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An Assessment of the *One Lecture-One Test* Learning Model by Journalism Teachers

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Abstract: This article analyzes transcripts from a knowledgeable group that discoursed at length the *one lecture - one test* (OLOT) learning model – a system that requires students to write a short test for 10 to 20 minutes after *every* lecture, for a score that counts toward the overall grade. This model contrasts with the traditional system in higher institutions that set two or three tests and give one or a few assignments in a semester. Investigation of OLOT started with a one-year survey and three-year longitudinal assessment. It proceeds with this work and shows via a color graphic analysis that, though OLOT appears capable of promoting students' *attendance, concentration, interest, and participation* during lectures, this may not necessarily translate to better *grades*. Data from the transcripts show, however, that, absence of better grades notwithstanding, the learning system should be given the benefit of the doubt given the significant showing of the four parameters.

Keywords: One lecture-one test, OLOT, teaching, learning, test-wisness, focus group, color graphics.

Introduction

Teachers in institutions of higher learning are continually seeking ways to overturn the traditional pedagogical systems with new ones

that can make their students stand out. One result of this move is the emergence of *One Lecture-One Test* (OLOT) - the learning model that requires a student to write a short

test of 10 to 20 minutes duration after every lecture, as a compulsory component of the continuous assessment and for a score that counts toward the overall grade. In OLOT, each test covers mainly the very core area of the module that the students have been taught during the lecture. Students are advised to write between one and three pages of paper and warned to imbibe the economy of language which enables them to write the test in a few but meaningful words. A script should take only between one and five minutes to mark.

OLOT is conjectured in some ways that may depend more on experienced and knowledgeable instructors than freshers, as newly qualified teachers (NQTs) will need mentoring to develop the necessary skills (Avalos, 2011; Aspfors & Fransson, 2015) needed to affirm those conjectures. One is that it could improve students' attendance as well as their concentration in class. OLOT brings every student to the reality of what he or she has just learned in class. A student is well aware that he or she must write a short test to test his or her understanding of the lecture. The tendency exists students will take interest in what is being taught if they know that test is coming after the lecture (Huff, 1961; Kelley & Zarembka, 1968; Erickson, 1972; Ferguson, 1974; Duchastel, 1981;

Williams, et al. 1985; Wyatt, 1992; Schönwetter, Clifton & Perry, 2002). The interest can manifest in the higher number of questions they ask in the areas they do not understand as the lecture progresses than when there is no imminent test.

Another area OLOT may be appreciated in is test anxiety. The conventional test system encourages test nervousness in students and most instructors are familiar with this experience (Szafran, 1981, p.31) to such an extent that special care centers are set up to help students overcome the threat. With OLOT, anxiety is converted to expectation since test-writing becomes a tradition while expectation transposes to appreciation and ultimately to positive test performance, especially for the smart and disciplined student.

OLOT is also estimated to be a promoter of stimulated recall (Bloom, 1953; 1956) by minimizing retrieval or encoding failure since the test written focuses attention to only the core area of the lecture. This is in contrast with the traditional two or three-test system where students write a test that involves variegated topics. Answering questions of different shades means that the conventional test system can proactively or retroactively promote knowledge interference. Proactive and retroactive components are upshots

of the interference theory, which opines basically that some memories do interfere with other memories. Proactive interference occurs when an old memory makes it difficult or even impossible to remember a new memory while retroactive interference is made manifest when new information interferes with one's ability to recall or remember a previously learned information. It might be a good idea if the traditional system is limited to the time of examination when students answer questions on various topics while OLOT takes care of continuous assessments.

Students' note-taking is related to test performance (Nye, Crooks, Powley & Trip, 1984) and it wouldn't make too much difference if the activity was acquired through some informal learning or deliberate efforts. The potential also exists for OLOT to make students improve their note-taking in terms of speed and stimulate the encoding processes within the learner (Carrier & Titus, 1981: 386). The system can eliminate the refusal to take notes owing to the certainty of an impending test, thereby minimizing the challenge of learners' inactivity during lectures. Some writers (Reid, 1948; Nolan, 1974; Dorn, 1987; Arias & Walker, 2004; McDougall & Granby, 1996; Saroyan & Snell, 1997) have implied or noted that when instructors ask questions

during lectures the subject matter will normally involve only those students who volunteer to answer. This can make non-volunteers unaccountable. OLOT, on the other hand, is primed to get most or all students busy via note-taking and make them accountable concerning a test close by. Furthermore, OLOT offers an instantaneous dimension to class preparation as the students know that a test is inevitable in a lecture unlike the homework or assignments (Sprecher & Pocs, 1987:268) which prepares students for the next lecture.

