



Enhancing Students' Learning through Assessment for Learning and Feedback

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ABSTRACT

The study examined how students' academic performance can be enhanced through assessment for learning and feedback. A descriptive survey design was employed in the study using a sample of 746 students and teachers from senior secondary schools in Rivers State. A four-point Likert type 38-item structured questionnaire titled Assessment for Learning, Feedback and Students' Learning (ALFSL) was designed and administered on the 746 students and teachers in the State. The reliability coefficient of the instrument was 0.89. Mean and standard deviation were used to answer the research questions, while the Independent t-test was used to test the hypotheses at 0.05 level of significance. It was found that discussing learning intentions with learners; stating the success criteria; providing formative feedback; effective questioning; and students' reflection on their learning enhance students' learning to a high extent. It was recommended among others that assessment for learning and feedback, involving discussion of learning intentions, stating the success criteria; providing formative feedback; effective questioning; and students' reflection on their learning, should be employed in the teaching and learning process at all levels of education.

Keywords: Academic performance, assessment, formative feedback, learning intentions, effective questioning, and success criteria.

INTRODUCTION

Assessment is a systematic process of gathering information about what a student knows, is able to do, and is learning to do. Assessment information provides the foundation for decision-making and planning for instruction and learning. Assessment is an integral part of classroom instruction that enhances, empowers, and celebrates student learning. Using a variety of assessment techniques, teachers gather information about what students know and are able to do, and provide positive, supportive feedback to students. Teachers also use this information to diagnose individual needs of students and to improve their instructional programmes, which in turn helps students learn more effectively.

The primary purpose of assessment is to promote learning. Assessment provides evidence of how learners are progressing according to defined standards or instructional objectives throughout the period of learning as well as achievement at the end of the learning period. It also provides information about the teacher's effectiveness. Assessment is dynamic and enables teachers learn about their students as well as learn with their students. According to Biggs (2002), assessment frames learning, creates learning activity and orients all aspects of learning behaviour. In fact, while it is possible for students to escape from the effects of poor teaching, they cannot (by definition if they want to graduate) escape the effects of poor assessment (Boud, 1995). This implies that assessment must be thorough, dynamic, effective, progressive, and feedback oriented. The form of assessment that meets these characteristics is assessment for learning, also known as formative assessment.

Assessment for Learning is the process of seeking and interpreting for use by learners and their teachers to decide where the learners are in their learning, where they need to go, and how to get there. In assessment for learning, emphasis shifts from summative to formative assessment. Summative assessment refers to strategies designed to confirm what students know, demonstrate whether or not they have met curriculum outcomes or the goals of their individualised programmes, or to certify proficiency and make decisions about students' future programme or placements (Earl & Katz, 2005; Earl, 2006). Summative assessment has been the most prevailing assessment in schools for many decades. It is the traditional assessment method and has served the purpose of man for as long as anyone can imagine. Its purpose is to certify learning and report to all stakeholders the progress of learners in school, usually by indicating learners' relative position compared to others. It is designed to provide evidence of achievement of learning objectives to parents, students themselves, and sometimes to outside groups (employers, other educational institutions, and many more).

Unlike the summative assessment (also known as assessment of learning) which is typically carried out at the end of a unit, course, grade, programme, term, or semester, assessment for learning happens during the teaching and learning process and takes the form of student-teacher interaction through questioning, role playing, aligning instructions, identifying students' learning needs, selecting and adapting learning materials, and many more. Assessment for learning makes obvious to the students what they are to learn, what is expected of them, and advice on how to improve on their work. The effect of assessment for learning, as it plays out in the classroom, is that students keep learning and remain confident that they can continue to learn at productive levels if they keep trying to learn, not giving up in frustration or hopelessness (Stiggins, 2002).

According to Race (2009), a good assessment should be valid (assess what it purports to assess), reliable (results from assessment should possess inter-tutor and intra-tutor comparability), and must be fair (should provide equivalent opportunities to succeed for all students). Race (2009) went further to suggest that assessment practices should not discriminate between students (equity), adequate time should be provided for rehearsal and feedback (timeliness), and assessment strategies should contain within them opportunities for students to redeem their failure (redemption). A good assessment system which is operative, conducive, efficacious, practicable and easy to conduct should permit all students considered capable of undertaking a course of study to have a chance of succeeding in the assessment, provided they learn effectively and work hard.

