



## Students' result oriented positive learning attitudes in sciences

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### ABSTRACT

The main aim of science and technology is to better man's life and his environment. Every learning situation in science based courses, subjects or areas requires a repertoire of essentials skills to achieve success. Success is built in every learning and learner but demands the right skills. Since no learner is perfect, such skills in learning make the learner more proficient as he continues to study and practice. One of such skills is the rightful and positive attitudes. Attitude can distort the perception of information and affect the degree of their retention. This paper examines what constitutes students' positive learning attitudes, habits, behaviours and qualities that are predictors to positive attitudes which in turn beget positive results in science learning. Factors which beget negative learning attitudes and their implications to learning are also considered.

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### Introduction

Science embraces every attempt of humans to explore, interpret and manage the natural world. It is dynamic and essentially concerned with search and explanation of both regularities and irregularities in nature. Science involves the quest for actions and reactions, causes and effects in the environment. The core purpose of science is to transform the environment towards improving the general quality of life; i.e. making the world a better place to live. Perhaps to overhaul this, positive results must be achieved through intellectualization of facts and values in an unbiased manner (Samuel, 1996).

Results generally appear to be one of the fundamental and essential goals behind every life struggle. The form it takes could be positive or negative in nature, but the most cherished is the positive platform which indeed has consequential effect of improving the worth of the student in every learning situation. These results are the main objective of every student and are brought about by the right and positive attitudes.

#### Students' learning attitudes

Students' learning attitudes have emotional contents and vary in intensity and generality according to the range of situations they apply. Scholl (2002) opined that attitude is a mental predisposition to act and is expressed by evaluating a particular entity with some degree of favour or disfavor. However, Rosemund (2002) affirmed that a favourable or disfavourable evaluative reaction towards learning events, programs and activities exhibited in student's beliefs, feelings, emotions or intended behaviours is an attitude. Attitude as described by Akuezilo (1993) is a mental state of readiness organized through experience, exacting a directive or dynamic influence upon the student's response to all objectives and situations with which it is related.

Other definitions include the one by Festus (2007) which maintains that attitude is the only but one among many terms used in describing acquired or learned behavioural dispositions. This implies that learning attitudes are the only things which the students can boast of after a lot of learned events have faded

away. Ogudia (2003) describes learning attitudes as that dispositional entity of the student which has great influence on his learning while Ajzen (2001) confirm that attitude is a mental position with regards to a feeling towards a particular state.

#### Students' positive to negative learning attitudes

Positive and negative learning attitudes/emotions at the same time do not occupy the student's mind. One must dominate at a time. It is the student's responsibility to ensure that the positive emotion constitutes the dominating influences of his disposition. Negative emotions are not induced but they occupy the student's disposition where there are no positive dominating attitudes. The presence of a single negative emotion in a student's disposition is sufficient enough to destroy chances of constructive thoughts which beget positive attitudes in sciences.

A positive learning attitude attracts opportunities for success while negative learning attitudes attract opportunities for failure and doesn't even take advantage of such successful learning opportunities when they do come along naturally. Positive results are nothing but reflections of mental positive learning attitudes of the student which he can organize, guide and completely control. This means that every student is what he is because of the dominating mental attitudes which the student allows to occupy his learning dispositions. A mental attitude can be just as stimulating and efficient as a deed in changing an emotion from negative to positive. However, mental attitudes are determined by our thoughts, statements and aspirations.

Positive learning attitude is everything a student needs, perhaps it worth 100%. When the alphabets of 'attitude' are replaced with numerical values i.e. a = 1, t<sup>3</sup> = 20<sup>3</sup> (60), i = 9, u = 21, d = 4 and e = 5 gives 100. So, if a student is possessing positive learning attitudes, he's 100% sure to succeed and enhance his learning productivity, but if he has negative learning attitudes, his learning results, no doubt will always be 100% poor. Both failures and success are the direct products of a student's learning attitudes. So, learning attitudes whether

positive or negative, are manifested in student's emotions, feelings, results and performances.

Positive learned attitudes are those things which remain after a lot learned events and behaviours have been forgotten and they in turn influence the nature and future of learning in the student. To gain, sustain and maintain positive learning attitudes, fear, anxiety and worry must be conquered.

