

**INVESTIGATING THE TEACHER-STUDENT RELATIONSHIP IN  
BIOLOGY CLASSROOM**

**BY**

**Victory Ebube ONYEKWERE  
EDU1602316**

**FACULTY OF EDUCATION  
UNIVERSITY OF BENIN  
BENIN CITY**

**JULY, 2021**

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**A PROJECT RESEARCH SUBMITTED TO THE DEPARTMENT OF  
CURRICULUM AND INSTRUCTIONAL TECHNOLOGY,  
FACULTY OF EDUCATION, UNIVERSITY OF BENIN, IN PARTIAL  
FULFILMENT FOR THE REQUIREMENT FOR THE AWARD OF  
B.Sc (Ed.) DEGREE IN BIOLOGY EDUCATION, UNIVERSITY OF  
BENIN, BENIN CITY.**

**JULY, 2021**

## **CERTIFICATION**

We, the undersigned hereby certify that this project work was carried out by **Victory Ebube ONYEKWERE** in the Department of Curriculum and Instructional Technology, University of Benin, Benin City and approved as adequate in scope and quality in partial fulfillment of the requirement of the award of the B.Sc. Ed. degree in Biology.

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\_\_\_\_\_  
**Dr.(Mrs.) P.I.O Aika**  
Project Supervisor

**Dr. (Mrs.) F.N. Ofuani**  
Project coordinator

Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
**Prof. E.O.S Iyamu**  
Dean, Faculty of Education

Date: \_\_\_\_\_

## **DEDICATION**

This work is dedicated to Almighty God who is the author of knowledge for His wisdom and strength throughout my academic pursuit in the University of Benin, Benin City.

## ACKNOWLEDGMENTS

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### **Abstract**

The study investigated the relationship between Biology teachers and their students. Four research questions were raised to guide the study and two were hypothesized.

The descriptive survey research design was adopted in the study. The population of the study consisted of nine thousand, one hundred and twenty (9120) students in the twelve (12) senior secondary schools in Egor Local Government Area of Edo State. The sample for the study consists of two hundred and forty-four (244) students. They were randomly sampled to ensure fair representation. The instrument that was used for this study was a questionnaire titled “Questionnaire on student’s perception of their relationship with their Biology teacher”  $C_r = .70$ . Data collected were analyzed using mean, standard deviation, t-test and ANOVA.

Some of the findings from the study revealed that students have a high level of connectedness with their Biology teacher. The learning of Biology among the students is enjoyable due to the connectedness they feel to their Biology teacher. Recommendations are made in line with the findings of the study.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **Background to the Study**

Education is a highly rated public venture used as an instrument per excellence in national development. Also education is a process of receiving or giving systematic instructions especially at schools or universities. Education is the process of remarking experience, giving it more socialized value through increased individual experience by giving the individual better control over his own power (Ozochi, 2009).

However, it seems as if the laudable aims and objectives of education in Nigeria as obtained in the National policy on education (Federal Government of Nigeria 2013) is not being obtained. This is because the school system generally is seen to be associated with poor academic performance, formation of bad gang of students, perpetual hatred of teachers and students negligence of some subject which then gives rise to serious problems for the realization of educational objectives.

In order to realize the aims and objectives of education in the school system, the teachers plays an important role. According to Olumba (2003), the aim of education can never be actualized if there is a poor relationship existing between the teacher and his students. Bringing these aims to reality depends on the orientation of teachers and students in the educational system because good education requires trained and committed teachers, who will carry the students along.

Teaching is the process of inculcating in the learners the desirable knowledge, culture, skills, values and norms which will make him to be useful to himself and the society at large. Therefore to promote the

relationship between teacher and students, the teacher must determine the most efficient and effective methods of teaching and the selected materials to create conducive learning experiences that will utilize the content associated with each objectives. This process requires good teacher-students relationship characterized by high levels of closeness. The relationship between teachers and students is the most basic relationship in the process of education and also a special kind of interpersonal and social relations which is the key to students' academic, social and emotional development and may altogether affect the educational environment. The teacher-student relationship can be defined as a dynamic system, in accordance with ecological systems theory in human development. It is a whole structure which is composed of interrelated two parts; teachers and students.

