

EFFECT OF LEARNING ACTIVITY PACKAGE ON SENIOR SECONDARY SCHOOL STUDENTS' PERFORMANCE IN BIOLOGY IN OTUKPO, BENUE STATE

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Abstract

The Study Was Designed And Conducted To Determine The Effect Of Learning Activity Package (lap) On Senior Secondary School Students' Performance In Biology. Two Research Questions And Two Null Hypotheses Were Formulated. A Quasi-experimental Pre-test, Post-test, Non-equivalent Control Group Design Was Adopted For The Study. A Sample Of 317 Ss Ii Students Offering Biology, Drawn By Both Purposive And Simple Random Sampling Techniques From Four Co-educational Schools In Otukpo Educational Zone Was Used For The Study. The Four Schools Were Assigned To Experimental And Control Groups Respectively. Two Intact Classes In Each School – (one As Experimental And The Other One As Control Group) Were Randomly Selected. The Experimental And Control Groups Were Taught The Biology Topic (unit Of Life) By The Regular Biology Teachers. The Instruments – Pre-bpt And Post-bpt Were Developed, Duly Validated And Reliability Of Equivalence, Internal Consistency And Stability Duly Established (0.79 And 0.83 Respectively) Before Using Them For Data Collection. The Research Questions Were Answered Using Mean And Standard Deviation While The Hypotheses Were Tested At ($p < 0.05$) Using Analysis Of Covariance (ancova). The Result Of Data Analysis Showed That There Is A Significant Difference Between The Experimental And Control Group, With The Mean Performance Scores Of The Lap Group Being Significant More Than The Control Group; There Was No Significant Difference In The Mean Performance Scores Of Male And Female Students In Biology When Lap Was Used. A Major Educational Implication Of The Findings Is That The Use Of Lap Does Not Show Any Significant Difference In The Achievement Of Male And Female Students. Thus The Use Of Lap Will Not Only Help Reduce The Problem Of Male Being Regarded As High Achievers In Science-related Courses But Will Also Encourage The Performance Of Female Students In Such Courses Among Others.

Keywords: Biology, Learning Activity Package, Gender And Performance

Introduction

Science And Technology Are Important Tools For Development And Productivity In Any Nation. Science Is A Necessity For Every Nation That Wants To Maintain Its Independence, Sovereignty, Self-reliance, Ensure Growth, And Have Its Head Held High Among Civilized Nations. This Is Because Science And Technology Provide The Basic Tools Of Industrialization And Economic Development In The Areas Of Communication, Transport, Energy, Information, Pollution And Waste Control, Among Others. In Nigeria, The Study Of Science Is Of Great Importance, That A Lot Of Emphasis Has Been Laid On The Teaching And Learning Of Science With The Major Aim Of Science Education, As Contained In The National Policy On Education, Being To Equip The Students To Live Effectively In This Modern Age (federal Ministry Of Education Fme, 2018). This Can Be Achieved By Inculcating The Necessary Scientific Skills And Attitudes In The Learners.

The Inculcation Of These Scientific Skills And Attitudes In Students Can Only Be Achieved Through The Proper Teaching Of The Various Science Subjects. These Include Biology, Chemistry, Physics, Mathematics, Health Science, Agriculture And Other Subjects. Biology Is A Natural Science With A Broad Scope But Has Several Unifying Themes That Tie It Together As A Single, Coherent Field. For Instance, All Organisms Are Made Up Of Cells That Process Hereditary Information Encoded In Genes, Which Can Be Transmitted To Future Generations (ugwu, 2017). Proper Teaching Of Biology Will Help The Students To Solve Personal And Societal Problems. The Knowledge Of Biology Helps To Debunk Superstitions, Know The Function Of The Various Parts Of The Body, Enables One To Understand Oneself, Maintain Good Health Practices Such As The Use Of Clean Water, Good Sanitation, Balanced Diet, The Need To Vaccinate, Among Others (ugwu, 2017). The Importance Of Biology As A Secondary School Subject Can Be Further Illustrated By The Fact That A Candidate Must Obtain A Credit Pass In It, For Admission Into Any Nigerian University To Study Such Important Science – Based Courses As Medicine, Pharmacy, Biochemistry, Microbiology And Food Technology.