#### **Students' positive learning attitudes**

Positive learning attitudes in students are characterized by words like 'faith, tolerance, tact, hope, integrity, optimism, courage, constructive initiative, generosity and kindness and it takes effort, patience, determination, persistence, co-operation, practice and diligence to maintain positive learning attitudes. However, for students to motivate their positive learning attitudes as to yield positive results in science, definite purpose, clean and clear thinking, creative vision, courageous actions and true perceptions must be applied with enthusiasm and faith.

Victory is built in every student but is achieved with student's positive learning attitudes. Positive learning attitudes are catalyst which propels students to learn and work towards a successful and worthwhile end. The following are essential students' positive learning attitudes.

**Regularity:** The word regularity means the occurrence of an event at a fixed interval of time. It is not a new term in every system of human endeavour, mostly the education sector. Omatseye (1992) affirm that regularity is a developed code of conduct in which some students always remain present in schools with the aim of learning without missing anything, they are expected to know. Thus, regularity is a behavioural pattern of life which positively affects the 'willing students' in terms of learning development.

Ajeniji cited in Festus (2007) maintain that regularity is the act of being obedient to rules and regulations by the students. Rosemund (2006) opined that it involves conforming to a rule of equal disposition in space or time to some standard pattern of proportion of rules or regulations. Regularity is one of the educational achievements that positively affect the growth and academic performance of the student and that's why it is required for effectiveness in science learning.

**Diligence:** Is a virtue required of every student. It is defined as the quality or attitude of doing what is right when doing what is wrong is much easier (Festus, 2007). Diligence which is a behavioural attitude of working industrially and the tendency to be dutiful by a student, begets confidence which in turn has measurable effect on the students' ability.

**Persistence:** This is the ability of the student to endure and continue in his learning without abandoning it in the face of difficulties, pains, repeated failures, troubles and hardships. It is an essential attitude in the transformation of desires into reality through work. Persistence is a direct product of habit and lack of it is a major source/cause of failure and accounts for why most science students abandon their programs. The relevance of persistence manifest when it is applied during scientific research and positive results achieved.

**Curiosity:** It is the desire for understanding, when one is confronted by novel situation(s) which cannot be easily explained in terms of the existing knowledge and experience (Dienye, 2006). Curiosity is the eagerness, desire or inquisitiveness to know, find out, or to get information that is special about both known and unknown situations in the course of learning. Curiosity is also defined as an intense devotion developed in a student towards his learning. Curious students

always ask questions to know – a **question** is any statement (oral, written or through body gasturation) made to oppose a command or request for a verbal or non-verbal response. Questions are of great benefits to the student because they;

- Sensitize the student's mind,
- Helps the student to focus his thoughts towards their learning,
- Clarifies issues of complication and ascertains understanding in the students,
- Stimulates critical reasoning and analytical thinking,
- Makes learning interesting mostly when questions are rightly answered,
- Arouses interest and curiosity in the students,
- Make the students to arrive at a particular concept through personal reasoning,
- Are thought provoking

Perhaps, without this attitude, extending knowledge in science can not be possible. No wonder it is said questions create knowledge and not answers, since science is all about making inquiry into both known and unknown situations. So, curiosity is the active driving force for an activity and compelling emotion that inspires actions in a student.

**Co-operation:** Science involves working together to achieve an unbiased result by scientists. So, cooperation is defined as the active working together in perfect harmony towards a common objective by two or more students. This attitude induces into the student's disposition the spirit and will-power to discard discouragement, fear and procrastination and to embrace success consciousness. No student can ever achieve success without the help and cooperation of others.

Cooperation is an attitudinal behavior which leads to accumulation of intelligence, experience and knowledge. It is the building and finishing point which brings about the full understanding of self, others' potentials, natural and scientific laws. However, through cooperation, a student appreciates and uses the full strength of the experiences, knowledge, qualities and skills of other students, as if they are his.

**Resourcefulness:** Success in learning comes to those who are conscious of it, likewise failure is an inheritance of all who embrace it. Being resourceful is good but is difficult to develop and sustain. Resourcefulness is the act of developing initiatives, thoughts, ideas experiences and being good at problem solving, especially in difficult situations.