OLOT and Test Wiseness

Test-wiseness refers to the skill that a student or test writer acquires from the biotic elements – teacher, fellow students, the student and other reasoned elements and the abiotic components – test structure, characteristics, clues, test situation, etc. of a test ecosystem and then create clues that enable him or her answer the question correctly (Millman, Bishop & Ebel, 1965; Sarnacki, 1979; Lange, 1981). For instance, a smart student could study the structure and characteristics of the test, test situation, teacher's body language, or any other relevant environmental appurtenances, articulate all these into a technique that makes him or her answers the test questions correctly. OLOT is

being conjectured to be a driver of test wiseness.

Millman, Bishop, and Ebel (1965) present a taxonomy of elements that are independent of the test constructor and those that depend on it. The independent elements include the examinee's time using, error avoiding, guessing and deductive reasoning strategies while dependent ones are intent consideration and cue-using strategies. Both of these the student can take advantage of to create the motivations that can make him or her answer the questions correctly. The motivation in the case of OLOT is that it operates an environment where students know that not writing the test at all or not writing it well portends failure and reduces their chances of lining up with other students at the time of graduation.

OLOT should not be misinterpreted for the familiar session conducted by a teacher who asks questions after a lecture to know if a student understands what he or she has just learned from that lecture. The OLOT model's mandatory test is deemed instrumental not only to a student's grade but also to graduation.

In spite of the growing adoption of the system by individual lecturers and teachers in several emerging economies including India, Nigeria, Indonesia and Kenya, OLOT is not conceptualized as a formalism yet in most tertiary institutions while

instructors in universities in the more advanced countries of Europe and North America are rarely seen using it. Using a color graphic analysis technique, this work projects the views of a group of knowledgeable persons which give the features that aid the understanding as well as provide insight that might be needed for decision-making by prospective adopters of the system.

Preliminary Investigations and Problem of the Study

In 2012, OLOT was put to the test to determine how it shaped students' performance, using *grade* as the criterion variable and – *attendance, interest, participation, concentration* in class as predictors (Omojola, 2014; Komolafe et al. 2018; Odiboh et al. 2017). The study was conducted in Covenant University, Nigeria for one academic session in four courses in journalism and mass communication disciplines. The descriptive showed that the students performed better in the four areas with scores ranging from 15 to 30 percent, though with a marginal improvement in grades, over the traditional system which sets one or two tests and a few assignments in a semester.

The results of the survey were presented in 2014 at the 4th annual International Technology, Education and Development Conference

(INTED) held in Valencia, Spain. After a short time of accolades for the reported improvements in students' performance, two major issues were raised as part of the critique to make the system more attractive. First, was that the single survey conducted would need to be corroborated by a longitudinal study. Repeated measures were necessary to understand the change dynamics and causal inferences as well as the teacher-student relationship that develops from a sustained teacher-student interfacing, as noted by Pennings, et al. (2014). Second, was that the opinions of lecturers should be sought to determine how universally workable the system could be.

A longitudinal study spanning three academic sessions - 2015/2016, 2016/2017 and 2017/2018 academic sessions – was conducted (Omojola, et al, 2018; Folayan, et al, 2018). The paired samples tests of the traditional test system with OLOT showed a preponderance of the latter in the mean distribution of the four predictor variables with varying dispersion values though. This improvement was replicated in grades, albeit marginally. The grading sequence in place at the university was A=5.00, B=4.00-4.99, C=3.00-3.99, D=2.00-2.99, and F=0.00, excluding the E grade which logically should have been 1.00-1.99 if it was included. It turned out that

the distance between two grades obfuscated the improvement seen in the OLOT grades, thereby rendering it inappreciable. For instance, a mean score of 2.90 in OLOT - obviously better than 2.10 recorded in the traditional system, would not make a difference as both 2.90 and 2.10 are domiciled in the same grade of D which is 2.00-2.99!

Objective and Rationale for the Study

The objective of the study is to determine, from the discussion of a knowledgeable group, how students could perform under the OLOT system in terms of *attendance*, *interest*, *participation*, and *concentration* as predictors and how these predictors might affect the criterion variable *grade*. The input of lecturers, who form the core of the group that discussed in this study, cannot be overemphasized as their opinions constitute a crucial component for the work to be credible. The insight generated from their discussion supplied the information on the features of the system since literature is not visible on it yet. This insight could also provide a prospective adopter the basis on which to adopt or reject it.

The Focus Group Discussion at the 4th C-ICADI Conference

The 4th International Conference on African Development Issues (C-ICADI) was held in Covenant

University, Ota, Nigeria from October 22nd to 24th 2018 with the theme: "The Challenge of Leadership: Driving Africa's Future." The conference featured most participants from Africa and had as its keynote speaker the former President of Zambia, Joyce Banda. It discussed several issues including politics, education, economy and other areas of need in Africa. One of the issues raised at the conference on the importance of teaching and learning elicited the composition of a focus group that discussed for one hour and a half in a break-out session.

