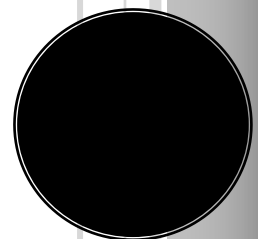


THE SCIENCE OF WONDERING

A Research Symposium

These action research projects have been conducted by teacher education candidates in the School of Education at Baylor University in collaboration with clinical instructors, mentor teachers, and Baylor faculty on PDS campuses in Waco ISD as well as at partner schools throughout the area.

April 7, 2009



FLEXIBLE GROUPING AND MATHEMATICS MASTERY

Primary Researchers

Kelly Nagel, Intern, Bell's Hill PDS
Brittany Reid, Teaching Associate, Bell's Hill PDS
Jenny Sydow, Teaching Associate, Bell's Hill PDS
Diane Biarnesen, Clinical Instructor, Bell's Hill PDS

Introduction

Within the context of mathematics instruction, we began to explore the connection between flexible grouping and mathematics performance. The research question was: Will flexible grouping improve students' mastery of math concepts, thus raising TAKS scores?

Methodology

Noticing a trend with students' math TAKS scores being lower than their reading scores, the researchers began to take a closer look at mathematics instruction. They divided the mathematics block into three 20-minute sessions. One of these sessions was devoted to flexible math groups. Student progress was tracked on a weekly basis and an objective breakdown was completed.

Results and Conclusions

At the beginning of the year, students had a 50% passing rate in mathematics. The end of the year passing rate was 89%. The researchers also noted that the students have improved in their ability to think mathematically and are more confident with their math skills.

Implications and Recommendations

Working in small groups allowed many students the freedom to take risk when learning difficult concepts. Through flexible grouping, students realized that they struggled with one concept while excelling in another. The researchers will continue to use this method of grouping for mathematics and will expand its use to reading instruction as well.

USING DEVELOPMENTAL CHARACTERISTICS TO INCREASE STUDENT ENGAGEMENT AND RESPONSE

Primary Researcher

Whitney Basil, Intern, G. W. Carver Academy PDS
Shannon Wiggins, Mentor Teacher, G. W. Carver Academy PDS

Introduction

The purpose of this study was to figure out how I use developmental characteristics to increase student engagement and response. I wanted to see how I differentiated for the various ability levels of my 8th grade students at G.W. Carver Academy.

Methodology

I used my mentor's reflections as well as my own to create a qualitative analysis chart. Observation forms allowed me to compare and contrast my questioning strategies to see how I began asking questions at the Evaluation and Synthesis level with Bloom's Taxonomy. My goal during data collection was to see if I focused on student needs to generate responses as well as increased student engagement.

Results and Conclusions

I observed that four themes surfaced from my data: student behavior, prior knowledge, teacher flexibility and questioning strategies. More than 60% of my reflections were geared toward having an effective behavior management system and making sure that I am being flexible to meet my students' needs. I learned that both elements were essential in achieving student engagement and response, and both must occur before implementing new strategies.

Implications and Recommendations

I learned that my focus was not heavily geared toward my questioning strategies, but rather my ability to remain flexible and remain consistent with behavior management. These results and my charts suggest that educators must first keep behavior and student needs in mind before pursuing the task of seeking higher level thinking.

DISCOVERY LEARNING WARM-UPS VS. TAKS FORMED WARM-UPS

Primary Researcher

Meredith Casas, Intern, G. W. Carver Academy PDS
Russ Reisinger, Mentor Teacher, G. W. Carver Academy PDS

Introduction

Warm-ups are to help students become focused and prepared for their class and are usually based in TAKS formed questions. The context of this study is two eighth grade mathematics classes at G.W. Carver Academy PDS. The study sought answers to two questions:

- If these warm-ups were given in a different style, would it be more effective in helping the students become prepared for their class activity or lesson?
- Which forms are more effective in the classroom, TAKS/Textbook form or Discovery/Hands-On learning style form?

Methodology

My second period class will receive warm-ups that are hands-on or discovery learning activities. My third period class will receive warm-ups that are written on the board in a TAKS question format or textbook form. My plan of how I will gather the data of this information is to record their daily warm up grades, make anecdotal notes, and have a chart to show progress of both classes.

Results and Conclusions

In the beginning of the research, I was able to modify the warm ups for my two classes. From the results of the warm ups, for the first three weeks, it was difficult to analyze because by the end of the three weeks because the students' warm ups increased in their grades. My third period class had higher grades at the end of the third week than my second period group. In the last four weeks of the research I did my best to modify the warm ups for both class periods. Towards the end of the research, I collected some data from my mentor teacher. He decided that he wanted to give my students a warm up question or problem of the day that was in TAKS form for all of my students. My mentor's idea was to help my students prepare them for the TAKS test. That was the answer to part of my question, why do most teachers give their warm-ups as TAKS questions. My mentor had the reason, is for students to become more prepared and familiar with the TAKS test. For the last week of my research I provided my students with this type of warm ups. I gave them a survey of what they liked and disliked about the warm ups.

THE EFFECTS OF SMALL GROUP INSTRUCTION ON THE LITERACY AND MATHEMATICS DEVELOPMENT OF URBAN PDS STUDENTS

Primary Researchers

Barbara Purdum-Cassidy, Lecturer, Curriculum and Instruction, Baylor University
Bill Sheppard, Principal, Mountainview PDS
Patricia Morgan, Teacher, Mountainview PDS
Bettye Keathley, Site-Based Coordinator, Mountainview Elementary

Introduction

This mixed methods study examined the effectiveness of focused, small-group instruction on elementary students' literacy and mathematics achievement in an urban PDS. The research questions were:

- What is the impact of small group instruction on kindergarten and first grade students' achievement in English language arts and reading?
- What is the impact of small group instruction on 3rd and 4th grade students' achievement in mathematics?
- What impact does participation in small group instruction have on the clinical instructors' attitudes toward small group instruction?

Methodology

TAKS scores and TPRI results were used to assess the impact of small group instruction on elementary students' literacy and mathematics achievement. In addition, clinical instructors were asked to describe changes in their practices as a result of the experience. A final item asked clinical instructors to rate their level of satisfaction with small group instruction.

Results and Conclusions

Study rates indicated significant differences in elementary students' achievement as a result of the experience. The results also indicated changes in clinical instructor practices. In addition, clinical instructors indicated satisfaction with utilizing small group instructional practices.

Implications and Recommendations

The findings of the study provide support for the effectiveness of small group instruction. As a result, this campus has increased its capacity for the 2009-10 academic year. This action will increase the number of classrooms that utilize focused, small-group instruction in literacy and mathematics.

GOALS IN THE CLASSROOM: LONG TERM VS. INSTANT REWARD

Primary Researchers

Doug Clifton, Intern, Lake Air Middle School
Keri Leupke, Mentor Teacher, Lake Air Middle School

Introduction

This study focused on the problem of students turning in homework on time. The research question sought to answer the question of whether the percentage of homework turned in on time would be influenced by either an instant, small reward or a larger, long term reward.

Methodology

The study took place over two weeks in two Athens mathematics classes. Both classes have a problem with turning their homework in on time. Both classes are at the same learning pace and have scored similar class averages on previous work. For the most part it gets done, but a late grade deduction is taken. Instant rewards included free time at the end of class, stickers, music being played and possibly something new after a couple of interviews with students about what might be good incentives. The larger reward was a class party on a designated day.

Results and Conclusions

No class earned their goal. The motivation proved to only be a temporary thing as they gave up after not earning rewards after a couple of assignments.

Implications and Recommendations

Recommendations differ between the two reward approaches. For short term instant rewards, begin by assessing an assignment that all students could finish in class and have success in meeting the challenge of turning in homework. Consequently, students receive the instant reward and experience success resulting in motivation to complete future assignments. In regards to the long term rewards, begin by asking students what they want to work towards. In this study, students were told what the long-term reward would be and may have not been important or intriguing to the students.

ZMASTERING MATH FACTS

Primary Researchers

Amanda Goray, Ashley Hatley, Ashely Kitchens, Rachel Koontz, Ana Ligon,
Brittany Reid, Lindsey Sorrel, Jenny Sydow, Teaching Associates, Bell's Hill PDS
Diane Biarnesen, Clinical Instructor, Bell's Hill PDS
Jenny Garza, Clinical Instructor, Bell's Hill PDS
Glenna Jenkins, Clinical Instructor, Bell's Hill PDS
Sarah Williams, Clinical Instructor, Bell's Hill PDS

Introduction

This study addressed the research question:

- Will mastery of math facts increase with intensive fact fluency practice?

Methodology

This research occurred in one 2nd grade class, one 3rd grade class and two 4th grade classes. Students were given 100-question math facts tests. Students were given five minutes to complete each test. Second graders were tested on addition and subtraction. Third graders were tested on subtraction and multiplication. Fourth graders were tested on multiplication and division. Data was analyzed by comparing the scores of targeted students to those scores of students who didn't participate in tutoring. The amount of increase was noted.

Results and Conclusions

Most candidates had to modify the strategy they were using to better meet student needs. Students who worked with the teaching associates showed significant gain in all areas tutored.