Despite The Fact That Biology Is Important To Human Progress; Students Still Perform Poorly In It. The Low Performance As Reported In Various Biology Tests Is Evident In Most Science Subjects In General. This Is Pointed Out By The Report Of The Registrar, Joint Admission And Matriculation Board (2016) Who Indicated That The Performance Of Candidates In The University Matriculation Examination (ume) Over The Last Three Years Has Shown A Steady Decline. This Is An Indication Of Low Performance.

This Is Also Evident In The Chief Examiners Report Of The West African Examination Council (2019). There Are Indications That Candidates Who Sat For The Wasc Examination In Biology Subject Exhibited The Following Lapses:

Inability To Properly Interpret Questions, Failure To Write Or Answer Their Questions Logically, Systematically And Convincingly, Poor Drawing Skills, Shallow Understanding Of Most Concepts In Biology, Poor Power Of Expression, Inability To Relate Features To Functions, Inability Of The Candidates To Correctly Spell Many Biological Terms.

The Aforementioned Gives An Indication That There May Be Low Desire In The Area Of Biology As One Of The Science Subjects. This May Lead To Appreciable Low/poor Choice Of Biology Or Other Science Subjects As A Subject To Offer In The Secondary Schools Or Tertiary Institutions. This May Also Be An Indication That Meaningful Learning Had Not Taken Place. The Overall Performance In Biology And Other Sciences Are Very Much Related To Many Other Variables, Which Are Evident In The Studies Carried Out By Other Researchers. The Variables Include: The Ability Levels Of The Learners, Gender Issues, Teaching – Learning Environment (location), Teaching Methods, Teachers Ability To Use The Various Methods And Materials Provided, Students Backgrounds, Level Of Intelligence Of The Students, Students Cognitive Styles, Among Other Variables (moore, 2010; Mukalia, 2010; Ogunleye, 2012; Eccles, 2012).

Various Teaching Methods Are Used By Teachers In The Teaching Of Biology Aimed At Bringing About Meaningful Learning. These Include Lecture Method, Demonstration Method, Discovery, Project, Inquiry Among Many Others. The Most Commonly Used Is The Lecture Method (ugwu, 2017). This Is Mostly Employed By Most Biology Teachers Because Of Some Of Its

Advantages Which Include The Fact That It Can Be Used To Cover A Large Content Area At A Time And The Students Are Given The Same Content At The Same Time. Another Major Advantage Is That It Can Be Used To Teach A Large Class Which Is A Prominent Feature In Most Nigeria Secondary Schools. Lecture Method Can Be Very Useful In Teaching When Used In Conjunction With Other Methods Especially For The Purpose Of Introducing The Topic (ugwu, 2017). Despite All These Advantages, The Lecture Method Employed In The Teaching Of Biology Has Some Flaws, Which Might Be One Of The Causes Of The Poor Performance In Biology. According To Awotua-efebo (2011), The Lecture Method Is Mainly Teacher – Centered, With The Students Being Consistently Passive And Contents Are Taught As Absolute Knowledge. This Method Had Failed In The Recognition Of The Uniqueness Of The Inquiry-based Nature Of Science And The Learner's Individuality (ugwu, 2017). Furthermore It Does Not Facilitate The Development Of Reasoning Skills And Processes In The Students. These, Among Other Reasons Had Not Enhanced Learning In Students And Thus Had Led To Poor Performance Of Students In The Biology.

A Learning Activity Package (lap) Is A Student – Centered, Activity-oriented Teaching Strategy Where The Teacher Acts As A Facilitator Of Learning, Guiding The Students Through A Series Of Activities And Problems, Which May Help Learners To Achieve Highly. In Lap, Learning Materials Are Broken Into Small Steps That Are Arranged Sequentially From Known To Unknown And In An Increasing Order Of Difficulty. This Suggests That Lap Calls For Individualized Student Attention. In Solving The Students Problems Of Poor Performance In Biology, There Is The Need To Shift From The Lecture Method Of Teaching Biology To A More Innovative Method - A Method That Should Seek For A Way Of Making Teaching More Precise, While At The Same Time Adjusting Both The Objective And Methods Of Learning To The Needs And Characteristics Of The Individual Learners. This Innovative Method Enables Each Student To Work At His Own Pace Thus Accommodating Both The Fast And Slow Learners. In This Method, The Goals Of The Subject Matter Are Spelt Out Very Well That Students Can Arrive At The Same Goals Independently Along Some Avenue Other Than The One Provided By The Teacher. This Calls For An Individualized Type Of Instruction.