Moreover, several studies have focused on teacher-student relationship for examples: Allen, Gregory, Mikami, Lun, Hamre, and Pianta, (2013). Focused on Effective teacher-student interactions in secondary school classroom. American Educational Journal.

Varga, (2017) similarly studied the effects of teacher-student relationships on the academic engagement of students. University students, United State.

And

Asiyai, (2014) examined Students' perception of the condition of their classroom physical learning environment and its impact on their learning and motivation. University student journal, united state. However, none of these studies focused specifically on the Biology classroom. Hence the need for this study.

### **Statement of the Problem**

The laudable objectives of education in Nigeria cannot be attained if students do not perform well academically in schools. In Nigerian secondary schools, students' poor performance in public schools examinations have been observed. The case is not different with students' performance in Biology examinations.

While several factors could account for students' poor performance in Biology, the role of teacher-student interaction pattern in the classroom has

not been adequately addressed. Some researchers have made attempts in this area but none of them (within the knowledge of the researcher) have addressed teacher-student relationship within the context of Biology learning. Based on this background, this study examined the teacher-student relationship in Biology classroom.

### **Research Questions**

1. What pattern characterizes the teacher-student relationship in Biology classrooms?
2. How do students perceive the effect of their relationship with their teachers on their learning of Biology?

Hypothesis 1: Students do not differ in their Perceived relationship with their Biology teacher based on sex.

Hypothesis 2: Students do not differ in their perceived relationship with their Biology teacher based on their class.

### **Purpose of the Study**

The major purpose of this study is to examine the teacher-student relationship in Biology classroom.

Specifically, the study sought to:

- 1) Determine the pattern which characterizes the teacher-student relationship in Biology classroom
- 2) Identify students' perception of the effect of their relationship with their Biology teachers on the learning of the subject.
- 3) Ascertain whether students differ in their perceived teacher-student relationship based on sex.
- 4) Ascertain whether students differ in their perceived teacher-student relationship based on class.

### **Significance of the Study**

The findings of this study would be significant to students, teachers and researchers.

First of all it is hoped that the findings of this study would identify students' perception of their relationship with their teacher. The result could lead to interventions by teachers aimed at improving their relationship with students and by extensive students' academic performance.

Moreover, the findings of the study would benefit teachers of Biology in Nigerian secondary schools. It would provide an insight into students' perception of their relationship with their teachers. This information would serve as feedback to teachers.

Finally, it is hoped that the findings of this study would benefit researchers. This work can be used as a basis for further research or as literature for researcher's working in a related area.

### **Scope of the Study**

The study focuses on the Perceived teacher-student relationship of teachers and students in the Biology classroom. It is restricted to students in public senior secondary schools in Benin City.

### **Operational Definition of Terms**

**Teaching:** The job or profession of a teacher

**Academic Achievement:** This is defined as the accomplishment of students in the teaching and learning process.

**Teachers-Student Relationship:** This is the dynamics of interpersonal friendship between the teacher and the students.

**Perception:** The way in which something is regarded, understood or interpreted.

**Biology:** A subject in the senior secondary school curriculum which deals with the scientific study of life and the structure of plants and animals.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

The review of literature is discussed under the following sub-headings:

- Concept of Teacher-Student Relationship Patterns
- Students perception of Teacher-Student Relationships and their learning
- Factor affecting Teacher-Students Relationship
- Summary of reviewed literature