Implications and Recommendations

As the candidates worked with the students, it was apparent that the computer programs that some groups were using were not effective in increasing students' performance on math fact fluency. The candidates believed that using flash cards was a more effective strategy in increasing fact fluency. The gains for student mastery indicate that intensive practice is effective. This strategy will be implemented next year.

INCREASING CONVERSATION IN A FOREIGN LANGUAGE CLASSROOM

Primary Researchers

Katy Evans, Teaching Associate, A. J. Moore Academy PDS
Joe Cintron, Clinical Instructor, A. J. Moore Academy PDS

Introduction

The question investigated by the teaching associate was:

- How can I get each student to converse more in the target language (Spanish) during class?

The teaching associate was excited to see how the results would turn out because she hopes to make her future classroom full of interaction and involvement. She realized that not every student is excited to learn Spanish, but she wanted to create a fun learning atmosphere to increase the probability of participation.

Methodology

The teaching associate modeled speaking in the target language and observed students as they worked cohesively in groups. She asked students specific questions regarding their abilities or hesitates in talking in the target language (through surveys). The teaching associate hoped to increase the amount of time that the target language was spoken in class.

SELF-GENERATED CONVERSATION IN THE FOREIGN LANGUAGE CLASSROOM

Primary Researchers

Julie Powers, Teaching Associate, Midway High School
Ester Boateng, Clinical Instructor, Midway High School

Introduction

Through observation, the teaching associate realized that the students appear to have forgotten many of the basics from French I and that they were very reticent to speak French in class. The reasons for this appeared to be that (a) the classes are held mainly in English—French is limited to some explanation (which is then translated) and drills and (b) there is not time given over to purely conversational activities. The teaching associate's wondering was,

- How would it be possible to increase the students' ability to take part in self-generated conversation in the target language (French)?

Methodology

After having read Elaine Kolker Horwitz's book, *Becoming a Language Teacher*, I conducted a class survey to discover the students' feelings about their ability to communicate in French, gauged their attitudes towards taking part in more conversational activities, and discovered what topics they would like to discuss. I also recorded the students speaking in a small group situation and repeated this at the end of my project. I carved out conversation time in the lessons and also made use of wasted time at the end of class to conduct conversation based on the vocabulary and skills we have been working on, while trying to tie in the subjects the students were interested in discussing. In this way, I took advantage of any and every opportunity to speak in the target language with the students.

Results and Conclusions

I observed a great improvement in the students' ability and willingness to speak in French, which is mainly due to a lessening of the anxiety which comes with speaking a foreign language.

AN ACTIVE DISCUSSION INQUIRY MODEL

Primary Researchers

Scott Reid, Teaching Associate, A. J. Moore Academy PDS
Keimesha Alexander, Clinical Instructor, A. J. Moore Academy PDS

Introduction

The purpose of this action research was to understand the central concepts about the participants' use of an active discussion model of inquiry through using photographs and investigative questions.

Methodology

The teaching associate conducted this research with five students selected from his classroom. These students were his sample population, and he derived his conclusions based on their responses. It would have taken too long to go through the entire classroom student by student, so the teaching associate felt that the selection of five students would give him an accurate vision for the conclusion of his research.

Implications and Recommendations

The teaching associate is hopeful that continued research in this area will help him better understand the framework for students' responses as well as aid him in his professional development.

EQUITABLE PARTICIPATION IN THE FOREIGN LANGUAGE CLASSROOM

Primary Researchers

Ashley Griffin, Teaching Associate, Waco High School
Sandra Gibson, Clinical Instructor, Waco High School

Introduction

After the first two weeks of school, the teaching associate felt like she had a good understanding of the classroom, teacher, and students—that is, until it occurred to her that there were a handful of students in the class whose names she didn't even know. That was alarming since she had even made a seating chart. After much thought and another week of observation, the teaching associate realized that the names she had easily learned were those of the interactive students, while the names she hadn't learned yet were the names of the quiet students. Her action research question was:

- How can I even out the amount of participation in class while keeping the participation to deal with the Spanish material for the most part?

Methodology

The junior and senior boys that sit on the back row of the classroom are the most talkative in class. They tend to simply talk a lot and make many jokes (both appropriate and inappropriate). To some degree, this is acceptable; however, some do not know when to be serious. Because these boys are so active during this early class, they speak out more voluntarily about topics at hand and are usually the first to be called upon for the answer by the teacher. On the opposite end of the spectrum, many of the younger, quieter students never speak out—often even when called on. The teaching associate believed this was because of the louder, older boys.

In order to counter the distracting behavior and the lack of confidence, the teaching associate created a system in which students would receive participation points. The students would be required to receive ten participation points every two weeks for a quiz grade.

Participation points were given for answering a question voluntarily or after being called on, being on-task, and in certain circumstances for good attitudes, etc. The teaching associate recorded the points, and at the end of the two weeks they would be tallied. For every participation point lacking, five points would be deducted from the quiz grade and for every participation point more than ten, bonus points would be added to the quiz grade. In addition to receiving points, students were also able to lose participation points for behavior that gets carried away, being disrespectful, not paying attention, etc.

INCREASING LEARNING AND RETENTION

Primary Researchers

Alex Bufton, Teaching Associate, A. J. Moore Academy
Joe Cintron, Clinical Instructor, A. J. Moore Academy

Introduction

I wanted to understand why the students were not retaining any of the knowledge we were going over in class. We would spend an entire day drilling vocabulary through different activities that appealed to the different learning styles, and still the students would not retain any of the words. They would learn the material enough to participate in the activity during class, but if we came back to the material the next day, they would not be able to recall most of the material. My research question was:

- How can I increase the amount of learning and studying that my students do outside of the classroom?

In a foreign language, it is particularly important to review the material daily so it will remain in your memory. If students are not studying at night or doing anything besides what we are doing in class, they will not retain the information. I wanted to know why they are not doing anything outside of the classroom. I want to find a way to gradually increase the amount of reviewing outside of the classroom.

I believe this is the only way that the students will be able to recall the information. Only so many tasks can be done during class; at some point the student needs to take the initiative and work on learning the material aside from the class time.

VISUAL LITERACY AND LEARNING

Primary Researchers

Emily Wilson, Teaching Associate, A. J. Moore Academy PDS
Eric Salas, Clinical Instructor, A. J. Moore Academy PDS

Introduction

Visual literacy can be an important key to understanding students' capacity for learning and how best to teach them.

Methodology

This was most evident through an action research project with four AP U.S. History students in a second period class. The research was conducted in the library in pairs. Five pictures were used to test the students' visual literacy. Picture one depicts a group of hippies, in black and white, in a field during the Summer of Love in 1967. Picture two depicts Times Square in the 1920s. Picture three is more like a painting and it depicts a group of African-American slaves in the woods. Picture four shows a 1950s diner. Picture five is more like a painting as well, and depicts a soldier and a woman in the 1700s.

Results and Conclusions

This entire research project has shed some considerable light on how students view history and how it affects them. It can be concluded that AP students in particular have some higher thinking capabilities and can retain more information when it is interesting to them specifically. Also, students seem not to realize a connection between them and citizenship. History seems to not be seen as one big story, which is what it is, and so students cannot create a context for themselves in which to relate different events to each other.

Implications and Recommendations

A common thread in instructional implications is the use of media, which can be very helpful in reaching students today and helping them to understand the importance of events and how they relate. One major key is to get the students interested and involved in their learning in order to gain from it. This research has been very insightful, and hopefully much can be learned from it to improve our students' education in social studies.

THE EFFECT OF STUDENTS' BACKGROUNDS ON SOCIAL STUDIES ACHIEVEMENT

Primary Researchers

Drew Morrill, Teaching Associate, A. J. Moore Academy PDS

Eric Salas, Clinical Instructor, A. J. Moore Academy PDS

Introduction

For my action research paper, I interviewed four students by asking them a list of about 30 questions. In doing this, I found out a few things about their education backgrounds and about their family backgrounds. I discussed how some of the students couldn't put some historical things together like the Holocaust and World War II. Also, I talked about how students' backgrounds play a huge effect on how they perceive and answer different material.

Results and Conclusions

I discovered that students generally think of history as just a class that they have to get through and pass with little personal meaning instead of one that will develop them as well-rounded individuals. I learned a great deal throughout this semester and will continue to learn more as I continue through this education process.

UNDERSTANDING THE IMPORTANCE OF HISTORY

Primary Researchers

Patricia Marshall, Teaching Associate, A. J. Moore Academy PDS
Keimesha Alexander, Clinical Instructor, A. J. Moore Academy PDS

Introduction

Each person sees history as something different. Some see it as important while others do not understand its relevance. This researcher attempted to answer the questions:

- Is history important to you?
- Where does it stand on your list?

Methodology

Each member of the university class was asked to interview at least four students in order to find out their basic knowledge when it came to history and was important to them about history. The interview had four sections: picture ordering, specifics about history, government and specific events.

Results and Conclusions

Students in history classrooms all over the United States and the world have different opinions and ideas about the importance of history. They have different understandings of what is important and what is not.