Black and William (1998a) indicated that improving learning through assessment for learning depends the active involvement of students in their own learning, provision of effective feedback to students, adjusting teaching to take account of the results of assessment, recognising the profound influence of assessment on the motivation and self-esteem of students, and the need for students to be able to assess themselves and understand how to improve. They stressed that in addition to the direct assessment of students by the teacher, group assessment, peer assessment, and self assessment are often encouraged by the teacher to enhance learning and improve performance.

Group assessment occurs when individuals work collaboratively to produce a piece of work. The advantage of group work for the assessor is often that the burden of marking many individual pieces of work is significantly reduced, but there is also the educational justification that collaboration is an important generic life skill that third level education should be developing in its students. The biggest challenge when assessing group work is that it is rare that all group members will contribute equally. Self-assessment involves students evaluating their own work and learning process. Through self-assessment, students can identify their own skill gaps, see where to focus their learning attention on, set realistic goals, review their work, and track their progress. Peer-assessment on the other hand involves students evaluating their peers' work and having their own work evaluated by their peers. Self-assessment, peer-assessment, and group-assessment help learners stay involved and motivated to learn, and encourages self-reflection and responsibility for their learning.

One major characteristic of assessment for learning is that it provides feedback to the learner and the teacher. Not just any feedback, but timely feedback. Good quality, comprehensive, timely feedback is a

very important factor in enhancing student learning and performance. Assessment should provide feedback to students on their progress towards the achievement of learning outcomes. The effective use of feedback will provide the opportunity for students to realise where they have done well and indicate what they could improve on, as well as justifying the grade/mark of summative assessments.

Timely feedback is beneficial to the student and teacher in many ways which include building learner's confidence, motivating the learners to improve their learning, providing the learners with performance improvement information, providing opportunities for the learners to address and correct their errors. It also informs the learners of where and how their learning and performance can be improved. Feedback on learning can come from a number of different sources: fellow students, teachers, and other staff supporting the learning process. The general purpose of classroom assessment and feedback is to enhance learning and improve academic performance of learners. Specifically, classroom assessment and feedback are done to:

1. Determine whether the intended learning outcomes are being achieved.
2. Provide feedback to students on their learning, enabling them to improve and develop.
3. Motivate students to undertake appropriate work.
4. Support and guide learning.
5. Describe student attainment, informing decisions on progression and awards.
6. Demonstrate that appropriate standards are being maintained.
7. Evaluate the effectiveness of teaching.

Enhancing students' learning through assessment for learning and feedback can be realised in several ways including deliberate and timely discussing of learning intentions with the learners, stating in unambiguous terms the success criteria, employing formative feedback, using effective questioning, and developing reflection on learning in the classroom.

The first active element of formative assessment in the classroom is the sharing of learning intentions with the learners, without which the learners are merely victims of the teacher's whim (Clarke, 2005). Learning intention is a description of what the teacher wants students to know, understand or be able to do by the end of a lesson. It tells students what the focus for learning is. Learning intentions are the same thing as learning objectives, learning goals, or learning aims. However, in assessment for learning, the word 'intention' is used to purposely put greater emphasis on the process of learning rather than on the end product. Informing learners about what they are going to learn and why they should learn it gives them (the learners) the tools they need to take responsibility for their own learning and achieve learning independence. When the learning intentions are promptly discussed with the learners, the following are achieved:

1. The learners get more focused for longer periods of time.
2. The learners are more motivated.
3. The learners get more involved in their learning.
4. The learners better able to take responsibility for their own learning.

Success criteria are the statements that help pupils recognise if they have been successful in their learning or not. Success criteria summarise the key steps or ingredients that student needs in order to fulfil the learning intentions – the main things to do, to include or to focus on (Clarke, 2001). They articulate the main teaching points or process which link directly to the learning intentions. They essentially spell out the steps required to achieve the learning intention, offering explicit guidance on how to be successful. By referring to the success criteria, learners know if they have achieved the learning intentions (learning objectives, learning goals, or learning aims). Generally, the success criteria of assessment for learning are:

1. Linked to the learning intention.
2. Specific to an activity.
3. Discussed and agreed with the pupils prior to beginning the learning activity.
4. Scaffold and focus pupils while they are engaged in the activity.
5. Used as the basis for feedback and peer and self-assessment.