#### **Concept of Teacher-Student Relationship Patterns**

The teacher-student relationship is all about creating a friendly environment to interact with students for better learning prospects. Teacher-student relationship pattern refers to the dynamics of interpersonal friendship between the teacher and the students. Most educational research cites the teacher-student relationship as a critical factor for successful learning in the classroom. Teachers must know how to build rapport with students so that they can influence them positively. For effective learning, teacher-student

relationship must be solid. Developing good relationship is key to a successful school year. Teacher-student interpersonal relationships is a key to students' academic, social and emotional development and consequently may affect the social and learning environments (Cornelius-white,2007; sabol & pianta2012). Strong, supporting teacher-student relationships might promote students feelings of safety, security and belongingness and may eventually lead to higher academic achievements. In contrast conflictual relationships might place students in situations where they do not feel connected to their school's academic and emotional resources, and may lead them to failure( Hamre&pianta,2006b;Roorda,koomen,spilt&Oort,2011). Importantly, positive or negative teacher-student relationships might also influence teacher's well-being and professional development (Hamre, pianta, Downer&Mashburn, 2008; O'Connor, 2008; Roorda & Dipietro, 2011). As such, teacher-student relationships are considered an integral part of classroom research (pianta & Hamre, 2009).

However, two patterns characterizes the teacher-student relationship; connectedness and Anxiety. It has been observed that students often times have anxiety than connectedness relating with their teachers.

### **Connectedness**

This is a feeling of belonging to or having affinity with a particular person or group. Positive relationships in schools are central to the wellbeing of both students and teachers and underpin an effective learning environment. There is now a wealth of research on the importance of connectedness in schools and how it promote effective education. Students' motivation to learn and receive an education drives their thoughts and actions. Teachers should ensure that every child feels capable and can meet expectations (academic and behavioural). A student who has connectedness with the teachers each year, it improves the likelihood of forming good relationship with future teachers. These students feel a sense of control and security. Additionally, it is possible that teachers invest more time in relationship with students who are more likely to succeed (Jerome & Pianta, 2008).

Connectedness is the ability to communicate with the students, to know every child's needs. Effective communication also includes both verbal and non-verbal cues, body language, voice inflection and facial expression are all key aspects of communication (Brown 2010). Teachers who make efforts to include all students, especially those who are typically off task or whose performance is low will see less off task behaviours and higher academic achievement over time. Including all students will also help develop the feeling of belonging, which will improve the relationships among teachers and students.

### **Anxiety**

This is a feeling of worry, nervousness, or unease about something with an uncertain outcome. Research cites it that students often times feel anxious, nervous around their teachers and this could be because the foundation of a good relationship is lacking. This is likely to negatively impact students' behaviour. Students will resist rules and procedure and they will neither trust teachers nor listen to what they have to say if they sense the teacher do not value or respect them (Boynton & Boynton 2005). One study

found that teacher-student relationship conflict was consistently related to lower grades (Gehlbach 2012). However some teachers may struggle with the concept of allowing students to get to know them on a personal level. Some teachers may even fear that familiarity with students creates a more undisciplined behavior in the classroom. Yet when students feel welcomed and comfortable they are more receptive. Beginning from the first day in school, teachers must send a message that they are in control. This should not include being overbearing, authoritative or inflexible. Teachers need to establish and maintain boundaries but it is important that teachers are also approachable. When teachers have negative relationships with students, it can lead to stress and feeling of anxiety which affects both their practice and well-being.

When teachers and students become more familiar with each other, it creates a sense of community (Brown 2010). Taking time to show students that their individuality is welcomed and that they are cared for, not only helps students feel that they belong but also helps foster an encouraging learning environment where both relationship and education can flourish.

## **Students Perception of Teacher-Student Relationship to Their Learning**

Perception is the impression in the mind of the student about a particular idea, belief etc. Student perception plays an important role in incentive. In fact, research suggests that the most powerful predictor of a children's motivation is the child's perception of control. Perceived control is the belief that one can determine one's behavior, influence one's environment, and bring about desired outcomes. Therefore, a student's perception of the teacher's behaviour impacts the relationship. Students who feel their teacher is not supportive towards them have less interest in learning and are less engaged in the classroom (Rimm-kaufman & Sandilos, 2012). Moreover, students and teachers influence each other. When a student perceives that he is welcomed and wanted in the classroom, he is more likely to be engaged and motivated. Thus, the role the teacher plays in the classroom affects the perception the student has on the relationship and the classroom environment, which ultimately contributes to achievement. Students who perceive that their teachers are more supportive have better

achievement outcomes on standardized school grades (Gehlbach, 2012; Rimm-kaufman & Sandilos, 2012).