Implications and Recommendations

History is used as a tool to strive for perfection. People want to perfect medicine, peace, weapons, automobiles, and so much more. If history was not there to show the failures from the past, then human kind would just continue in a circle. With history as a guideline, the human race can use the past in order to change the world.

RAISE YOUR HAND PLEASE!

Primary Researchers

Amanda Muloney, Intern, Hillcrest PDS
Jamie Smith, Mentor Teacher, Hillcrest PDS

Introduction

I wondered how I could influence the students who do not usually raise their hands and volunteer their answers to be able to do so.

Methodology

I wrote down each student's name on an index card in marker. I shuffled the cards up so that they were not in any type of order, and each time I needed to ask the students a question or wanted volunteers during a lesson, I picked the next name from the pile.

Results and Conclusions

I found that students who did not normally want to volunteer answers had the correct answer but were either too shy to answer or did not like participating in class discussions.

Implications and Recommendations

I will continue to use this method of differentiating in my classroom. It is easier to get a whole class assessment of whether or not the students understood the objective being presented in the lesson.

PRE-KINDERGARTEN GENDER GROUPING

Primary Researchers

Amanda Gilmore, Teaching Associate, Hillcrest PDS
Jillian Nyberg, Teaching Associate, Hillcrest PDS
Diane Sriram, Clinical Instructor, Hillcrest PDS

Introduction

This action research study examines the effects of separating pre-kindergarten boys and girls into separate groups for math centers from January through April.

Methodology

The researchers used observations, pre-and post-tests, and KeyMath® assessments.

Results and Conclusions

The researchers discovered that it is beneficial in some ways to separate the genders into two groups. From the observations, we determined that boys and girls learn in different ways. Certain activities work better for each group. Competition was higher with the boys, but the girls didn't like competitive activities. The girls' group was able to listen to and do activities with books while the boys didn't like this activity as much and got distracted. The teaching associates planned lessons that would cater to the boys' and girls' separate needs and interests.

Implications and Recommendations

By examining these data, teachers will be able to place students in groups that will be most beneficial to student learning.

LEARNING STATIONS IN MATHEMATICS

Primary Researchers

Lacey Yates, Teaching Associate, Hillcrest PDS
Laura Smith, Teaching Associate, Hillcrest PDS
Tammy Johnston, Clinical Instructor, Hillcrest PDS
Meghan Robinson, Clinical Instructor, Hillcrest PDS

Introduction

The focuses of this study are whether students would be engaged and understand the concepts more fully in learning stations rather than direct teach within small groups.

Methodology

This study took place during the spring semester of 2009 in the first grade during 60 minute math instruction. The participants in this study had average math skills and were grouped by gender. Within the study, the participants' engagement and understanding of the concepts within the small groups was observed by a teaching associate in both environments. Teaching associates also conducted surveys of participants' thoughts on learning stations and direct teach within the small groups.

Results and Conclusions

Participants were more engaged within the learning station environment and also grasped the concepts more fully within that environment.

Implications and Recommendations

This study supports the idea that first grade students with average math skills work best in the learning station environment.

WILL YELLOW PAPER V. WHITE PAPER CHANGE THE STUDENTS' GRADES OR BEHAVIOR?

Primary Researchers

Angela Brewster, Mentor Teacher, Lake Air Middle School
Pam Hennig, Mentor Teacher, Connally Junior High School
Abigail Fifield, Intern, Lake Air Middle School

Introduction

After receiving bright pink letter in the mail and realizing that it made me more interested in the letter, I began to wonder if I put one of my Algebra class's homework and tests on colored paper rather than white, how would it affect them? The research questions were:

- Would colored paper change the student's grade?
- Would it make math a little more fun to do?

Methodology

I selected two similar classes and did a background study on both. Both are above average, have few students with special needs and are predominantly Anglo. Genders are equally distributed in both classes as well. When copying activity workbook sheets, one class received the assignment on yellow paper; the other received the same assignment on white paper. The research study ran for approximately six weeks in the fall, 2008 semester. I kept a journal of the mood of the class, student comments, any grades taken, and improvement in test grades.

Results and Conclusions

I noticed a difference in the grades, behavior and the amount of homework being turned in. The class whose work was on yellow paper had generally positive comments about it although I did notice a tendency for more talking and chatting rather than a "get right to work" behavior. The class receiving white paper only began to notice as well and complained about not having colored paper, particularly for their foldables. When I averaged grades at the end of the research period, the class that used white paper only had a higher average than the class that used yellow paper.

Implications and Recommendations

In the future, I might switch up colors, but have every class period's the same.

DOES GENDER MATTER IN THE MIDDLE SCHOOL?

Primary Researchers

Lauren Svane, Intern, Midway Middle School
Tina Robinson, Mentor Teacher, Midway Intermediate School

Introduction

The research question to be answered was:

- Does grouping students together based on their gender at an intermediate age level affect their social behavior and success in a math classroom?

My hypothesis was that by dividing students into groups of the same gender, the students' academic success and classroom participation will improve. In addition, students who typically keep to themselves will demonstrate increased participation in a same gendered group compared to their level of participation if they were in a mixed gender setting.

Methodology

This experiment was conducted on two similar 5th grade math classes over a period of seven weeks. To conclude the success of this strategy in the classroom, I gathered qualitative data such as student surveys, anecdotal notes, self-assessments, student interviews, and quantitative data such as test scores and quizzes.

Results and Conclusions

This study shows that although there was not a significant difference in the classes' academic performance, there was a significant difference with the social behavior of my quieter students. Several students, who are introverted, participated in groups of the same gender a more significant amount of the time than students who were involved in mixed gender groups. My results are inconsistent with my initial hypothesis in the regards of academic performance. There was not any evidence present that proved the separation of students by gender brought about an improvement in students' grades. However, findings, such as anecdotal notes and student surveys, suggested a significant positive effect on children's prosocial behavior as a result of participation in a same gender classroom context.

ARE MANIPULATIVES BENEFICIAL IN THE CLASSROOM?

Primary Researchers

Ashley Vick, Intern, Midway Intermediate School
Amy Chandler, Mentor Teacher, Midway Intermediate School

Introduction

When talking to different teachers in the education profession, one will come to see that there are many different views on the benefits of manipulatives in the classroom. Therefore, this study was conducted to collect and analyze data in a 5th grade classroom to see if the use of manipulatives made a difference in the students' understanding of the concepts taught and in turn affect the outcome of their grades on homework and tests.

Methodology

Two classes were looked at, one class being the experimental class and the other as the control class. Manipulatives were taught with on certain lessons to the experimental group and then was not shows to the control group. Observations were made, students were asked to give their opinions, and a questionnaire was given.

Results and Conclusions

From analyzing the data, the conclusion came out of the study that manipulatives do seem to help in students' understanding but there are many factors that go into like how the teachers use the manipulatives to teach, the manipulatives that are used and the concepts that are taught with them.

Implications and Recommendations

The level of how beneficial they are is a question that still needs more time and research done to fully come to a definite answer.

TIMERS AND PRODUCTIVITY

Primary Researchers

Jennifer Walter, Intern, Robinson Junior High School
Mark Montgomery, Mentor Teacher, Robinson Junior High School

Introduction

The purpose of the study was to observe the effects of a timer on student productivity.

Methodology

I selected two students from my classes based upon their classroom performance; the two students are slow to start activities as well as complete activities. I studied the students during the daily bell ringer for 23 school days. I recorded their progress on the bell ringers. I also had the students reflect upon their experience with the timer after the study was completed.

Results and Conclusions

I concluded that both students appeared to become more efficient when I employed a classroom timer; however, I was not able to conclude that the timer was the direct cause of the students' increased productivity.

Implications and Recommendations

I would recommend a larger scale study to compare the effectiveness of using timers with classes as opposed to not using timers. In addition, a more in-depth questionnaire should be developed to gather students' perspectives regarding the use of timers in the classroom.

EFFECTS OF MUSIC IN THE CLASSROOM

Primary Researchers

Heather Goad, Intern, Hillcrest PDS
Tammy Johnston, Mentor Teacher, Hillcrest PDS

Introduction

In my classroom of first graders, I encountered issues with student focus and behavior during reading stations. I wondered if playing music during reading stations would help my students focus and improve behavior.

Methodology

I took tallies during stations for one week without music. I made a tally for each time I refocused or corrected behavior. The next week I took tallies while playing soft music in the background. I also conducted interviews with the students to gain their perspective.

Results and Conclusions

I found that I refocused or behavior more without music than with music. During the interview, several students claimed that the music helped them focus.

Implications and Recommendations

I will use music in my classroom often. It is important for each teacher to take into account the mix of students when choosing to play music or not.

SEATING ARRANGEMENTS

Primary Researchers

Melanie Keith, Intern, Midway Junior High
Glenn Voltin, Mentor Teacher, Midway Junior High

Introduction

Do you ever wonder the best way to arrange your classroom to be the most effective for your students? Many have always wondered if sitting the students in groups or rows is more effective in the classroom. I did research to determine which arrangement the students learned better in.