Discussing the success criteria with the learners is an important part of assessment for learning. According to Scott, Harvey, Saenz and Hayes (2005), sharing success criteria encourages an independent approach to learning. When learners have success criteria at hand, they are more informed about how they will be assessed. Thus, they are better able to assess their own work to identify success and areas for improvement. This involves them in their own performance and learning. In time, pupils who have experience of working to success criteria and contributing to the development of success criteria are more likely to use these to assess their own achievements, address their own concerns and identify areas for improvement without relying upon others for guidance. This learning independence is a quality and skill that benefits pupils both in the classroom as well as in life beyond the classroom. Discussing the success criteria with the learners in the classroom helps foster a positive classroom environment; encourages pupils to be involved in the learning and upcoming activities even before they begin; builds pupil self-esteem by offering them opportunities to contribute; and encourages and strengthens teacher-student relationship.

Darling-Hammond (2008) revealed that using feedback and formative assessment continuously has incalculable implications for effective teaching and learning. Quality feedback can motivate learners by building their self-esteem and reinforcing their virtue. However, feedback can often be too little, too late, too vague and too impersonal. The feedback discussed here is quality feedback that comments on the quality of a pupil's work and offers advice on how to improve. It contains three elements: evidence on where the pupil is now; a definition of the desired goal; and practical strategies to close the gap. It must be emphasised that the critical part of quality feedback is the advice on how to improve (Nicol, 2010; Irons, 2007). In assessment for learning, feedback points students towards ways to realise the improvement needed to reach the learning intentions. For feedback to be truly formative, it must:

1. Be timely.
2. Relate to the focus of the learning intention.
3. Identify where success has occurred and reward it.
4. Identify where challenges exist.
5. Identify where and how improvement can take place.
6. Allow time for improvement.

Every teacher asks some question or the other as a form of assessment for learning. Thus, questioning is an integral part of assessment for learning (formative assessment). Whether the questioning is effective or not is a different kettle of fish, what is important is that questioning is done all the time in assessment for learning. However, it is very imperative that for students' learning to be enhanced and performance improved, questioning must be effective (Tofade, Elsner & Haines, 2013; Treacy, 2007). Effective questioning is about asking questions that elicit maximum feedback, which is used to evaluate, plan, expand, and enhance learning. Effective questioning serves two main purposes: to assist with assessment and to improve understanding. Questioning for understanding can be both teacher-led and pupil-led. While teacher-led questioning helps learners make connections that are not immediately apparent and guides them to facts, solutions, and conclusions they need to discover, pupil-led questioning is a key process in learning and allows learners to develop independence, work through problems, and reflect (evaluate) on their own understanding.

Asking effective questions by the teacher involves careful planning which enables the teacher to ask himself the following questions: What do I want my students to learn? How do I want them to learn it? How will I find out if they have learned it? The answers to these questions will help the teacher ensure that questions to the learners reinforce the focus for learning and draw out their understanding of the learning. Effective questioning concerns also how well the teacher deals with responses from learners, not just how well the teacher poses the questions. Part of the teacher's role is to listen actively for the answers he seeks but at the same time not overlook other answers and responses that may reveal more about the learners' level of understanding. One tip for dealing productively with answers is to put 'wrong' answers to use by turning them into a springboard for improved understanding. The trick is to

point out the error in the response in such a way that the teacher does not actually condemn the “wrong” answer, but to steer the students towards a better response.

The teacher must always encourage pupil-led questioning. Encouraging learners to ask questions is a key process in assessment for learning and it:

1. Promotes learners’ involvement and participation in the teaching-learning process.
2. Develops independence in the learners.
3. Helps learners to work through their difficulties.
4. Develops in the learners the ability to explain things more easily.
5. Develops reflection and evaluation of their own learning.

Scott, et al. (2005) reported that learners’ reflection on their learning is another important element of assessment for learning. Reflection on learning is a review of the learning events that have taken place. The use of learning reflection in the classroom is a very powerful tool of assessment for learning. Students are usually frank and honest in the assessment of their own performance and that of their peers. Encouraging learners to reflect on their learning events, allows them to:

1. Reconsider their actions and choices.
2. Review and process new knowledge.
3. Incorporate feedback from the teacher.
4. Solidify important concepts.
5. Decide their future learning pathways.