Brekelmans & Wubbels, (2005) also conducted a study that showed that students' perceptions of teacher influence were related to cognitive outcomes. The higher a teacher was perceived on the influence dimension, (an interpersonal perception profile), the higher the outcomes of students on a test. In their study, teacher influence was the most important variable at the class level. They report that the more teachers were perceived by their students as cooperative, the higher the students' scores were on cognitive tests.

Reflection is imperative for the classroom environment, each lesson should be tailored to the needs of the students who are currently present in the classroom. When the classroom environment is structured to meet the student's needs, teachers are also able to fulfill the three universal innate psychological needs of the students autonomy, belongingness and competence. Because teachers play important roles in children's lives, teacher well-being at least indirectly, has significant effects on children's

socio-emotional adjustment and academic performance (Spilt, 2011; wentzel, 2016). Teacher's well-being is affected when the teacher feel unprepared to handle a diverse group of students, especially when there are discipline concerns. These concerns, as well as a lack of classroom management skills, can hinder teachers from helping their students succeed academically (Price, 2008).when teachers experience negative relationships or negative interactions with their students, teachers feel stress and internalize these feelings. Teachers also feel negative effects when their relationships are characterized as disrespectful and distant (Spilt, 2011; Prince, 2008). On the other hand, when a student does perceive he has control, there are a multitude of positive academic consequences. This includes but is not limited to, engagement in academic activities, setting high and concrete goals, increased focus on tasks and more preemptive actions like study and practice. These students actually learn more because they approach learning with enthusiasm and vigor, enjoy challenges and seek help when needed (Skinner & Greene, 2008).

These positive consequences of perceived control are skills that will help students throughout their academic careers and further strengthen relationships between teachers and students. Therefore teachers should seek to build a sense of student control; the positive consequences of control can have numerous and lasting effects on students. The effects of perceived control contribute to forming relationships with teachers and the students' education. When students do not feel a sense of control or when they feel their teachers do not care about them, there are many negative consequences. Students will avoid challenges and will not seek help from their teachers. Feeling distracted, anxious, distressed and unmotivated are also consequences when the student feels he has no control.

### **Factors Affecting Teacher-Student Relationship**

The teachers need to understand that in schools, students come from different cultures and backgrounds and each student deserves to be respected as an individual and their needs vary from one another. Thus, teachers must establish a positive relationship with their students in order to provide the learning opportunity as well as motivation they need to be successful in both

academic work and life. Students who come from broken homes, fighting parents and toxic environment tends to pose a threat to their teachers because they lack respect and courtesy making it difficult for the teacher to build relationships with them. Another significant factor is the gender bias. The distinctions and disparities between the schooling of males and females have been apparent since historical records of education began to be kept. The place of gender within teaching and learning has developed considerably since the early years of the twentieth century. Examining gender differences encompasses many facets and previous research has indicated a need to acknowledge the influence of these constructs that help to form an individuals self-concept and perception. Gender differences have been depicted in the manner in which males and females respond to anxiety and conflict (Brody & Hall 2000; Taylor, 2000) fear, anger and sadness (feder, 2007).

School climate has been implicated as "boy unfriendly" due to an inability to recognize differences in learning and interpersonal relating styles and developmental trajectories (kindlon & Thompson 1998; pollack 1998).

Healthy relationships between students and teachers have been implicated as primary moderators of resiliency (Baker 2006;pollack 2004). Unfortunately the presence of higher levels of conflict and lower levels of closeness diminish the quality of relationships boys are able to experience with their teachers. From the gender difference of view in the teacher-student relationships specifically it is believed that despite the proactive effect of the socioeconomic status, teachers would rate their relationship with boys as being more conflicted and less close than their relationship with girls. it is also believed that the age of the child would predict teacher report of closeness and conflict as moderated by gender. Yet what seems to concern many students more than a teacher's teaching skills or physical appearance is his or her gender. In secondary level education, students tend to favour having teachers of the opposite sex because it renders the classroom's psychological environment more positive and comfortable (lawrenz, 1987). Gender is a teacher-related factor that is constantly researched due to the major influence it has on aspects of teaching and learning such as teacher-student interaction (including miscommunication). Teacher fairness towards