Methodology

I compared two classes with similar demographics and skill levels. The classes had taken several tests prior to me changing the seating arrangement to have data to compare results to. I looked at the class averages on the tests in two of my class periods and compared them. I compared my fourth and ninth period classes because they were very similar. I looked at the change of the scores over the two tests and was able to see which seating arrangement was more effective.

Results and Conclusions

After the first test, the class that was set in groups had much lower test scores. After the next test, the test grades increased significantly. After doing research upon this I discovered that the long term result of seating students in groups is positive, although the student must first get comfortable in the seating arrangement.

REWARDS VS. CONSEQUENCES AND THEIR EFFECT ON BEHAVIOR

Primary Researchers

Ashley Nick, Intern, Tennyson Middle School
Theresa Daniel, Mentor Teacher, Tennyson Middle School

Introduction

My research question is exploring how rewards versus punishments affect the behavior in the classroom.

Methodology

The participants in this research are two classes of all male 8th grade students who are of different races and ability levels. In my research, I gave one class period minimal consequences and gave tickets as rewards and did a drawing each week for prizes and for the other class period I gave no rewards and only consequences for misbehavior.

Results and Conclusions

Through this research I did not come to a clear conclusion as to which is more effective in behavior management. However, I did learn a lot about using rewards and consequences effectively in the classroom.

YOU CAN LEAD A HORSE TO WATER BUT YOU CAN'T MAKE HIM DRINK

Primary Researchers

Christine Riemer, Intern, Midway Intermediate School
Sara Mechell, Mentor Teacher, Midway Intermediate School

Introduction

Although there are many students who are naturally motivated to make good grades (or at least pass) by completing academic tasks, there are also students who would choose to sit and stare off into space every day rather than do their work—regardless of the consequences. There are various responses that can be given to students who refuse to do their work, but oftentimes the effect is short-lived and ultimately ineffective. My research question is:

- Do extrinsic rewards motivate students to make passing grades and complete academic tasks?

Methodology

In order to find out which responses are most effective, I applied various strategies to two low-motivated students in my classroom.

Results and Conclusions

I learned that most strategies worked for a short period of time, but I did not discover any motivational tactics that were successful for more than a couple of weeks. Extrinsic motivations will only impact student efforts for short periods of time.

EMERGING THEMES FROM STUDENT JOURNALS

Primary Researchers

Randy Wood, Professor, Curriculum and Instruction, Baylor University

Alfredo Loredo, Principal, César Chávez PDS

Elizabeth Smart, Site-Based Coordinator, César Chávez PDS

Brandi Ray, Site-Based Coordinator, César Chávez PDS

Introduction

Journaling is a common practice with university students doing field based work in Professional Development Schools. However, the quality of the journal entries need to be reviewed in order to see if the students are just writing words to complete requirements or are they writing meaningful statements that can be used to improve teacher training and teacher performance.

Methodology

This study reviews the journals of the middle school TAs for the fall semester of 2008. This research is a mixed method approach.

Results and Conclusions

The factors that emerged within the journals were: focus on students, focus of self, focus on cooperating teacher/university supervisor, and focus on the other factors of the TA year. Students in this study have almost equal focus on all four factors. This study shows that traditional students in a middle school setting tend to focus of self (62%), on students (27%), on cooperating teacher/university supervisors (8%), and other factors (3%) in their daily journals.

Implications and Recommendations

Other studies that have included non-traditional students have indicated that these student's give an abundance of reflections which tend to focus on students and self with only a minimal focus on their cooperating teacher/university supervisor while traditional students give many observations. There is a great difference in these two groups. One difference is that the traditional students tend to not question the actions of the cooperating teacher and they are limited in their reflective analysis of situations they experience. One practice, Tigchelaar and Korthagen* attempt to build reflection for students in all types of field experiences which could help develop journaling in the Professional Development Schools.

From this study, we would like to recommend that students in our traditional pre-service programs be given more instruction about how to journal in order to clarify their thinking about student involvement in the classroom and the importance of the instruction by the CI and the University professors. Students should be encouraged to do more than give an observation of the event, but should analyze through a comprehensive reflection the pros and cons of what is happening while they are in the classroom.

HOW DO YOUNG CHILDREN LEARN TO READ NONFICTION?

Primary Researchers

Sarah Frisbee, Polly Parnell, Chanel Brasher, Ashley Korol, Jordan Sandefur, Jamie Nguyen, Katherine Perrin, Laura Marchesani, Jeremy Gilbert, Caroline Meads, Katie Picken, Amanda McKethan, and Casey Quinn, Interns, Robinson Elementary and Robinson Primary Schools

Linda Cox, Senior Lecturer, Curriculum and Instruction, Baylor University
Margaret Thomson, Lecturer, Curriculum and Instruction, Baylor University

Introduction

Interns have learned vocabulary and comprehension strategies in their reading methods courses. They are quick to apply these techniques when teaching reading. Yet, when they teach in the content areas, such as science, health, or social studies, they struggle with what to do when students are not learning. Is the material too difficult? Is the vocabulary foreign to the children? Do they have any prior knowledge of or experience with the topic? Are these students English Language Learners? What if the students are in kindergarten and do not yet read? This was the dilemma facing the thirteen interns at Robinson Elementary and Robinson Primary.

Methodology

Their “need to know” ensured active participation in workshops conducted in January by Mrs. Thomson and Mrs. Cox. These workshops focused on the *RAN (Reading and Analyzing Nonfiction)* strategy by Tony Stead. All thirteen interns were asked to implement the strategy in either science or social studies during the spring semester in EC-4 classrooms. Mentors and/or intern supervisor observed them as they taught. Interns reflected on their own teaching. In some classrooms engagement data was collected. All interns reflected on their implementation of this strategy.

Results and Conclusions

Engagement data yielded an 89%-94% engagement in K-3 classrooms, much higher than during traditional instruction in the same content area.

DEVELOPING FRACTIONAL THINKING IN GRADES K-3: A COLLABORATIVE STUDY WITH GRADUATE AND UNDERGRADUATE STUDENTS AT PARKDALE PDS

Primary Researchers

Brittany Bartz, Kristin Biggs, Laura Bonner, Amanda Boyd, Jessica Cremeens, Emily Ford, Jenny Giesbrecht, Katie Gobroski, Melissa Gossett, Tina Hernandez, Kayla Jones, Lacey Melinder, Kristin Randolph, Kaity Schultz, Leigh Anne Scott, and Robyn Stickley, Teacher Education Candidates

Dr. Patricia Sharp, Ms. Betty Ruth Baker, Mrs. Cheri Jennings, Dr. Trena Wilkerson, Dr. Sandi Cooper, and Mrs. Susan Cooper-Twamley, Faculty Mentors

Katy Abel, Renee Clay, Carol Colgin, Trina DeRosier, Lilly Dungan, Kelsey Fowler, Cathy Henson, Beth McCarty, and Debbie Nauert, Mentor Teachers and Clinical Instructors

Introduction

The understanding of fractions is one area of mathematics in which learners demonstrate major misconceptions (National Math Panel). Since student understanding is best developed at an early age, our responsibility as educators is to provide a variety of learning opportunities that foster critical math thinking. The purpose of this study was to further fractional understanding through the use of manipulative and visual aids at the kindergarten through the third grade levels.

Methodology

Each student participating in the study was assessed prior to instruction in order to determine current understanding of fractions using an assessment developed by Baylor graduate students in mathematics. Based on the results, students received six lessons based on fractional concepts once a week for six subsequent weeks. Instruction included both discrete and continuous models, taught through hands-on learning experiences. Students were post-assessed at the end of the study using the same assessment to determine growth in fractional understanding.

A mixed methods analysis approach was applied by mathematics graduate students. Qualitative data sources included video and observation notes coupled with teacher observation. Quantitative evidence was derived from pre and post assessments administered to the students.

DEVELOPING STUDENTS' DESCRIPTIVE VOCABULARY AND COMPREHENSION THROUGH THE USE OF PICTURE BOOKS AT PARKDALE PDS

Primary Researchers

Brittany Bartz, Kristin Biggs, Laura Bonner, Amanda Boyd, Jessica Cremeens, Emily Ford, Jenny Giesbrecht, Katie Gobroski, Melissa Gossett, Tina Hernandez, Kayla Jones, Lacey Melinder, Kristin Randolph, Kaity Schultz, Leigh Anne Scott, and Robyn Stickley, Teacher Education Candidates

Dr. Patricia Sharp, Ms. Betty Ruth Baker, Mrs. Cheri Jennings, Faculty Mentors

Katy Abel, Renee Clay, Carol Colgin, Trina DeRosier, Lilly Dungan, Kelsey Fowler, Cathy Henson, Beth McCarty, and Debbie Nauert, Mentor Teachers and Clinical Instructors

Introduction

At Parkdale Professional Development School, an action research study was used to determine if frequent interactions with quality children's literature would increase students' vocabulary and comprehension. The study involved students in kindergarten through third grade. Researchers included four Baylor interns and twelve teaching associates.