The teacher can develop learners’ reflection on their learning through the use of self-assessment and peer-assessment. Student self-assessment involves students evaluating their own work and learning process. Through self-assessment, students can identify their own skill gaps, see where to focus their learning attention on, set realistic goals, review their work, and track their progress. Peer-assessment on the other hand involves students evaluating their peers’ work and having their own work evaluated by their peers. Self- and peer-assessment help learners stay involved and motivated to learn, and encourages self-reflection and responsibility for their learning.

Owing to constraints of time, teachers are not often able to attend to every learner’s needs. Therefore, it is reasonable to use peer-assessment and self-assessment which require the involvement of learners in the assessment and evaluation of their work. Peer-assessment and self-assessment are very beneficial in the following ways:

1. Creating independent learners.
2. Increasing learners’ self-esteem.
3. Developing learners’ ability to recognise quality.
4. Improving learners’ understanding.
5. Strengthening the learner’s voice in the classroom.
6. Providing valuable feedback at learners’ language level.

When learners are encouraged to assess their own work, they are given a more active role in the learning process. They come to take responsibility for their own learning and become more independent and self-reliant, meaning they do not always need the teacher (or parent) to help them. This independence enables them to be more focused and motivated in their work. This independence, motivation and confidence inevitably improve their self-esteem and contribute to the creation of a positive learning culture, and improve their performance.

Analysing their own and others’ work can help them to deepen their understanding of the subject at hand. Through this partnership group work, learners are able to provide each other with valuable feedback. When this process is working well, the feedback gotten is often more helpful to the learners than that given by the teacher. The opportunity to discuss, explain and challenge each other enables them to achieve optimally. It also gives them a valuable opportunity to learn from each other. What is more, during peer assessment, the exchanges between pupils are in their own language, which can enhance their understanding and improve their performance.

Statement of the Problem

Student's learning outcome is often claimed to be a function of teacher effectiveness. In other words, learners' performances are determined by how effective or ineffective the teacher is (Obilor, 2018). The use of different forms of assessment in the classroom is a teacher function that could enhance or discourage learning. This work focuses on the extent to which assessment for learning and feedback can enhance learning and improve students' academic performance.

Purpose of the Study

The purpose of this study is to investigate how students' learning can be enhanced through assessment for learning and feedback. Specifically, the objectives of the study are to:

1. Examine the influence of learning intentions on students' learning.
2. Investigate the influence of success criteria on students' learning.
3. Determine the influence of formative feedback on students' learning.
4. Examine the influence of effective questioning on students' learning.
5. Determine the influence of reflection on learning on students' learning.

Research Questions

1. To what extent does discussing the learning intentions with students enhance students' learning.
2. To what extent does stating the success criteria enhance students' learning.
3. To what is the extent does formative feedback enhance students' learning.
4. To what is the extent does effective questioning enhance students' learning.
5. To what is the extent does reflection on learning enhance students' learning.

Hypotheses

1. There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that discussing the learning intentions with students enhances students' learning.
2. There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that stating the success criteria enhances students' learning.
3. There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that formative feedback enhances students' learning.
4. There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that effective questioning enhances students' learning.
5. There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that reflection on learning enhances students' learning.

METHODOLOGY

Survey research design was adopted for this study. A survey research design is a developmental field study that systematically collects, analyses and synthesises quantitative data on a large representative sample of a given population (Kpolovie, 2010).

The population of the study is 39709 students and teachers of Senior Secondary Schools in Rivers State, made up of 31996 SS2 students and 7713 teachers (Source: Rivers State Post Primary Schools Board, 2018). The sample size is 746 students and teachers computed using the Fluid Survey Sample Size calculator, comprising 380 students and 366 teachers randomly selected from nine Senior Secondary Schools (3 from each Senatorial Zone) of Rivers State.

A four-point Likert type 38-item structured questionnaire titled "Assessment for Learning, Feedback and Students' Learning (ALFSL) was designed and administered on the 746 students and teachers in the State. The reliability coefficient of the instrument was 0.89. Mean and standard deviation were used to answer the research questions, while the Independent t-test was used to test the hypotheses at 0.05 level of significance.

RESULTS

Research Question 1: *To what extent does discussing the learning intentions with students enhance students' learning?*

Table 1: Summary of descriptive statistics on the extent to which discussing the learning intentions with students enhances students' learning.