male and female students, student engagement in class and ultimately, student overall performance at school. Gender differences also occur in the realm of classroom behavior. Teachers tend to praise girls for "good" behavior, regardless of its relevance to content or to the lesson at hand and tend to criticize boys for "bad" or inappropriate behaviour (Golombok & Fivush 1994). This difference can also be stated in terms of what teachers overlook with girls, they tend to overlook behaviour that is not appropriate but with boys they tend to overlook behaviour that is appropriate. Teachers have a tendency to talk to boys from a greater physical distance than when they talk to girls (Wilkinson & Marrett 1985). The difference may be both a cause and an effect of general gender expectations. Expressive nurturing is expected more often of girls and women and a business-like task orientation is expected more often of boys and men, particularly in mixed sex groups (Basow & Rubinfeld 2003; Unikel & Dew 2005). Another possibility is that some teachers may feel that boys are especially prone to getting into mischief so they may interact with them more frequently to keep them focused on the task at hand (Erden & Wolfgang, 2004).

## **Summary of Literature Reviewed.**

Positive relationships in schools are central to the wellbeing of both students and teachers and underpin an effective learning environment. Wellbeing comprises not only physical but also psychological health. This is demonstrated by both optimal functioning and predominantly positive feelings. Positive relationships increase engagement among students. It also creates a more productive and fulfilling learning environment for all. The review has also shown that gender is one factor that could influence the student-teacher relationship. In addition, studies in the relationship pattern between students and their teachers in Biology classrooms in the Nigerian context seem to be missing. Against this backdrop, this study examined the teacher-student relationship in the Biology classroom in Senior secondary schools in Benin city.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter describes the methods and procedures used to carry out this study under the following sub-headings:

- Research Design
- Population of the Study
- Sample and Sampling Technique
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

#### **Research Design**

The study made use of the descriptive survey research design.

## **Population of the Study**

The population of the study comprises of nine thousand one hundred and twenty (9120) students in the (12) senior secondary schools in Egor Local Government Area of Edo State (Ministry of Education Edo state, 2021).

## **Sample and Sampling Technique**

The sample for the study consists of two hundred and forty-four (244) students drawn from four (4) secondary schools in Egor Local Government Area of Edo State. The simple random sampling technique using the ballot procedure, was used in selecting the four schools used in the study. Sixty-one students were then randomly selected from each of the sampled school which brings the total number of students sampled to two hundred and forty-four.

## **Research Instrument**

The instrument used in generating data for this study is a self-designed questionnaire titled" Questionnaire on students' perception their

Relationship with their biology teacher in senior secondary schools in Egor Local Government Area of Edo State". It is made up of three sections (A, B and C).Section 'A' covers the demographic information of the respondents. Section 'B' contains fifteen items designed to ascertain patterns of teacher-students relationship. Section 'C' contains ten items designed to ascertain students' perception of their relationship with their teacher. Section 'B' and 'C' are modified likert-type scales with four options of Strongly Agree, Agree, Disagree and Strongly Disagree. The questionnaire is scaled thus for positively worded items: Strongly Agree=4, Agree=3, Disagree=2, Strongly Disagree=1

The reverse is the case for negatively worded items. A scale of 2.5(The average of the scale) was set as the decision marker. When the mean of the responses to an item is greater than or equal to 2.5,then the item is accepted and vice versa.

## **Validity of Instrument**

To determine the validity of the instrument, the drafted copies of the designed instrument was given to the supervisor for face validity. Also, two other lecturers in the Department of Curriculum and Instructional Technology (CIT) read the draft. Their inputs and suggestions were embedded in the final draft.

## **Reliability of the Instrument**

In order to determine the reliability of the instrument, the instrument was administered to (30) students selected from the population excluded from the study sample. The data collected were analyzed using Cronbach's alpha. A reliability co-efficient of 7.6 was obtained.

## **Administration of the Instrument**

Copies of the questionnaire were administered personally by the researcher to the respondents. Collection of the instrument was on-the-spot.