Methodology

At the start of the study, research was gathered through video observation and analysis of students narrating a wordless picture book entitled Changes, Changes by Pat Hutchins. Pre-Assessment data identified a need for intervention involving rich vocabulary and comprehension strategies. Focusing on one book each week for six weeks, students were provided various engaging interactions with the literature. Intervention strategies included: discussions of vocabulary, interactive retellings of the stories, and opportunities to express vocabulary through writing. Students were post-assessed in the same manner as the pre-assessment.

Results and Conclusions

Improvement was evident. Through observations, student work, and assessment, increases in students' word knowledge and comprehension were noted. Candidates also reported personal gains through lesson planning, reflection writing, and video observation and evaluation.

SPELLING INSTRUCTION FOR HILLCREST PROFESSIONAL DEVELOPMENT SCHOOL KINDERGARTENERS: A COLLABORATIVE EFFORT BETWEEN NOVICE SPECIAL EDUCATION TEACHERS AND CLASSROOM TEACHERS

Primary Researchers

Kara Blenden, Erin Butler, Chastity Robinson, Teacher Candidates, Hillcrest PDS

Introduction

In this action research project that was begun through joint efforts between PDS & Baylor faculty in spring, 2007 spelling instruction for kindergartners was explored using a developmental approach described in Words Their Way, Word Study for Phonics, Vocabulary, and Spelling Instruction.

Methodology

We explored the effects of delivering intentional spelling lessons within classroom reading lessons and in small group reading interventions conducted by Baylor Novice teacher candidates enrolled in “Literacy for Students with Special Needs”. During this nine-week spring semester study both pre-assessment and post assessment were given to measure increases in correct letter sequences written by the kindergartners. In addition, Letter Sound Fluency testing was incorporated to explore how spelling improvement connects to reading improvement.

BEHAVIOR INTERVENTION WITH AN AT-RISK GIFTED STUDENT

Primary Researcher

Alyssa Pond, Intern, South Bosque Elementary

Introduction

Within the context of a clustered gifted and talented classroom, the researcher began to explore the relationship between student engagement and behavior. The research question was: Does modifying the environment and providing specific corrections increase the amount of time the student is on-task?

Methodology

Based on challenges a student faced with regard to behavior and engagement, the researcher began by conducting a Functional Behavior Assessment. She observed the student in the 4th grade classroom a total of four times. The researcher tracked antecedents, behaviors, and consequences as well as engagement data in order to design an effective intervention plan for the student.

Results and Conclusions

After analyzing the data, the researcher found that the student was off-task 49% of the time on average, with the highest off-task percentage reaching 60%. She also noted that general corrections did not change the student's behavior.

Implications and Recommendations

According to the data summary, the researcher developed recommendations in order to increase the student's engagement. The recommendations included moving the student within closer proximity of the teacher, providing written procedures and instructions, increasing specific praise, and using specific corrections instead of general corrections.

ENGAGEMENT INTERVENTION WITH AN AT-RISK GIFTED STUDENT

Primary Researcher

Tracy Baker, Intern, Hillcrest PDS

Introduction

Within the context of a gifted and talented classroom, the researcher began to explore the engagement and participation of an “at-risk”, gifted and talented student. The research question was: Will positive reinforcement increase an introverted student’s engagement and participation?

Methodology

Noticing a trend in the student’s lack of participation, the researcher began to take a closer look at engagement in a gifted and talented pull-out classroom as well as in the general 4th grade classroom. The researcher gathered initial data including a Functional Behavior Assessment and student engagement data. After the data were analyzed, an intervention including positive reinforcement and specific praise was implemented. Student engagement was tracked after the intervention and was compared to the baseline data.

Results and Conclusions

At the beginning of the study the student was only engaged on average 50% of the time during a 45 minute lesson. After the interventions were put into action the student remained on task and engaged a majority of the time. The researcher also noted that the student volunteered more frequently to speak in both small and large group settings, and appeared to feel more confident with his contributions.

Implications and Recommendations

The researcher found that offering the student positive reinforcement and specific praise increased the student’s overall engagement. The researcher will continue to provide this type of feedback to all students during independent, whole group, and small group learning experiences.

CASE STUDY OF AN AT-RISK GIFTED AND TALENTED STUDENT

Primary Researcher

Kellsye Wells, Intern, North Waco PDS

Introduction

While working with gifted and talented students in a pull-out program, I explored the effects of positive reinforcement on undesired behaviors. My research question was: Will the undesired behavior of a student decrease when the student is positively reinforced with a self-selected reward?

Methodology

Based on observable challenges the student had in both the regular classroom and the G/T pull-out program, particularly talking out and lack of engagement, I developed my research question and began collecting data. After observing the student multiple times in a variety of classroom settings and performing a Functional Behavior Assessment, I completed my baseline data. I developed an intervention plan which involved the student selecting a reward to work towards. The student's response to the intervention plan was tracked using the same methods used to collect the baseline data.

Results and Conclusions

At the beginning of my study, the student had multiple outbursts during several selected fifteen minute observation time periods. I worked with him to develop a reward system that would meet his educational and social needs as a gifted and talented student.

Implications and Recommendations

I learned from my research that at-risk gifted and talented students respond well to behavior management systems when the reward is something they are interested in working toward. Through my intervention plan, the case study participant's undesired behavior decreased in the gifted and talented pull-out classroom environment. I would recommend that this method of positive reinforcement be considered for all at-risk students when possible.

“AT RISK” GIFTED STUDENT ENGAGEMENT

Primary Researchers

Kimber Fowler, Intern, Mountainview PDS

Introduction

Within the context of a gifted education pull-out program and a general education third-grade classroom, the researcher observed an “at risk” gifted student’s lack of engagement and challenging behavior. The research question was: Are there trends in the “at risk” gifted student’s lack of engagement and misbehavior?

Methodology

The researcher began by observing the student in the gifted and talented pull-out program, general education classroom, and specials programs (such as Spanish or physical education). The researcher also observed the student during different times in the day and while different subjects were taught. A functional behavioral assessment was conducted and engagement data was collected. Antecedents and consequences related to the child’s lack of engagement and misbehavior were recorded. Within the context of a gifted education pull-out program and a general education third-grade classroom, the researcher observed an “at risk” gifted student’s lack of engagement and challenging behavior. The research question was: Are there trends in the “at risk” gifted student’s lack of engagement and misbehavior?

Results and Conclusions

Trends were found in the engagement and misbehavior of the student based on the subject being taught and the student’s environment. The student had the least amount of engagement during mathematics (20%) and the most engagement in Spanish (100%). Misbehavior and lack of engagement increased when the student was located towards the back of the classroom, regardless of what subject was being taught.

Implications and Recommendations

The student is identified as gifted in mathematics; however, because student engagement decreased in math, it has been recommended that the student have an individual learning plan implemented in math. It has also been recommended that the student move to the front of the room in all classroom environments in order to increase desired behavior. In addition, the student will track and self-assess behavior and feelings toward behavior in a daily journal.

CASE STUDY FOR AN AT-RISK GIFTED AND TALENTED CHILD

Primary Researcher

Sara Harrison, Intern, Parkdale PDS

Introduction

Within the context of the gifted and talented urban classroom, I began to investigate the causes behind the undesired behavior of one at-risk gifted and talented student. I then implemented various strategies to determine if intervention would change undesired behavior to desired behavior. The research question was: What strategies will effectively improve the behavior of an at-risk gifted and talented student, thus creating a more positive learning environment as well as more success for the study participants.

Methodology

Recognizing the undesired behavior of a particular student and noticing the negative effect on the learning environment resulting from this behavior, I began to look closely at what was causing the undesired behavior. I recorded data by completing a Functional Behavioral Assessment, conducting interviews, and making observations. By collecting data on the at-risk student, I was able to create and implement an intervention, using several strategies, which focused on establishing positive communication from role models and positive reinforcement within the context of the school. The student's progress was monitored weekly.

Results and Conclusions

At the beginning of the case study, the student was experiencing many behavior problems and exhibiting undesired behavior that caused disruptions to the class and occasionally resulted in In-School-Suspension. Since the intervention, the student has shown improvement and is exhibiting more desired behavior. The student's social skills and self confidence have also been affected in a positive way due to the intervention.

Implications and Recommendations

Implementing an intervention based on the needs of the individual child proved to be successful. By establishing positive communication and positive reinforcement, the child was able to realize the rewards of exhibiting the desired behavior. I will continue to use interventions with future students who display the need.

BEHAVIOR INTERVENTION WITH AN AT-RISK GIFTED STUDENT

Primary Researcher

Johnna Butler, Intern, Bell's Hill PDS

Introduction

Within the context of a gifted and talented pull-out classroom, the researcher began to investigate how a student's pouting caused off-task behavior. The research question was: Will the student's pouting and off-task behavior decrease when she is given a signal and positive reinforcement for performing the desired behavior?

Methodology

In order to track the student's pouting and off-task behavior, the researcher began conducting a functional behavioral assessment. She observed the student in the gifted and talented pull-out classroom a total of three times for fifty minutes each time. The researcher tracked antecedents, behaviors, consequences, and percentages of time that the student was off-task and on-task. The data were collected in order to develop and implement a behavior intervention plan.