Variables	N	Mean	Std. Dev.	Decision
Students	380	3.1842	.68359	Enhances students' learning to a High Extent
Teachers	366	3.1393	.69419	Enhances students' learning to a High Extent
Total	746	3.1622	.68879	Enhances students' learning to a High Extent

Very Low Extent = 1; Low Extent = 2; High Extent = 3; Very High Extent = 4

The results presented in Table 1 show that 380 students have a mean of 3.1842 with standard deviation of 0.68359, while 366 teachers have a mean of 3.1393 with standard deviation of 0.69419. The total sample of 746 has a mean of 3.1622 with standard deviation of 0.68879. The above results indicate that students and teachers of senior secondary schools in Rivers State agree that discussing learning intentions with students enhances students' learning to a high extent.

Research Question 2: *To what extent does stating the success criteria enhance students' learning.*

Table 2: Summary of descriptive statistics on the extent to which stating success criteria enhances students' learning

Variables	N	Mean	Std. Dev.	Decision
Students	380	3.2184	.66751	Enhances students' learning to a High Extent
Teachers	366	3.2004	.63419	Enhances students' learning to a High Extent
Total	746	3.2096	.65116	Enhances students' learning to a High Extent

Very Low Extent = 1; Low Extent = 2; High Extent = 3; Very High Extent = 4

Table 2 presents results which show that 380 students have a mean of 3.2184 with standard deviation of 0.66751, while 366 teachers have a mean of 3.2004 with standard deviation of 0.63419. The total sample of 746 has a mean of 3.2096 with standard deviation of 0.65116. The above results indicate that students and teachers of senior secondary schools in Rivers State are in a consensus that stating success criteria enhances students' learning to a high extent.

Research Question 3: *To what is the extent does formative feedback enhance students' learning?*

Table 3: Summary of descriptive statistics on the extent to which formative feedback enhances students' learning

Variables	N	Mean	Std. Dev.	Decision
Students	380	3.2237	.64971	Enhances students' learning to a High Extent
Teachers	366	3.1885	.64104	Enhances students' learning to a High Extent
Total	746	3.2064	.64545	Enhances students' learning to a High Extent

Very Low Extent = 1; Low Extent = 2; High Extent = 3; Very High Extent = 4

The results presented in Table 3 show that 380 students have a mean of 3.2237 with standard deviation of 0.64971, while 366 teachers have a mean of 3.1885 with standard deviation of 0.64104. The total sample of 746 has a mean of 3.2064 with standard deviation of 0.64545. The above results indicate that students and teachers of senior secondary schools in Rivers State agree that formative feedback enhances students' learning to a high extent.

Research Question 4: *To what is the extent does effective questioning enhance students' learning?*

Table 4: Summary of descriptive statistics on the extent to which effective questioning enhances students' learning

Variables	N	Mean	Std. Dev.	Decision
Students	380	3.2342	.65006	Enhances students' learning to a High Extent
Teachers	366	3.1215	.63214	Enhances students' learning to a High Extent
Total	746	3.1789	.64127	Enhances students' learning to a High Extent

Very Low Extent = 1; Low Extent = 2; High Extent = 3; Very High Extent = 4

Table 4 presents results which show that 380 students have a mean of 3.2342 with standard deviation of 0.65006, while 366 teachers have a mean of 3.1215 with standard deviation of 0.63214. The total sample of 746 has a mean of 3.1789 with standard deviation of 0.64127. The above results indicate that students and teachers of senior secondary schools in Rivers State are in a consensus that effective questioning enhances students' learning to a high extent.

Research Question 5: *To what is the extent does reflection on learning enhances students' learning?*

Table 5: Summary of descriptive statistics on the extent to which reflection on learning enhances students' learning

Variables	N	Mean	Std. Dev.	Decision
Students	380	3.2216	.51934	Enhances students' learning to a High Extent
Teachers	366	3.3470	.57082	Enhances students' learning to a High Extent
Total	746	3.2797	.54460	Enhances students' learning to a High Extent

Very Low Extent = 1; Low Extent = 2; High Extent = 3; Very High Extent = 4

The results presented in Table 1 show that 380 students have a mean of 3.2216 with standard deviation of 0.51934, while 366 teachers have a mean of 3.3470 with standard deviation of 0.57082. The total sample of 746 has a mean of 3.2797 with standard deviation of 0.54460. The above results indicate that students and teachers of senior secondary schools in Rivers State agree that reflection on learning enhances students' learning to a high extent.