Individualized Instruction, According To Chauhan (2008), Is That In Which The Teachers Attend To Learning Needs And Problems Of Each Learner Separately. In Other Words, It Means The Tailoring Of Instruction To The Particular Needs And Ability Of Each Learner.

The Individualized Instruction Method Can Be Approached And Achieved Through Different Methods Such As Programmed Instruction (pi), Computer Assisted Instruction (cai), Independent Study (is), Audio-tutorial Training Models (attm), Learner-controlled Instruction (lci), Personalized System Of Instruction (psi), Protocol Packages (pp), And Learning Activity Package (lap) Among Others. Learning Activity Packages (lap) Which Is One Of The Teaching Methods Employed To Achieve Individualized Instruction Was The Focus Of The Present Study.

Computer Assisted Instruction (cai) Had So Much Been Advocated And Had Been Established By Research Finding To Be Good For Individualized Instruction. The Use Of Cai In Nigerian Schools Had Been Hampered By Non-availability Of Computer Systems In Most Public Schools And Even Some Private Schools (eze, 2014). Based On The Non-available Of These Computer Systems In Our Nigerian Schools The Researcher Advocates For The Trial Of Another Individualized Method Of Instruction Which Can Be Readily Available And Can Be Affordable. This Calls For The Trial Of The Use Of Learning Activity Package (lap).

From The Researches Available To The Researcher The Efficacy Of Lap As A Teaching Technique In Biology Was Carried Out By Abu (2011) In Zaria, Abu Used Lap As An Instructional Material On Students' Performance In Biology. In The Study, The Lap Was Developed On The Topic Micro-organisms And The Subjects Used Were 25 Randomly Selected Senior Secondary Two (ssii) Students.

The Above Study Is Indirectly Measuring Performance In Biology And There Was No Evidence Of Validation Of The Instrument Used. There Was Also No Indication Of The Test Of

Reliability Of The Instrument Used To Ensure That The Generalization Of The Study Will Not Be Limited. The Researcher Was After The Learners' Mastery Of The Objectives Of Lap And No Other Variable Was Employed In The Study. Moreover, The Method Of Data Analysis Was The Percentage And There Was No Control Group. Hence, In This Study, More Control Of The Characteristics Of Lap Was Adopted By Remedying The Above Deficiencies Including Using Experimental / Treatment And Control Groups For Assessing The Efficacy Of The Package. Variables Like Retention And Interest Levels Were Considered In The Present Study.

However, The Present Study Focused On The Application Of Lap As A Method Of Instruction And Not As An Instructional Material, And Was Carried Out In Otukpo, Benue State. The Developed Lap On The Unit Of Life Was Used To Ascertain The Efficacy Of The Method With Respect To Students' Performance In Varying Ability Levels. The Reliability Of The Lap Was Tested To Ensure That The Results Of The Study Were Not Limited.

Statement Of The Problem

The Persistent Poor Performance Of Students In Biology As Revealed By Both Research Results And Waec Chief Examiner' Reports Calls For Concern Especially For Teachers Of Biology. The Problem Has To A Large Extent Been Attributed To Ineffective Teaching Method Employed By The Teachers – Especially Lecture Teaching Method Which Is Teacher-centered.

Consequently, There Is The Need To Improve On The Teaching And Learning Of Biology By Exploring The Use Of Some Innovative Learner Centered Teaching–learning Methods, Since It Is Believed That Meaningful Learning May Be As A Result Of Active Participation By Students. Findings Have Shown That They Are Student Centered And Can Also Enhance Learning And Performance, But The Problem Of Large Class And Non-availability Of Computer Systems In Most Nigerian Classes Has Made Their Practicability Nearly Impossible. Therefore There Is Still The Need To Investigate Other Innovative Child-centered Method That Is Affordable, Readily Available As Well As Flexible, Combing Both Package Learning And Practical Activities (i.e. Minds – On And Hands – On). Such A Method Should Enable The Teacher To Easily Diagnose The Problems Of The Individual Learner And Allows The Learners To Evaluate Themselves, Receiving Immediate Knowledge Of Result. These Calls For The Trial Of Another Individualize Method Such As Learning Activity Package (lap). Hence, The Study Was Set To Find Answer To The Question: What Is The Effect Of Lap On Students' Performance In Biology?

Research Questions

The Following Research Questions Were Formulated To Guide The Study:

1. What Are The Mean Performance Scores Of Senior Secondary Two (ss Ii) Students Taught Biology Using The Learning Activity Package (lap) And Those Taught Using Conventional Lecture Method?
2. What Is The Difference Between The Mean Performance Scores Of Ss Ii Male And Female Students Who Were Taught Biology Using Lap?