Results and Conclusions

According to the data summary, the researcher developed a behavior intervention plan to decrease the student's pouting and off-task behavior. The recommendations include a signal to alert the student that she needs to stop pouting and return to work, specific positive reinforcement, and a behavior checklist that is to be completed by the student and the teacher at the end of each class time.

Implications and Recommendations

According to the data summary, the researcher developed a behavior intervention plan to decrease the student's pouting and off-task behavior. The recommendations include a signal to alert the student that she needs to stop pouting and return to work, specific positive reinforcement, and a behavior checklist that is to be completed by the student and the teacher at the end of each class time.

Do Students Learn Better by Taking Traditional Notes or by Using Foldables?

Primary Researchers

Jessica Russell, Intern, Tennyson Middle School
Jane Sykes, Mentor Teacher, Tennyson Middle School

Introduction

This study focused on the effectiveness of foldables as a means to taking notes in a mathematics classroom. Does the use of foldables allow students to perform better on assessments as compared to taking notes in a spiral notebook?

Methodology

Two classes were identified based on similarities between student performance, ethnicity, SES, and class size. Students from “Class A” engaged in a traditional approach to taking notes by using regular paper and pencil for two chapters in mathematics. Students from “Class B” engaged in taking notes in their foldables for the same two chapters. Neither class was granted permission to use notes during the chapter exams. After classes took both exams, “Class A” students were taught the next two chapters using foldables to take notes while students from “Class B” transitioned to the traditional method of note taking. Again, both classes took the chapter exams without the use of their notes. Students were also given a survey to determine which method they preferred when taking notes in mathematics.

Results and Conclusions

Students in “Class A” preferred the use of foldables as the method for taking notes; however, performed better on chapter assessments when taking traditional notes. “Class B” preferred traditional notes but performed better on the chapter assessments when using foldables. Therefore, just because the students prefer a particular method for taking notes, does not mean that is how they best comprehend information.

Implications and Recommendations

One size does not fit all students. What works best for some students may not be the best approach for others. There are many types of learners and that is why it is so important to differentiate and change up the lesson and methods to meet all of the students’ needs.

EFFECTS OF HOMOGENEOUS GROUPING

Primary Researchers

Beth Mayfield, Teaching Associate, Hillcrest PDS
Marianne Greer, Clinical Instructor, Hillcrest PDS

Introduction

This action research study examines the impact of homogeneous and heterogeneous academic grouping in literacy achievement in a pre-kindergarten classroom during the fall semester of 2008, from September to November.

Methodology

Instruction took place during three fifteen-minute literacy groups with one Baylor Teaching Associate. Instruments used to group and track the students were pre- and post-assessments, progress records, and anecdotal notes. Homogeneous grouping allowed the top and the lower students to be challenged at their own academic level.

Results and Conclusions

This study challenges the argument that homogeneous grouping only benefits the higher group. While homogeneous grouping can have some negative effects, it seemed to be the better strategy for meeting the needs of all of my students. Homogeneous grouping should be considered when grouping students.

Implications and Recommendations

Questions for future studies would include testing students around the same academic level, and testing students in higher grades to see if the homogeneous grouping would work in the same manner.

THE EFFECTS OF DIRECT SPELLING INSTRUCTION IN A MATHEMATICAL CONTEXT

Primary Researchers

Carla Theilig, Danica Richards, and Molly Christy, Teaching Associates, Hillcrest PDS
Bianca Ochoa, Clinical Instructor, Hillcrest PDS

Introduction

This action research study examines the effect on spelling improvements in mathematical vocabulary after direct instruction.

Methodology

In the spring semester of 2009, three different math groups at Hillcrest Professional Development School were given deliberate spelling instruction during their regular math lessons in order to see whether or not such instruction would improve their overall spelling capabilities. Both pre- and post- assessments were administered to evaluate their improvements.

Results and Conclusions

We found the students improved their spelling on 59% of the words after instruction. 55% of the students' scores improved by at least one word and 18% of the scores stayed the same.

Implications and Recommendations

For further investigation, the results could be compared to another third grade class who did not have the emphasized vocabulary instruction. This could also be integrated into all subjects to assess overall improvement of spelling achievement.

TRACKING SOCIAL AND ACADEMIC BEHAVIORS

Primary Researchers

Katharine Cobb, Intern, Hillcrest PDS
Bianca Ochoa, Mentor Teacher, Hillcrest PDS

Introduction

During my intern year experience at Hillcrest P.D.S, I was given the opportunity to work with a student who was in need of a behavior intervention to increase learning. I wondered how I could get a struggling student to take responsibility for his behavior and grades.

Methodology

In the spring semester of 2009, I created and implemented a behavior chart that the student would keep track of his own behavior along with academic performance. Every week I would have a five minute interview with the student to discuss the growth that was happening with his chart.

Results and Conclusions

After the first two weeks with the chart, I found that this structure increased the student's attention span and his behavior improved. As time went on, other students began asking for their own behavior charts. I soon saw other students' behaviors increase positively and academic performance increased.

Implications and Recommendations

I believe this behavior chart would work well with any child.

GENDER GROUPING IN MATH INSTRUCTION

Primary Researchers

Heather Wiggins, Intern, Hillcrest PDS
Lynley Nicholson and Brittany Lowry, Teaching Associates, Hillcrest PDS
Kathleen Minshew, Mentor Teacher, Hillcrest PDS
Lindsey Stevens, Clinical Instructor, Hillcrest PDS

Introduction

This action research study examines the impact of gender grouping on math achievement in a Kindergarten classroom during the spring semester of 2009 from January to April.

Methodology

The math instruction took place during 55 minute math groups with one Baylor Intern and two Baylor Teaching Associates. The KeyMath® Assessment was given to all of the participating students before and after gender grouping. Data was collected by comparing pre- and post-assessments for the students in mixed and single gender groups.

Results and Conclusions

The assessments showed that students in single gender groups showed more improvement than the students in the mixed gender group. This is useful information because it can inform decisions about math instruction in a Kindergarten classroom.

Implications and Recommendations

From this study, new questions have emerged such as, what size groups are most effective for student achievement and how will students perform when they return to mixed math groups.

DIFFERENTIATION FOR HIGH ACHIEVING STUDENTS

Primary Researchers

Sarah Black, Intern, South Bosque Elementary
Kimberly Umhoefer, Mentor Teacher, South Bosque Elementary

Introduction

Do high achieving students need differentiation? As a Baylor Intern at South Bosque Elementary School, I wondered if differentiation would affect high achieving students in their academics, social behavior, and engagement success.

Methodology

To explore this question, I grouped my highest achieving students in four subjects for a three-week period. In achievement I compared the students' average of all four subjects to the averages of each student after grouping. I counted each major, negative social behavior incident for each student on a weekly basis. For engagement, I observed each student for ten minutes once a week and compared his or her percentages.

Results and Conclusions

My results showed students' academic averages increased by two to three points. Six students' social behavior did not change, but one student's social behavior fluctuated depending on the activity. Each student's engagement increased. In conclusion, I need to continue grouping these students together to complete different tasks, including options for independent study.

THE EFFECTS OF A MIXED BALANCED LITERACY GROUP

Primary Researchers

Kaitlyn Gold, Teaching Associate, Hillcrest PDS
Christine Moody, Clinical Instructor, Hillcrest PDS

Introduction

This action research examines how being in an average mixed balanced literacy group effects boys compared to girls during a 90 minute literacy group in the fall semester of 2008 at Hillcrest Professional Development School.

Methodology

The students that participated in this research were four average kindergarten boys and girls. The research was based on pre and post assessments using the John's Basic Reading Inventory

Results and Conclusions

The results show that the girls improved more than the boys. However, the boys outperformed the girls in the writing section.

Implications and Recommendations

This information would be useful for making important decisions about grouping during reading. Due to these results one might wonder what would happen if the boys and girls were separated to teach writing. If the boys and girls are mixed, how could they be taught in a way that would make major improvements in both the reading and writing sections?

ENHANCING THE PARENT, STUDENT AND TEACHER PARTNERSHIP

Primary Researchers

Kaitlyn McDonald, Lauren Arce, Emily Stamper, Audrey Griffith, and Lauren Bibby,
Interns, North Waco PDS
Susan Schafer, Instructor, Curriculum and Instruction, Baylor University

Introduction

This action research study was conducted to identify ways to enhance the partnership between the parent/guardian, student, and teacher. Research indicates that parents have a positive effect on their child's educational experience.

- Original Question: How do we increase parent involvement in after school events?
- Adapted Question: How do we increase parent involvement in ways other than after school events?

This study took place in an urban school in Waco ISD, which serves 496 students ranging in grades of K-5th. Demographics in this school mirror those of the overall district. Our wonderings began in the fall of 2008 when we noticed a lack of parent participation in two separate after school events.

Methodology

Our original goal was to increase parent involvement at after school events. Through the course of our research the goal evolved into increasing the positive communication between the parent, teacher, and student. Our data collection methods included parent communication logs, graphic organizers, notes home, grades, and oral interviews with our mentor teachers, and behavior charts.

Results and Conclusions

Results of the study supported other existing parent involvement research which consistently reports that establishing positive rapport is critical to creating a collaborative partnership between teachers and parents.