Hypothesis 1: There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that discussing the learning intentions with students enhances students' learning.

Table 6: t-test analysis of students and teachers rating of the extent to which discussing learning intentions enhances students' learning

	F	Sig.	t	Df	Sig. (2-tailed)
Equal variances assumed	.326	.568	.889	744	.374
Equal variances not assumed			.889	741.918	.374

The mean difference is not significant at .05: At df = 744, t = 0.889, p = 0.37 > .05

Table 6 presents t = 0.889, df = 744, two-tailed p = 0.374 (which is greater than the chosen p = 0.05). Therefore, the null hypothesis that "there is no significant difference in the mean rating of students and teachers of senior secondary schools in Rivers State that discussing the learning intentions with students enhances students' learning" is accepted. In other words, students and teachers of senior secondary schools in Rivers State are in a consensus that discussing learning intentions with students enhances students' learning to a high extent.

Hypothesis 2: There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that stating the success criteria enhances students' learning.

Table 7: t-test analysis of students and teachers rating of the extent to which stating success criteria enhances students' learning

	F	Sig.	t	Df	Sig. (2-tailed)
Equal variances assumed	2.384	.123	.169	744	.866
Equal variances not assumed			.169	743.862	.866

The mean difference is not significant at .05: At df = 744, t = 0.169, p = 0.87 > .05

The results presented in table 7 show that t = 0.169, df = 744, two-tailed p = 0.87 (which is greater than the chosen p = 0.05). Therefore, the null hypothesis that "there is no significant difference in the mean rating of students and teachers of senior secondary schools in Rivers State that stating the success criteria enhances students' learning" is accepted. In other words, students and teachers of senior secondary schools in Rivers State are in agreement that stating the success criteria enhances students' learning to a high extent.

Hypothesis 3: There is no significant difference in the mean rating of students and teachers of senior secondary schools in Rivers State that formative feedback enhances students' learning.

Table 8: t-test analysis of students and teachers rating of the extent to which formative feedback enhances students' learning

	F	Sig.	t	Df	Sig. (2-tailed)
Equal variances assumed	1.149	.284	.744	744	.457
Equal variances not assumed			.744	743.566	.457

The mean difference is not significant at .05: At df = 744, t = 0.744, p = 0.46 > .05

The results presented in table 8 show that t = 0.744, df = 744, two-tailed p = 0.46 (which is greater than the chosen p = 0.05). Therefore, the null hypothesis that "there is no significant difference in the mean rating of students and teachers of senior secondary schools in Rivers State that formative feedback enhance students' learning" is accepted. In other words, students and teachers of senior secondary schools in Rivers State agree that formative feedback enhances students' learning to a high extent.

Hypothesis 4: There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that effective questioning enhances students' learning.

Table 9: t-test analysis of students and teachers rating of the extent to which effective questioning enhances students' learning

	F	Sig.	T	df	Sig. (2-tailed)
Equal variances assumed	1.581	.209	.966	744	.334
Equal variances not assumed			.966	743.585	.334

The mean difference is not significant at .05: At df = 744, t = 0.966, p = 0.33 > .05

Table 9 presents t = 0.966, df = 744, two-tailed p = 0.33 (which is greater than the chosen p = 0.05). Therefore, the null hypothesis that "there is no significant difference in the mean rating of students and teachers of senior secondary schools in Rivers State that effective questioning enhances students' learning" is accepted. In other words, students and teachers of senior secondary schools in Rivers State are in a consensus that effective questioning enhances students' learning to a high extent.

Hypothesis 5: There is no significant difference in the mean rating of teachers and students of senior secondary schools in Rivers State that reflection on learning enhances students' learning

Table 10: t-test analysis of students and teachers rating of the extent to which reflection on learning enhances students' learning

	F	Sig.	T	Df	Sig. (2-tailed)
Equal variances assumed	5.412	.070	.386	744	.700
Equal variances not assumed			.386	731.524	.700

The mean difference is not significant at .05: At $df = 744$, $t = 0.386$, $p = 0.70 > .05$

Table 10 presents $t = 0.386$, $df = 744$, two-tailed $p = 0.70$ (which is greater than the chosen $p = 0.05$). Therefore, the null hypothesis that “there is no significant difference in the mean rating of students and teachers of senior secondary schools in Rivers State that reflection on learning enhance students' learning” is not rejected. In other words, students and teachers of senior secondary schools in Rivers State are in agreement that reflection on learning enhances students' learning to a high extent.