3. Hypotheses

The Following Hypotheses, Which Were Tested At 0.05 Level Of Significance Were Formulated To Guide The Study:

1. There Is No Significant Difference Between The Mean Performance Scores Of Ss Ii Students Who Were Taught Biology Using Lap And Those Who Were Taught Using Conventional Lecture Method.
2. There Is No Significant Difference Between The Means Performance Scores Of Ss Ii Male And Female Students Who Were Taught Biology Using Lap

Methodology

The Design Of The Study Was Quasi-experimental Design Of The Pre-test Post-test Non-equivalent Group Desig. The Design Is Often Used In Classroom Experiments When Experimental And Control

Groups Are Assembled As Intact Classes And No Possibility Of Randomization. Hence, Intact Classes Were Used And There Was No Random Assignment Of Research Subjects.

The Population Of The Study Comprised Of All Public Co-educational Senior Secondary Two (ssii) Students Who Were Offering Biology In The Three Local Government Areas In Otukpo Education Zone Of Benue State, 2022/2023 Session. Altogether, There Were 2022 Students. The Choice Of Ssii Students Was Due To The Fact That “unit Of Life” Is Meant For Ssii As Contained In The Biology Core Curriculum Of The Federal Ministry Of Education (fme, 2018) For Senior Secondary Two (ssii). The Choice Of Co-educational Secondary Schools Was That Gender Is A Variable In The Study. The Sample Used For The Study Consisted Of A Total Of 317 Ssii Biology Students (157 Males And 160 Females) Drawn Out From 18 Co-educational Secondary Schools In Otukpo Education Zone. This Is Because Gender Is A Factor In The Study. The 18 Co-educational Schools Were Purposively Selected From 29 Secondary Schools In The Zone.

From The 18 Co-educational Schools, Four Schools That Had Up To Two Or More Ssii Classes Were Purposively Selected. Two Intact Ssii Classes In Each School, One Intact Class Was Assigned To Learning Activity Package Of Instruction (lap) While The Other Intact Class Was Assigned To Lecture Method Of Instruction. The Selection Of The Classes For Either Of The Instructional Methods Was Done Through Simple Random Sampling (balloting).

Results

Research Question One

What Are The Mean Performance Scores Of Senior Secondary Two (ss Ii) Students Taught Biology Using The Learning Activity Package (lap) And Those Taught Using Conventional Lecture Method?

Table 1mean Performance And Standard Deviation Scores Of Students Taught The Unit Of Life With Lap And Lecture Method

GROUP		MEAN	SD	N
LAP	Pre test	12.05	7.15	160
	Post test	22.21	5.91	
	Gain Score	10.16		
Lecture Method	Pre test	9.45	5.63	157
	Post test	16.37	5.23	
	Gain Score	6.92		

As Shown In Table 1 Above The Mean Scores Of Students Taught Unit Of Life Using Lap Were 12.05 And 22.21 Respectively In Pretest And Posttest, With Standard Deviation Of 7.15 And 5.91. On The Other Hand, The Control Group Had The Mean Score Of 9.45 And 16.37 And Standard Deviation Of 5.63 And 5.23 Respectively In The Pretest And Post-test.

Table 1 Also Reveals That The Lap Group Got A Gain Score Of 10. 16, While The Lecture Group Had A Gain Score Of 6.92. The Lap Group Differed With The Lecture Method Group In The Mean Biology Performance Gain Score By 3.24. This Indicates That Students Taught With Lap Achieved Higher Than Students Taught With Lecture Method. However, The Standard Deviation Scores Of The Students In The Post Test For The Lap Group Was 5.91 While For The Lecture Group It Was 5.23, Indicating That The Students Individual Scores Were More Clustered Around The Mean With Lecture Method Than With The Lap.

Research Question Two

What Is The Difference Between The Mean Performance Scores Of Ss Ii Male And Female Students Who Were Taught Biology Using Lap?

Table 2: Mean Performance And Standard Deviation Scores Of Ssii Students Showing The Interaction Between Teaching Strategies With Gender When Taught The Unit Of Life.