Implications and Recommendations

The most significant outcome of our study was that the interns learned how important the teacher's role is in increasing parent involvement through positive communication.

CONSISTENCY IN BEHAVIOR MANAGEMENT

Primary Researchers

Angel Rasco, Intern, G. W. Carver Academy PDS
Jeannie Kuchera, Mentor Teacher, G. W. Carver Academy PDS

Introduction

My research question was: Does being consistent in the classroom discipline plan affect student behavior? I studied the increase of desired behavior in my 6th grade English class at Carver Academy.

Methodology

I restated the rules for my students at the beginning of every class reminding them of the consequences for breaking a rule. For five days I kept data and consistently followed through with consequences for misbehavior counting how many times students signed the book.

Results and Conclusions

As I became consistent in the reinforcement of rules and consequences, the discipline problems drastically decreased. The data showed there was not a difference in gender or in class periods.

Implications and Recommendations

I'm learning that the more consistent I am, the less discipline issues I have. I would like to chart my energy level throughout the periods and look at behavior during advisory which is a 25 minute non-graded class.

USE OF CALCULATORS IN THE HIGH SCHOOL MATH CLASS

Primary Researchers

Jennifer Bonn, Teaching Associate, University High School
Vicky Brown, Clinical Instructor, University High School

Introduction

The review of previous research indicated that calculators should be used in the classroom, and the teaching associate wanted to test the validity of this theory. Her wondering was: How does the use of calculators affect student achievement?

Methodology

This study took place in an Algebra class. There were 18 participants: 7 girls; 11 boys. Fourteen were Hispanic, two were African-American, and two were Caucasian. The timeline was from September 2 to November 19, 2008. All topics (absolute value, linear equations, systems of equations, and matrices) were taught first by hand and then by calculator. The instruments used were pre and post assessments, observation notes, and a student questionnaire.

Results and Conclusions

The results indicated that student received higher grades on tests with the use of calculators than on tests without the use of calculators.

Implications and Recommendations

The researchers found that it is important to use technology in the classroom, no matter how difficult it is to implement it. Even though it is important that the students learn to use calculators, it is also extremely important that they understand the procedural method.

THE MOZART EFFECT

Primary Researchers

Shanna Ware, Teaching Associate, University High School
Sara Scott, Clinical Instructor, University High School

Introduction

The research addressed the following question, “Does Mozart music have a substantial impact on learning mathematics on the high school level?” This concept is commonly referred to as “The Mozart Effect” and has been tested worldwide by many educators and psychologists; all with varying results. The teaching associate was intrigued with this concept and found that most of the studies had been conducted with pre-school or college age students. She was curious to know if The Mozart Effect would impact her 10th graders.

Methodology

This study took place in a 10th grade geometry class with twenty-nine students, ranging from the ages of fourteen to seventeen. There were 8 African-American; 19 Hispanic; 2 Caucasian; 2 limited-English speakers; 1 with physical disabilities; and 6 with special education modifications. During Unit I, which was taught by the teaching associate from September 4th to Sept. 26th, there was no music played in class. Unit II was taught from Oct. 6th to Oct. 31st. During independent work, the TA played Mozart as the students worked. She compared the class averages on the unit assessments for Unit I and Unit II. She also distributed a questionnaire to her students to ascertain their feeling about the music. She also kept a record of anecdotal notes.

Results and Conclusions

The results for the study of these twenty-nine urban high school students showed that there was not any substantial change in students learning of mathematics with or without the accompanying of Mozart’s masterpieces. The teaching associate did note several reasons that may have impacted her research, which was the short length of time for the study. Student responses to the questionnaire ranged from intense dislike of the classical music to indifference. A few students did actually request her to continue playing it in future times.

Implications and Recommendations

The teaching associate would like to conduct a similar research at a later date but allow more time for data gathering.

IMPACT OF HOMEWORK ON STUDENT LEARNING

Primary Researchers

Stephany Grullon, Teaching Associate, University High School

Vicky Brown, Clinical Instructor, University High School

Introduction

High school students dislike homework and often do not complete their homework assignments. Yet, teachers consistently assign homework as a means of reinforcing the learning. The teaching associate wondered if completion of homework impacted student achievement. The research question was: What is the impact of homework on student learning?

Methodology

This study took place in a Pre-AP Algebra classroom with twenty-one participating students. The students consisted of five boys and sixteen girls, sixteen sophomores and five juniors; three of the students were Gifted and Talented. There were 10 African-American; 10 Hispanic; and one Caucasian student. For comparison, the TA divided the class into two groups: those who completed 70% or more of their homework and those who completed less than 70% of their homework. She then compared the averages of unit assessments to see which group did the best. She also gave a student survey to gather input into students' feelings about homework. The TA also kept anecdotal records.

Results and Conclusions

The results based on the findings of this action research indicated that students who do consistently turn in their homework do better than students who do not consistently turn in their homework.

STUDENTS KNOWLEDGE OF SOCIAL STUDIES

Primary Researchers

Lynn Hebert, Teaching Associate, University High School

Melvin Petty, Clinical Instructor, University High School

Introduction

The purpose of the research was to develop a deeper understanding of the knowledge and views of social studies held by high school students. The study will seek to answer: What are some of the presumptions of social studies already in the minds of high school students before they enter my classroom? With the knowledge of these presumptions, how can I adjust my instructional content and methods to accommodate the students as they are and provide them maximum benefit from our time together?

Methodology

The research will be conducted using four to five students from an American History class. This research will aim to gauge students' knowledge by having them place six photographs in chronological order and answer a list of detailed questions about specific content, as well as their views of social studies. Once this procedure is complete, I will begin analyzing the collection of data. The process of the interviewing of all students will require approximately a full school week, and then several hours for analysis, reflection, and writing.

Implications and Recommendations

After studying this data, I will develop conclusions based on the responses, and the instructional implications of those conclusions for more complete and effective teaching, and record them in a paper.

HOW END OF UNIT REVIEWS IMPACT TEST RESULTS

Primary Researchers

Mary Smitson, Teaching Associate, University High School
James Whatley, Clinical Instructor, University High School

Introduction

The purpose of this research was to understand which style of end-of-unit reviews help students perform to the best of their abilities on exams. A teaching associate went through a series of different end of unit reviews with a Jeopardy-style game to see which style best helped students in their learning. The teacher associate had a test group and control groups. The reviews consisted of review worksheets, take-home worksheets, and Jeopardy games. The teacher associate found that the more time spent on reviewing, the better the students in the test group performed on the exam. The research questions were: How will providing different end-of-unit reviews for students impact results on exams? How will students react to a game versus worksheet type of review?

Methodology

For the first test, all four class periods had a standard in-class review worksheet followed by a test the next day. For the second test, the test group had an in-class review sheet and a Jeopardy game prior to the test. The other classes (control groups) had only the standard in-class review worksheet before the second test. For the third test, the test group had a sheet with everything on the review to take home and study before the Jeopardy game. The students did not have to fill out anything on this sheet; everything was given to them. The students took a test the day after the Jeopardy game. Again, the control groups had a standard review worksheet before the test. For the fourth and final exam, the test group had only a Jeopardy game without any worksheet type of review the day before the test. The control groups had the same in-class standard review followed by a test.

Results and Conclusions

A review worksheet along with a Jeopardy game showed good scores on the exam; however, the test group scored consistently lower on the reviews and exams than other class periods. The more time spent in preparation for the exam, the better the students performed. When students did not have any sort of paper review and only the Jeopardy game, the test scores were lower.

Implications and Recommendations

It makes sense that the more time students spend preparing for an exam that they will do better. Through this process, I learned that students are not very adaptable. The students wanted to complete the same review sheet instead of play a game. I also learned that even though students may be involved with the review game, they may not be involved with the material. This research helps future PDS work because I can alter games to focus more on the material in order to help students learn.

CLASS DISCUSSION AS AN ASSESSMENT TOOL

Primary Researchers

Tiffany Crowl, Teaching Associate, University High School

Heather Hughes, Clinical Instructor, University High School

Introduction

Tests are prominently used in our education system to measure a student's intelligence or knowledge over a subject area. Art is subjective and tests cannot easily be created to assess a student's knowledge about art. Therefore, art teachers use many different strategies to assess their student's work such as: written evaluations (teachers grading according to a rubric), class critiques, self evaluations, and teacher/student conferences. The question I wanted answered through my action research project was which forms of assessment do high school students like best so my research question was: Is group reflection and verbal feedback more effective than individual reflection and written feedback?

Methodology

To find the answer to this question I created many different assessment activities during a sculpture unit for my students to participate in. After the students have had an exposure to all the different assessments I had them fill out a survey over which methods they prefer.

Results and Conclusions

The results from the survey showed that class discussion was the students' preferred method of assessment. Seventy-five percent of the students said on their survey that they enjoyed participating in a class discussion. They said that they enjoyed listening to their classmates opinions of their work.

STUDENTS' KNOWLEDGE OF SOCIAL STUDIES CONCEPTS

Primary Researchers

Cassie Goodwin, Teaching Associate, University High School
Melvin Petty, Clinical Instructor, University High School

Introduction

The social studies action research will be used to help teachers understand what secondary-aged students already know and think about social studies. It will show what students are interested in, what they dislike, what they do not know, and what they already know.