DISCUSSION OF FINDINGS

This study examined how assessment for learning and feedback enhance students' learning. It was found that discussing learning intentions with learners; stating the success criteria; providing formative feedback; effective questioning; and students' reflection on their learning enhance students' learning to a high extent.

Discussing learning intentions with learners was found to significantly influence students' learning to a high extent which is in agreement with the findings of Clarke (2005). Learning intention informs the learners of what they are expected to be able to do at the end of the lesson or programme. It emphasises the area(s) of focus. Properly discussed learning intentions promote motivation, commitment and responsibility of learners, which in turn enhances students' learning.

This study also found that stating success criteria influences students' learning to a high extent. The influence was found to be significant as supported by the findings of Scott, et al. (2005). Success criteria are a concise presentation of what the students are expected to do to achieve the learning intentions. They articulate the main teaching points or process which link directly to the learning intentions (Clarke, 2001). Like the discussing of learning intentions with the students, briefly and unambiguously stating the success criteria evokes students' motivation, commitment and focus. In addition it promotes self-assessment by the students.

It was further revealed that formative feedback significantly enhances students' learning to a high extent. Nicol (2010), Darling-Hammond (2008), and Irons (2007) are in agreement with this finding, and as observed by Nicol (2010) when feedback is timely and comprehensive, students' learning becomes very effective. Quality feedback motivates learners by building their self-esteem and reinforcing their virtue. It points students towards ways to realise the needed improvement to reach the desired learning intentions.

Effective questioning was found to significantly enhance students' learning and to a high extent. This result is supported by the findings of Tofade, Elsner and Haines (2013) and Treacy (2007). Questioning is done every day in the classroom, but not just any question would do. Effective questioning is what is desired and advocated for. Effective questioning is about asking questions that elicit maximum feedback, which is used to evaluate, plan, and expand, learning. Effective questioning serves two main purposes: to assist with assessment and to improve understanding. These two purposes when achieved enhance students' learning.

The study also found that students' reflection on learning enhances students' learning to a high extent. This finding is supported by Scott, et al. (2005) who reported that learners' reflection on their learning is

another important element of assessment for learning which enhances students' learning. Students' reflection on their learning involves reconsidering their actions and choices, reviewing and processing new knowledge, incorporating feedback from the teacher, and deciding their future learning pathways, all of which enhance students' learning.

CONCLUSION

Assessment for learning is the process of seeking and interpreting for use by learners and their teachers to decide where the learners are in their learning, where they need to go, and how to get there. Assessment for learning makes obvious to the students what they are to learn, what is expected of them, and advice on how to improve on their work. This study found that assessment for learning is effective and enhances students' learning when learning intentions are appropriately communicated to the students (informing learners what they should be able to do at the end of the lesson), and success criteria are expressly presented (informing students what they are expected to do to achieve the learning intentions). Further, assessment for learning is found to be effective with the use of formative feedback, application of effective questioning, and encouragement of reflection on students' learning. Put together, it was found that students' learning is enhanced significantly and to a high extent through assessment for learning and feedback.

RECOMMENDATIONS

Appropriate and effective learning in the classroom (and indeed, learning in any environment whatsoever) should be desired and worth achieving. Assessment for learning and formative feedback have been found in this study as essential in achieving appropriate and effective learning in the classroom. To enhance students' learning therefore, it is recommended as follows:

1. Teachers must ensure that learning intentions are promptly and clearly communicated to students to give them direction and focus.
2. What the students are expected to have achieved or learned at the end of the lesson or programme must be unambiguously presented to the students. This will enable them know when they have gotten to their destination.
3. Effective questioning (questioning that elicits maximum feedback) should be the way to go. Such questioning could be teacher-led, student-led, or both.
4. Teachers must give timely feedback. In addition to being timely, feedback must focus on the learning intentions, identify where success has occurred and challenges exist, suggest how improvement can take place, and allow time for improvement.
5. Teachers must encourage learners to reflect on their learning which will propel the learners to review what they have learnt and enable them decide their future learning pathways.

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