## **Method of Data Analysis**

The research questions items use analyzed using frequency count, simple percentage, mean and standard deviation while the hypotheses were analyzed using t-test and Analysis of Variance (ANOVA).

## CHAPTER FOUR

### PRESENTATION OF RESULT AND DISCUSSION OF FINDINGS

This chapter presents the results of the study and their discussion. The data are presented in tables and arranged according to the order of the research questions raised and hypothesis tested.

#### Presentation of Result

**Research Question 1:** What pattern characterizes the teacher-student relationship in Biology classrooms?

**Table 1: Descriptive Statistics on the Pattern that Characterizes the Teacher-Student Relationship in Biology Classrooms**

S/N	ITEMS	Sum	$\bar{x}$	SD	Remark
1	I find it difficult to allow myself to depend on my Biology teacher	244	2.88	1.16	Agree
2	My Biology teacher is concerned with the needs of his or her students	244	3.03	0.88	Agree
3	It is difficult for me to feel connected to my Biology teacher	244	2.28	0.92	Disagree
9	I prefer not to get too close to my Biology teacher	244	2.11	0.94	Disagree
10	I find it easy to depend on my Biology teacher for help	244	2.75	1.04	Agree
12	I know my Biology teacher could make me feel better if I had a problem	244	2.81	1.05	Agree
14	My Biology teacher seems uncomfortable interacting with students	244	2.18	0.92	Disagree

15	I do not have good communication with my Biology teacher	244	2.46	1.13	Disagree
	Average mean		2.56	1.01	
4	My Biology teacher makes me doubt myself	244	1.89	0.78	Disagree
5	I am uncomfortable around my Biology teacher	244	1.85	0.82	Disagree
6	I feel scared sharing my thoughts with my Biology teacher	244	2.36	1.03	Disagree
7	I worry that I wouldn't measure up to my Biology teacher's standards	244	2.34	1.00	Disagree
8	I'm afraid that I will lose my Biology teacher's respect	244	2.16	0.98	Disagree
11	I worry a lot about my interaction with my Biology teacher	244	2.39	1.03	Disagree
13	I often worry that my Biology teacher does not really like me	244	1.98	0.89	Disagree
	Average		2.14	0.93	

In analyzing the items in Table 1, the following patterns were used for scoring:

A) Connectedness items: 1, 2, 3, 9, 10, 12, 14 and 15

B) Anxiety items: 4, 5, 6, 7, 8, 11 and 13

The responses shows that of the two teacher-student relationship patterns, connectedness is the most dominant pattern in Biology classroom since its average mean of 2.56 is greater than that of anxiety which is 2.14. This shows that senior secondary school students view their relationship with their Biology teacher as close or connected.

**Research Question 2:** How do students perceive the effect of their relationship with their teachers on their learning of Biology?

**Table 2: Descriptive Statistics on How Students Perceive the Effect of Their Relationship with Their Teachers on Their Learning of Biology**

S/N	ITEMS	Sum	$\bar{X}$	SD	Remark
16	My passion to learn Biology is because my Biology teacher always motivates me	244	3.11	1.01	Agree
17	My Biology teachers positive and patient attitude encourages me to learn the subject	244	2.97	0.93	Agree
18	My Biology teacher does not appreciate my contributions during Biology classes	244	1.96	0.83	Disagree
19	I feel a sense of belonging around my teacher, which makes me contribute to classroom discussions	244	2.76	0.96	Agree
20	My Biology teacher seems to only appreciate certain students, this makes me inactive in Biology classroom	244	2.10	0.96	Disagree
21	My Biology teacher makes me doubt my ability and this makes me unable to enjoy Biology classes	244	2.12	0.90	Disagree
22	I enjoy learning Biology because my Biology teacher is the best at teaching it	244	2.77	1.08	Agree
23	Learning Biology is difficult for me because I feel my Biology teacher does not like me	244	2.03	0.86	Disagree
24	My Biology teacher shows favoritism to some students, I so don't like learning Biology	244	2.08	0.90	Disagree
25	Biology teacher is my friend and I love learning Biology	244	2.87	1.01	Agree
	Significant score=2.5		2.48	0.94	

Table 2 showed that the students agreed to items 16( $\bar{X}$ =3.11), 17( $\bar{X}$ =2.97), 19( $\bar{X}$ =2.76), 22( $\bar{X}$ =2.77) and 25( $\bar{X}$ =2.87). These responses

indicates that students perceive their relationship with their Biology teacher motivates them to learn Biology, encourages them to learn the subject and makes them feel a sense of belonging around their teacher. In addition, they enjoy learning Biology.