Methodology

My research was conducted in an American History class, using a small group of students. The students were given photographs and were told to place them in chronological order. The students were also asked a specific set of questions to test their knowledge of history and their perceptions and views of history.

Results and Conclusions

Based on the answers students gave, teachers were able to come up with some conclusions on how students view social studies and used these conclusions to come up with some instructional implications. The researchers concluded that today's students consider history only as a subject they need to pass in order to graduate and that they need help to connect social studies to their everyday lives in order to see the significance of this subject.

Implications and Recommendations

After the finalization of the research, I anticipate a product which will reveal definite trends in the perspective of, and relationship between high school students and the social studies, and provide solutions for problems found while emphasizing accommodations needing to be made in my teaching philosophy and methodology.

TEACHING SUBJECT-VERB AGREEMENT IN ISOLATED SENTENCES OR IN CONTEXT

Primary Researchers

Emily McDonald, Intern, Midway Intermediate School
Ms. Crawford, Mentor Teacher, Midway Intermediate School

Introduction

The purpose of this research is to discover whether or not students recognize rules for subject-verb agreement in their own writing. Through writing, students could understand subject-verb agreement.

Methodology

The data consisted of: assessment of writing, isolated sentences and, an answer to a final question. I taught subject-verb agreement in context for students, in a two day lesson to sixth graders at Midway Intermediate, to have a full understanding.

Results and Conclusions

I chose twenty-one students, and then evaluated their final questions. Twelve students showed proficient knowledge, nine showed no sign of knowledge. Teaching subject-verb agreement in context was not beneficial to all of my students; too many did not understand the concept.

Implications and Recommendations

I discovered that teaching subject-verb agreement in context was not beneficial to all of my students due to different learning needs. Students need isolated sentences and practice. In the future, I recommend using practice in isolation, as reinforcement of knowledge, and through student writing.

GOAL SETTING AND IMPROVED MOTIVATION

Primary Researchers

Tenece Williams, Intern, Midway Intermediate School
Ms. Gietzen, Mentor Teacher, Midway Intermediate School

Introduction

I implemented my study in a 6th grade Reading classroom at Midway Intermediate School. My research question is: Does isolated instruction, goal setting, and self-assessment improve motivation and grades?

Methodology

On Mondays, Thursdays, and Fridays, I took two high risk students to a quiet room for 40 minutes to create goals, work on makeup work and homework. Completion of their goals earned them an incentive.

Results and Conclusions

The program was partially successful because the students met their goals and raised their Language Arts grades. However, their other grades declined. My personal reflection of what students said showed an increase in motivation. I believe the length of the study needs to be increased.

Implications and Recommendations

The students took great ownership of their goals during this project. Continuing this program for one more week would provide time for students to change work habits. Implementing a similar program in my future would be worth the time and the effort for my future students. I have learned from student behavior and talk about goals that this plan would be worth implementing in the future.

THE EFFECTS OF REPLACEMENT BEHAVIORS AND REINFORCEMENT ON A STUDENT'S SELF-INJURIOUS BEHAVIOR

Primary Researchers

Zahra Arab, Teaching Associate, Midway High School
Raye Lynn Morris, Clinical Instructor, Midway High School

Introduction

In this research project, the effects of implementing a hairbrush on self-injury were studied.

Methodology

The participant, Luke, had very limited speech and frequently engaged in hair picking on his head which resulted in scalp peeling and prominent skin patches. The frequency of the head picking was measured using a frequency count. A two-component intervention was implemented, including giving Luke a hairbrush to replace hair picking and rewarding him for every 45 seconds he keeps his hands down/away from his head.

Results and Conclusions

The results of this study suggest that teachers may be able to combine replacement behaviors (e.g., hairbrush) with differential reinforcement of appropriate behavior to reduce self-injury.

THE USE OF AUGMENTATIVE COMMUNICATION AIDS TO INCREASE STUDENT REQUESTS FOR FAVORITE ACTIVITY

Primary Researchers

Jenna Bankhead, Teaching Associate, Midway High School
Molly Cire, Clinical Instructor, Midway High School

Introduction

For this action research project, the use of communicative assistive technology was tested to discover its effectiveness in assisting a nonverbal student express a want or need. The student participant, Bo, is a freshman in a medically fragile Life Skills classroom. Bo is nonverbal; therefore, his ability to express his wants and needs is severely limited.

Methodology

To improve communication abilities, he was provided two different communication aids, a photo of a preferred DVD, *The Golden Girls*, and a BIGmack™ communication device, a button that, when pressed, emits the previously recorded message, “more Golden Girls, please.” By observing Bo use the two different aids, the effectiveness of each was analyzed. Every time that Bo used one of these communication aides, his response and need for prompts was recorded on a Daily Progress Monitoring Chart.

Results and Conclusions

The results suggest that providing communication aids increased Bo’s ability to express his desire to watch more *Golden Girls*.

Implications and Recommendations

This study is very important to help students who are nonverbal communicate their wants and needs, which, in turn can better the students’ success in the classroom.

THE EFFECTS OF A COMMUNICATION DEVICE ON A STUDENT'S SELF-INJURIOUS BEHAVIOR

Primary Researchers

Tavia DeAtley, Teaching Associate, Midway High School
Raye Lynn Morris, Clinical Instructor, Midway High School

Introduction

In this action research project, the effects of the implementation of a communication device on a student's self-injurious behavior were studied.

Methodology

The participant, Jay, was a nonverbal high school male who engaged in self-injury, skin-picking, which resulted in permanent damage to his hands. The frequency of skin-picking was measured using a frequency count comparing two teaching sessions: when Jay had access to his communication device, a small device that emits phrases when activated by pushing a button, and when Jay did not have access to the communication device.

Results and Conclusions

Results demonstrated that Jay only engaged in self-injury when he did not have access to his communication device.

Implications and Recommendations

This study suggests that challenging behavior may be used as a form of communication; therefore, it is important for teachers to provide alternative and augmentative forms of communication to nonverbal students for the purposes of increasing communication and reducing challenging behavior.

THE USE OF BACKWARD CHAINING TO TEACH MULTIPLE-STEP PERSONAL CARE SKILLS TO AN ADOLESCENT WITH A DISABILITY

Primary Researchers

Funke Alashe, Teaching Associate, Midway High School
Raye Lynn Morris, Clinical Instructor, Midway High School

Introduction

In this action research project, the effects of the implementation of an effective teaching method, backward chaining, on a student's multi-step goal was studied.

Methodology

The participant, Nancy, was a nonverbal high school female who was unable to tie her shoes without assistance. The independence and mastery of each individual step introduced and taught was measured using a frequency count: Nancy had access to her shoe and other shoes with shoe laces that were untied and easy to handle.

Results and Conclusions

Results demonstrated that Nancy was able to learn each step of shoe tying from a teaching method known as backwards chaining.

Implications and Recommendations

This study suggests that multi-step tasks can be taught from a very systematic teaching method; therefore, it is important for teachers to provide effective teaching methods that can facilitate learning based upon the needs of every student and increase independence and create an effective and structured learning environment.

THE USE OF AN AUGMENTATIVE COMMUNICATION AID TO INCREASE STUDENT REQUESTS FOR FAVORITE FOOD

Primary Researchers

Kayse Katzmannm, Teaching Associate, Midway High School
Molly Cire, Clinical Instructor, Midway High School

Introduction

In this action research project, the effects of the implementation of a communication device on a student's ability to make requests were studied.

Methodology

The participant, Sarah, is a nonverbal, high school sophomore diagnosed with Rett Syndrome. Least-to-most prompting was implemented to teach Sarah to request her favorite food, Cheetos, using a BIGmack™, an augmentative communication device. BIGmack™ is a button, when pressed, emits a previously recorded message such as "more Cheetos." The frequency of independent requests was monitored.

Results and Conclusions

Results suggest that Sarah was able to independently request Cheetos when given a communication device and least to most prompting.

Implications and Recommendations

The research illustrated that it is important for teachers to allow all students the opportunity to communicate.

THE USE OF BACKWARD CHAINING TO TEACH MULTIPLE-STEP DOMESTIC SKILLS TO AN ADOLESCENT WITH A DISABILITY

Primary Researchers

Laine Echols, Teaching Associate, Midway High School
Raye Lynn Morris, Clinical Instructor, Midway High School

Introduction

In this action research project, the effects of using backward chaining to teach a student how to fold a t-shirt were studied.

Methodology

The participant, Sally, was a nonverbal high school female who could fold small washcloths but not t-shirts. The goal was for Sally to fold numerous different t-shirts in three easy steps. Data was collected on whether or not the step being taught was done independently or with a prompt. Backward chaining was implemented in which the final step was taught first. As independence increased, other steps were added one at a time.

Results and Conclusions

The results demonstrated that Sally was able to fold a t-shirt independently after thirteen sessions.

Implications and Recommendations

This study suggests that the backward chaining technique works because the student receives immediate reinforcement and the activity is completed in a short period of time and because each step is reinforced at each teaching session.