Resourcefulness also involves critical reasoning, clear thinking and mental precision. No student is resourceful until he believes, he can acquire it. Resourcefulness brings about the sustenance of the intelligence, experience and knowledge needed for learning in sciences. This attitude is the basis for expansion and the study of science.

**Punctuality:** It is an attitudinal behavior of arriving at an arranged time of event. Punctuality which is a vital key to every source of success especially in science involves doing things precisely or close to the time they are expected to be done. There is no student that has achieved success without being punctual to his studies, learning activities, events and programmes. However, the cultivation and application of this attitude is an essential move to enhancing learning in science.

Procrastination, lack of interest, weakness of desire, un-organized plans, inadequate planning and fear are factors which hinder punctuality in students mostly when it comes to learning science courses.

**Humility:** This is the attitude of not being proud in character. Rosemund (2006) maintains that humility is more of a voluntary self abasement and a desirable ingredient of a mature personality by the recognition of one's limitations as well as limitations of science itself.

Students' humility manifests in their polite, cultured, refined, respectful, clean and faithful nature of learning in science. Humility as a positive learning attitude preserves good personality, creative initiative ambitions, self consciousness and self control.

**Honesty and integrity:** The basis for learning science is to frontier and make the world a better living place for humanity, perhaps scientific inquiry should be reproducible and this depends on honesty of the researcher and his data. Honesty is an attitude concerned with the conscious act of truthfully reporting exact observations, recording accurate events and data. Science education demands students to be honest for knowledge expansion to continue.

**Carefulness, cleanliness and orderliness:** These attitudes are concerned with accuracy, precision, perfection, sequence and being disposed in learning science based courses. It is required that a science student should reduce the chances of accidents, prevent unpleasant items to the senses and work arena, and should be disciplined as to behave in an expected learning manner.

#### **Functions of students' positive learning attitudes**

Positive learning attitudes are desired by students to achieve positive results in science and they make students;

- active in participation and practice in class learning,
- to be encouraged and sustain the ability to logical reasoning, critical evaluation and listening,
- to persist in accurate observations and experiments,
- to develop self confidence in themselves,
- to develop positive interpersonal relationship with both teachers and fellow students,
- not to be driven off their concentration by fear and discouragements,
- to express and demonstrate their learning in continuous actions,
- possess burning desires to achieve their desired goals,
- to learn with definiteness of purpose, measurable goals and resourceful objectives,
- to be imbued with reliability, truthfulness, humble manners and resourcefulness,
- become leaders within and outside the school in their future lives,
- become educationally advanced and socially good,
- become reflective thinkers, to be developed and exposed of hidden talents and potentials,
- to be motivated as to see learning as a social event and programme, and
- develop oral communication skills.

#### **Factors that enhance students' positive learning attitudes**

● **Environment:** This factor motivates students to possess positive learning attitudes like regularity, punctuality, diligence, persistence, etc and this agrees with Nnoyelu (1997) when he stated that every home is a school and every parent is a teacher. The environment remains the essential training ground for good students with adequate positive learning attitudes.

● **Good Teacher:** A good teacher is one who inspires students to cultivate interest and ability to engage in life-long, meaningful learning, creative reasoning and thinking, problem

solving and to develop sound self control, confidence and esteem. It is also not indisputable but an understanding fact that teachers' teaching methods, manners, skills and behaviours encourages positive learning attitudes in students. This certainly agrees with Bab (1974), that every child imitates the practices of both his teachers and parents, be it good or bad, rich or poor and listens to the instructions about.

● **Innate Vision:** This is the unrevealed mental picture, concept and plan of a student, which propels him to put up positive learning attitudes and to aspire high in his learning struggle. Vision is that spark that makes learning mostly in science enjoyable, interesting and workable and it provides reasons for positive attitudes. Innate visions make learning purposeful and propel a student to achieve his learning objectives and goals.

● **Desire and Desirable prizes:** These are two stimulating factors which propel the student to continue in learning struggle; no matter how strenuous it is, thereby sustaining the positive learning attitudes in the student. Research has shown that these factors mostly improve curiosity and persistence in the student. When the desire attached to learning is highly valued by a student, he develops positive learning attitudes to achieve his goals.

● **Passion** is the act of having a keen interest in a particular activity or course. It brings about the required positive attitudes and makes learning activities and events purposeful as it boils up the student's spirit about desires, qualities and goals to become successful in all his learning pursuits.

