result was the fact that the students know the researcher very well. The researcher has spent much time with these students. Some he has taught for two or three years. The students could very well have marked on the test what they thought the researcher wanted marked. No matter how hard it was tried to get the students to mark their answers freely, they still could have answered to make the researcher happy. Through experience, some groups of students are more agreeable than other groups. This could be the case with the subjects in the study. They could have seen the positive responses on the test, no matter what side they were on, and marked them accordingly.

## Chapter V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

There is a growing lack of interest in special children towards their schooling. Many see no need in going to school and gaining an education. Many people in and out of education agree that it is up to each and every teacher to find an effective way of keeping special students interested. Special Education must keep these students motivated so they will want to learn and stay in school.

For the above reason, this writer chose to teach his developmentally handicapped class using a play-game activity program. This program was used to keep students motivated to learn.

The purpose of this study was to determine what effect an organized program of play-game activities had on the attitudes of high school developmentally handicapped students towards schooling.

There was no significant difference between the mean pretest scores and the mean posttest scores of high school developmentally handicapped students attitudes towards schooling when given the opportunity to participate in a play-game activity program during school.

The study was conducted in a developmentally handicapped classroom at a rural school. There were sixteen subjects in the study. The researcher designed a semantic differential to measure student attitudes towards school. This test was used for both a pretest and a posttest. The test was administered in one group setting. The treatment consisted of a four week daily play-game activity program used in and out of the classroom.

The class showed a mean gain from the pretest to the posttest. A t-test for a dependent sample was computed. The findings were found to be not significant, therefore, the null hypothesis was not rejected.

#### Conclusions

The author of this study failed to find any significant difference in high school developmentally handicapped students attitudes after using a play-game activity approach. Even with this result, the students did enjoy this teaching procedure. They seemed to be more anxious to review when a game was attached to it. Even the researcher enjoyed himself more as a result of using a play-game program. Breaking up the day with play or games helped to motivate the students to learn.

## Recommendations

Play and games could become a valuable part to a teacher's lesson. It is recommended by the author that there should be more research done in this area.

Appendix A

Good	_____	:	_____	:	_____	:	_____	:	_____	:	Bad
Important	_____	:	_____	:	_____	:	_____	:	_____	:	Unimportant
Negative	_____	:	_____	:	_____	:	_____	:	_____	:	Positive
Boring	_____	:	_____	:	_____	:	_____	:	_____	:	Interesting
Helpful	_____	:	_____	:	_____	:	_____	:	_____	:	Unhelpful
Unsuccessful	_____	:	_____	:	_____	:	_____	:	_____	:	Successful
Unfair	_____	:	_____	:	_____	:	_____	:	_____	:	Fair
Pleasant	_____	:	_____	:	_____	:	_____	:	_____	:	Unpleasant
Hard	_____	:	_____	:	_____	:	_____	:	_____	:	Simple
Work	_____	:	_____	:	_____	:	_____	:	_____	:	Fun
Wise	_____	:	_____	:	_____	:	_____	:	_____	:	Foolish
Kind	_____	:	_____	:	_____	:	_____	:	_____	:	Cruel

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