N = 317

GROUP	STATISTIC	MALE	FEMALE	OVERALL
Treatment	Mean	22.93	21.49	22.21
	SD	5.10	6.57	5.91
	n	80	80	16
Control	Mean	17.18	15.56	16.36
	SD	4.51	5.75	5.23
	n	77	80	157
Overall	Mean	20.11	18.53	19.31
	SD	5.60	6.84	6.30
	n	157	160	317

Table 2 Reveals The Mean Performance Scores Of Male And Female Students In The Treatment Group As 22.93 And 21.49 With Standard Deviation Of 5.10 And 6.57 Respectively. For The Control Group The Mean Scores Were 17.18 And 15.56 For The Male And Female Students With Standard Deviations Of 4.51 And 5.75 Respectively.

This Shows That Both The Male And Female Students Of The Treatment Group Achieved Better Than Their Counterparts In The Control Group. But Within The Treatment Group, The Male Students Achieved Better Than Their Female Counterparts. The Standard Deviations Show That There Are Extreme Scores With More In The Female Groups Of Both Treatment And Control Groups. The Table Also Revealed That The Overall Mean Performance Scores Of Male And Female Students In Both Treatment And Control Groups Were 20.11 And 18.53 With Standard Deviations Of 5.60 And 6.84 Respectively. Thus Irrespective Of The Teaching Method Used, The Male Students Seemed To Achieve Better Than Their Female Counterparts In Bat. The Standard Deviation Shows Extreme Scores, With More Extreme Scores In The Female Group Than In Male Group.

Hypothesis One

There Is No Significant Difference Between The Mean Performance Scores Of Ss Ii Students Who Were Taught Biology Using Lap And Those Who Were Taught Using Conventional Lecture Method.

Table 3: Analysis Of Covariance Of Student Mean Performance Scores In Bat (instruction Method X Gender And Instruction Method X Ability Group.)

Source of Variation	Type of Sum of Square	Df	Mean Square	F-cal	Sig	Decision
Corrected Model	6294.81	11	572.26	27.99	0.00	S
Intercept	1739.56	1	1737.56	85.00	0.00	S
Pretest (covariate)	466.57	1	466.57	22.82	0.00	S
Ability	48.25	2	24.13	1.18	0.31	NS
Method	86.98	1	86.98	4.26	0.04	S
Gender	42.16	1	42.16	2.06	0.15	NS
Ability X Method	181.07	2	90.54	4.43	0.01	S
Method X Gender	22.86	1	22.88	1.12	0.29	NS
Error	6234.89	305	20.44			
Total	130721.00	317				

S = Significant; Ns – Not Significant 317; <0.05

Table 3 Shows That The Calculated F-value For The Effect Of Treatment (method) On Students' Performance In Bat Is 4.26 Significant At 0.04 Level Of Significance, Which Is Less Than 0.05 Set For The Study. The Null Hypothesis Is Therefore Rejected. This Means That A Significant Difference Exists In The Mean Performance Scores Of Biology Students Taught With Lap And Those Taught With Lecture Method.

Hypothesis Two

There Is No Significant Difference Between The Means Performance Scores Of Ss Ii Male And Female Students Who Were Taught Biology Using Lap

Table 3 Shows That The Calculated F-value For The Effect Of Gender No Students Performance In The Unit Of Life Taught Is 2.06 Significant At 0.15 Level Of Significance Which Is Greater Than 0.05 Level Set For The Student. The Null Hypothesis Is Accepted. This Means There Is No Significant Difference In The Mean Performance Scores Of Male And Female Students In Post Biology Performance Test.

Discussion

Result Of Data Analysis On Table 1 Shows That Students Taught With Lap Performed Significantly Better In The Biology Performance Test Than Their Counterparts Who Were Taught Using The Lecture Method.

This Result Is In Agreement With The Result Of Earlier Studies Carried Out By Burnside (1991), Abu (2011) And Eriba &sesugh (2016) Who Found In Their Separate Studies, That Learning Activity Package (lap) Was More Effective Than The Conventional Methods In Fostering Students' Performance. The Relative Superiority Of The Lap Over The Lecture Method In Enhancing Students' Performance In Biology Units Could Be Attributed To The Fact That, As A Teaching Method The Lap Is Student – Centered And Ensures Active Participation Of Students In The Teaching Learning Process More Than The Lecture Method. The Lecture Method Often Subjects The Learner To The Position Of The Passive Recipient Of The Facts As Handed Down To Him By The Teacher. Moreover, The Activities In The Lap Were Carried Out By The Students Themselves, At Their Own Pace During And After The School Periods; Which Is In Contrast To The Lecture Method Where The Teacher Did Most Of The Work For The Students.