#### **Wasting Attitudes**

**Indecision:** This has to do with the state of a student being unable to make conclusions on a choice or judgment at a particular time. It is a negative attitude of being incapable of taking decisions on what to do. Indecision is the twin brother of procrastination and they both induce fear and bring about failure in all works of learning.

**Inconsistency:** This is the inability of a student to make a choice on a particular thing. It is the act of making too many statements that are true about something. The changes in a student's behavioural pattern that makes his ideas, views, aims, plans etc unclear for understanding is inconsistency. Genuine wisdom is usually conspicuous through modesty and consistency.

**Indifference:** This has to do with the attitude of a student being unconcerned for what he is supposed to be concerned for. It is usually reflected in a student's readiness to compromise all occasions rather than to meet opposition and fight it. Indifference is commonly expressed in a student through lack of ambition, willingness to tolerate failure, and acceptance of whatever compensation learning offers without protest. Mental and physical laziness, lack of initiative and imaginative ability, unmaintained enthusiasm and self control are attributes of indifference.

**Indecency:** It is the attitude of exhibiting offensive, dishonest and impolite behaviours which are likely to shock, upset and offend others around the student. Most ideas, experiences and thoughts of the student are still in-born because of indecency. If a student illicit indecency, and embraces decency he can go along well with other many attitudes.

**Instability:** Most students are good starters but poor finishers of every bit of thing they begin because of instability. So instability is the attitude of one been uncertain in learning. The condition of a student not been strong, ready in taking actions on learning plans is also instability. Instability is an agent of fear and devastates personality.

**Inability:** This is the attitude of being unable to do something meaningful and worthwhile. No unstable, double minded, slovenly and carefree student can become a successful student. Procrastination, doubt, over-caution, worry, fear and envy are all the committee friends of inability and they are all destructive to learning plans, actions and desires.

**Indulgence:** The attitude of eating and drinking too much which is not necessarily for satisfaction but for pleasure is indulgence. The value of every decision a student makes depends on the courage required to render them, which indulgence is not a party to. So it is an agent of failure in learning.

**Injustice:** This is the attitude of been unfair to other students. No negative, unruly, impolite and stupid attitudes towards others can bring a student success in whatever learning endeavour he is engaged in. The act of victimizing, repressing, and intimidating others and favouring others is nothing but injustice.

#### **Wasting Behaviours:**

**Impiety:** This is the act of being un-respectful to God. God is the only invisible councilor who links finite mind of the student with infinite intelligence.

**Insanity:** it is the act of exhibiting stupid behavioural actions which may cause someone a serious harm. Insanity causes and induces failure to embrace opportunities for learning advancement.

**Insubordination:** The act of a student not being submissive and obedient to a higher authority is insubordination. Giving evasive answers to questions asked by superiors, hesitancy in manner and speech, deceit in both deeds and words are examples of insubordination.

**Iniquities:** This is the state of being immoral in behavior. The quality of being very unfair in behavioural attitudes to others.

**Impurity:** Lack of firmness in character, attitude and behaviour is caused by impurity. It is the state of been behaviourally dirty.

**Inhospitality:** The state of a student been unfair, unfriendly, unkind, unfaithful, un-respectful, non-polite, unwelcoming and ungenerous to other students and teachers is nothing but inhospitality.

#### **Wasting Habits**

These are practices, methods, techniques and regular tendencies that wastefully consume a student's time without yielding any positive and rewardable results. They include;

- Excessive sleep both in the night and day just because of pleasure forgetting learning.
- Late arrival to school as a result of unpreparedness and unseriousness.

- Lack of career objective which is begotten from indefinite purpose and plans in learning.
- Failure in proactive planning.
- Lack of learning focus and purpose resulting from not been cooperative with others.
- Irrelevant chatting, as a product of bad personality and unproductive habits.
- Lack of commitment to study as an offspring of unmotivated behaviour.
- Limitless time dressing attitude due to lack of focus.
- Lack of concentration and adequate preparation resulting from indefiniteness of plans.
- Too many association involvements because of non-career and life focus.

The ability to move forward and press toward the mark, regardless of time, events, activities, and programmes distinguishes the winner from the loser. Winners are not quitters but losers are good quitters.

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