However, responses to items 18( $\bar{x}=1.96$ ), 20( $\bar{x}=2.10$ ) 21( $\bar{x}=2.12$ ), 23( $\bar{x}=2.03$ ) and 24( $\bar{x}=2.08$ ) show that students disagreed to the contents of the items. These responses indicates that the Biology teachers appreciates all the students' contribution and do not show favoritism to any student. These qualities of the teachers have a positive impact on students' learning of Biology.

## Hypothesis Testing

**Hypothesis 1:** Students do not differ in their perceived relationship with their Biology teacher based on sex.

**Table 3: t-test on Gender Difference in Students' Perceived Relationship with Their Biology Teachers**

Variable	No Exp.	$\bar{X}$	SD	Df	t- Cal.	t- Critical	Sig (2- tailed)	Decision
Male	122	5.94	1.26	242	2.401	1.960	.032	H <sub>01</sub> Rejected
Female	122	5.51	1.50					

Table 3 shows that there is significant gender difference in perception of students in their relationship with their Biology Teachers. The table shows that the calculated value is 2.401 while the critical value is 1.960 at 0.05 alpha level; therefore the null hypothesis is Rejected..

**Hypothesis 2:** Students do not differ in their perceived relationship with their Biology teacher based on their class.

**Table 4: ANOVA of The Difference in Students' Perceived Relationship with Their Biology Teacher Based on Their Class.**

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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.951	3	.317	.162	.922
Within Groups	539.499	303	1.989		
Total	594.450	306			

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Table 4 shows the F- value =.11.721 this value is significant. Testing at .05 alpha level of significance, the p-value is greater ( $.001 < 0.5$ ) therefore the null hypothesis is rejected. Hence it would be concluded that there is a significant difference in students' perceived relationship with their Biology teacher based on their class.

### **Discussion of Findings**

Study findings of the first research question revealed that there is connectedness among Biology teachers and their students. Also it is not difficult for students to feel connected to their Biology teacher. Biology teachers do not make their students doubt themselves. It was seen that Biology teachers are concerned with the needs of their students. It was also

seen that students have good communication with their Biology teacher. Students are not anxious and scared when relating with their Biology teacher. Data for the second research question revealed that students' perception of their relationship with their teacher motivates them to learn Biology and makes them feel a sense of belonging around their teacher. In addition, they enjoy learning Biology. Also, it was seen that Biology teachers appreciate all the students' contributions and do not show favoritism to any student thereby improving the students' interest in learning Biology.

Results obtained as regard the hypothesis 1, revealed that Students differ in their perceived relationship with their Biology teacher based on sex. Hence, male and female students have different perceptions as regarding their relationship with their Biology teacher. For hypothesis 2, Students also differed in their perceived relationship with their Biology teacher based on their class. Hence, the respondents were found to hold varying perceptions across their different classes in the sampled schools.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **Introduction**

This chapter presents a summary of the research, its conclusion and recommendations.

#### **Summary of the Study**

This study was carried out to investigate the teacher-student relationship in Biology classroom in public senior secondary schools in Egor Local Government Area, Edo state. In the course of conducting the study, four research questions were raised out of which two were hypothesized. The study adopted the descriptive survey research design. The sample size for the study is two hundred and forty-four (244) senior secondary school of four public schools in Egor Local Government Area, Edo state. A questionnaire titled "questionnaire on the students' perception of their relationship with their Biology teacher" was the main instrument used for data collection. Data from the questionnaire were analyzed using descriptive

statistics of frequency, mean, standard deviation, while t-test and ANOVA statistics were used in the analysis of the hypothesis

## **Findings**

Finding revealed that:

1. Senior secondary school students perceive their teacher-student relationship with their Biology teacher as characterized by connectedness.
2. Biology students perceive that their relationship with their Biology teacher has a positive impact on their learning of Biology.
3. There is a significant difference in male and female students' perception of their relationship with their Biology teacher.
4. There is a significant difference in students' perception of their relationship with their Biology teacher based on their class.