The Active Participation Of The Students Involving The Use Of Several Sense Organs, Invariably Should Arouse Greater Students Performance Going By Psychological Theories (blair And Stone, 1975). Given, These Prevailing Circumstances Under Which The Lap And The Lecture Method Are Employed In The Classroom Instruction, It Is Not Surprising That The Treatment Group (lap) Out – Performed The Control Group In Bat. The Above Result On The Effect Of Lap On Performance, Does Not, However, Agree Completely With Hwong (1993) Who Found That Co-operative Method Of Learning Enhances Performance Better Than The Individualized Method Employed In The Teaching Of Music. The Effectiveness Of The Co-operative Learning Method May Be Due To The Nature Of The Subject Matter, Which Is Music That Requires Unified And Co-operative Effort For Efficient Production.

Interaction Effect Of Treatment And Gender On Students' Performance

It Has Been Established In This Study That There Is No Significant Interaction Effect Of Treatment And Gender On Students; Mean Scores In The Post Performance Test. The Finding Of This Study Is In Agreement With Abonyi (2008) And Iioputaife (2011) Who Found No Interaction Effect Between Gender And Instructional Model. However, The Finding Of The Study Disagrees With Eze (2014) And Ezeudu (2015).

The Performance Of Male And Female Students May Not Vary Due To Variation In The Instructional Models, Especially With The Learning Activity Package (lap) Which Is Activity Oriented And The Learners Are Allowed To Learn At Their Own Rate, Offering The Learner The Unique Opportunity To Read, Work Accept And Internalize The Basic Biology Concepts At Their Own Pace, Master The Subject As Indicated By The Accuracy Of Their Own Responses. The Approach Equally Allows Learner The Knowledge Of Immediate Feedback Which Serves As A Great Motivation Propelling Learners To Want To Learn More.

Conclusion

Learning Activity Package (lap) Was Found To Be More Effective Than The Lecture Method Of Students' Performance In Biology. While The Mean Performance Score Of The Male Students Was Found To Be Slightly Greater Than Their Female Counterpart Using Lap, There Was No Significant Difference In The Extent Of Performance Of Biology Concepts Between The Treatment And Control Groups. Also The Male Student' Mean Retention Score Was Significantly Greater Than That Of The Female Students. There Is No Significant Interaction Effect Of Treatment And Gender On Students' Mean Performance And Retention Scores. Student' Ability Levels And Treatment Had Significant Interaction Effect On Their Performance In The Biology Concepts Taught.

Recommendations

In View Of The Afore-mentioned Educational Implications Of The Result Of This Study, The Following Recommendations Were Made:

1. As The Use Of Learning Activity Package Has Been Found Effective In Promoting Performance In Senior Secondary School Biology And Since This Teaching Method Is Relatively New In Nigeria, It Should Be Included In The Biology Curriculum Of Teachers' Training Tertiary Institution, So As To Popularize Its Use Among The Teachers And Hence Bring About More Effective Learning Of Biology In Our Secondary Schools.
2. In View Of The Established Efficacy Of The Learning Activity Package And The Fact That Most Of The Serving Biology Teachers May Not Be Familiar With Its Use, Seminars And Workshops Should Be Organized By Government And Relevant Professional Bodies E.g Science Teachers Association Of Nigeria (stan) To Educate And Sensitize The Teachers On The Use Of The Learning Activity Package Of Biology Teaching And Learning.
3. As Students Of Different Ability Levels Have Been Shown To Benefit Differently From Biology Lesson With Respect To Performance And Retention Using Learning Activity Package, Biology Students Should Be Placed In Classes According To Their Ability Levels, To Prevent The Slow Learner Being "dragged" By The Fast Learners.
4. Government Agencies And Professional Associations Whose Responsibility It Is To Design And Revise The Curriculum For Secondary Schools Should Incorporate And Emphasize The Use Of Learning Activity Package Method In The Teaching Of Senior Secondary Schools Biology.
5. Government Agencies And Professional Bodies Such As Nerdc And Stan Should Sponsor Further Researches On The Efficacy Of The Learning Activity Package In Promoting Performance In Other Units Of Senior Secondary Schools Biology
6. Government, Through The State And Federal Ministries Of Education Should Encourage The Biology Textbook Writers To Write And Publish Biology Textbooks Based On The Learning Activity Package Instructional Method.

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