## **Conclusion**

Based on the findings of the study it was concluded that senior secondary school students do not have anxiety relating with their Biology

teachers. It was also revealed that students and teachers have good communication, There is a sense of belonging among the students and familiarity with the teacher does not promote undisciplined behaviors among students in the classroom.

It was also revealed that there is a difference in male and female students' perception of their relationship with their Biology teacher similarly in different classes, students' perception of their relationship with their Biology teacher differed.

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APPENDIX

DEPARTMENT OF CURRICULUM AND INSTRUCTIONAL  
TECHNOLOGY

FACULTY OF EDUCATION

UNIVERSITY OF BENIN, BENIN CITY

**Dear Respondent,**

I am an undergraduate student of the university of Benin, Department of curriculum and instructional technology in the faculty of Education. I am currently carrying out a research on "Analysis of the teacher-student relationship of Biology teachers and their students". Please, feel free to respond honestly to the questions provided below as the information supplied here will be treated with utmost confidentiality.

**Thank you for your cooperation.**

**The Researcher,**

**Onyekwere Victory Ebube**

**SECTION A: Personal Information**

**Instruction:** Please tick (  ) the appropriate column

**Sex:** Female (  ) Male (  )

**CLASS:** S.S 1 (  ) S.S 2 (  ) S.S 3 (  )

**SECTION B: Patterns of Teacher-Student Relationship**

**Instruction:** Listed below are statements that represent possible opinion that you may have about your relationships with your Biology teachers. Please represent your opinion for each item by ticking the appropriate column.

S/N	ITEM	Strongly Agree	Agree	Strongly Disagree	Disagree
1	I find it difficult to allow myself to depend on my Biology teacher				
2	My Biology teacher is concerned with the needs of his or her students				
3	It is difficult for me to feel connected to my Biology teacher				
4	My Biology teacher makes me doubt myself				
5	I am uncomfortable around my Biology teacher				
6	I feel scared sharing my thoughts with my Biology teacher				
7	I worry that I wouldn't measure up to my Biology teacher's standards				
8	I'm afraid that I will lose my Biology teacher's respect				
9	I prefer not to get too close to my Biology teacher				
10	I find it easy to depend on my Biology teacher for help				

11	I worry a lot about my interaction with my Biology teacher				
12	I know my Biology teacher could make me feel better if I had a problem				
13	I often worry that my Biology teacher does not really like me				
14	My Biology teacher seems uncomfortable interacting with students				
15	I do not have good communication with my Biology teacher				

Scoring: Two teacher-student relationship patterns

a) connectedness items: 1,2,3,9,10,12,14 and 15

b) anxiety items: 4,5,6,7,8,11 and 13

**SECTION C: Student perception of relationship with teachers and their learning of Biology**

S/ N	ITEMS	Strongly Agree	Agree	Strongly Disagree	Disagree
1	My passion to learn Biology is because my Biology teacher always motivates me				
2	My Biology teacher's positive and patient attitude encourages me to learn the subject				
3	My Biology teacher does not appreciate my contributions during Biology classes				
4	I feel a sense of belonging around my teacher, which makes me contribute to classroom discussions				
5	My Biology teacher seems to only appreciate certain students, this makes me inactive in Biology classroom				
6	My Biology teacher makes me doubt my ability and this makes me unable to enjoy Biology classes				
7	I enjoy learning Biology because my Biology teacher is the best at teaching it				
8	Learning Biology is difficult for me because I feel my Biology teacher does				

	not like me				
9	My Biology teacher shows favoritism to some students,I so don't like learning Biology				
10	Biology teacher is my friend and I love learning Biology				