The group comprised six university staff, including five lecturers with experience in journalism teaching and one administrator. All of them have taught journalism and media communication. Two were from Nigeria (Q1, Q2), one from South Africa (Q3), one from Ghana (Q4), one from Zambia (Q5) and one from Sierra Leone (Q6). Impressively, the discussants were equi-gendered and all except one female had PhDs, meaning they should be knowledgeable to an appreciable level about teaching and learning. They claimed authoritatively they were conversant with the definitions of the variables - *attendance*, *interest*, *participation*, and *concentration*. The moderator asked for their opinions on how they think the four parameters could pan out in

OLOOT. Though they were allowed to expatiate on their points, they followed an instruction that they should encapsulate each point in a simple sentence or even phrase for easy capture in the transcripts. They were to start their discussion of each parameter by saying if OLOOT could promote it or not. The most visible keyword in each view expressed is identified to enable proper categorization of that opinion.

A Note on the Color Analysis Technique

The use of visual images instead of words and numbers for analysis is not visible enough yet in focus group research, unlike words. To this end, a graphic analysis technique (Omojola, 2016; Omojola, Odiboh & Amodu, 2018) has been developed featuring the use of symbols and colors to depict opinions and the strength of those opinions. In this work, I use colors, tints, and tones to depict the opinions of the discussants. This color technique can help analysts and their audience to determine visually what transpired in the discussion *prima facie*. The cognitive ability to decipher this depiction is considered automatic, or at least not difficult, to enable the viewer to figure it out. In this work, the opinion of a discussant that is similar or the same as another is marked the same color. Figure 1

below identifies the colors used for the analysis.

Colors Identified		
 Grape	 Brown	 Olive
 Turquoise	 yellow	 Purple
 Sea Green	 Crimson	 Deep Rose
 Mint Green	 black	 Olive Drab
 Army Green	 Red	 White
 Blue	 Green	 Peach
 Khaki	 Cyan	 Pink
 Gold	 Magenta	 Sand
 Walnut	 Orange	 Sky Blue
 Neon Red	 Dark Brown	 Chartreuse
 Violet	 Ice Blue	 Dusty Plum

Figure 1: 33 Colors for analysis identified

Discussion of Item 1: Attendance

Q1 Submission

a. When I called for a test, attendance was usually between 95 and 100 percent,

Therefore, OLOT should promote attendance. *Grape*
 b. Genuine reasons such as death can undermine attendance in OLOT. *Turquoise*

- c. Students do miss class owing to social reasons such as attending sibling's weddings, birthdays, etc. OLOT can minimize this. *Sea Green*

Q2 Submission

- a. I believe OLOT can promote attendance. *Grape*
- b. Some students don't respect lecturers OLOT or no OLOT, they still stay away. *Mint Green*
- c. Some students are very lazy. With OLOT they will still miss their classes. *Army Green*
- d. A bad company could make student miss lecturers OLOT notwithstanding. *Blue*
- e. Some students are motivated by the desire to achieve. With OLOT they can do more. *Khaki*

Q3 Submission

- a. OLOT sounds like a novel way of learning. It could boost students' attendance. *Grape*

Q4 Submission

- a. No student wants to miss a test if it counts toward their graduation. *Grape*
- b. From experience, I have understood that many students

don't want to miss tests because they target higher grades. OLOT wouldn't make any difference to that. *Gold*

- c. I concur that bad friends can abet a student's absence in class. *Blue*

Q5 Submission

- a. I predict OLOT can increase attendance by 15 percent or more. *Grape*
- b. We should note that a student who has discipline as their core value would not want to miss a lecture, OLOT or no OLOT. *Walnut*
- c. Poor student/teacher relationship can undermine students' attendance in OLOT. *Neon Red*

Q6 Submission

- a. OLOT can be used as a strategy to boost students' attendance where it is low. *Grape*
- b. Truancy is some students' way of life simply because they are undisciplined. *Walnut*
- c. OLOT can promote the desire to not repeat a class, thereby enhancing attendance. *Violet*.

Att.	a	b	c	d	e	f
Q1						
Q2						
Q3						
Q4						
Q5						
Q6						

Figure 2: Opinions representation – Attendance

Figure 2 shows that the six discussants expressed 18 opinions on *attendance*. It shows six grapes, meaning all agree that OLOT can promote students' interest during lectures; two walnuts and two blues indicating respectively that discipline and a bad company can affect attendance. Other colors appear as singles with each indicating one variable. They are neon red - teacher-student relationship; gold - higher grades; turquoise – death; sea green – attending a social function; army

green – laziness; khaki – a desire for achievement, violet – desire to not repeat a class and mint green – respect for lecturers.

Discussion of Item 2: Interest

Q1 Submission

- a. OLOT can promote the interest of students during lectures. *Grape*
- b. If a lecturer is not a good communicator, a student will lose interest and OLOT's purpose will be defeated. *Brown*

- c. OLOT depends on several factors that have to do with a teacher's performance. *Yellow*
- d. OLOT will encourage or compel students to take notes during lectures. *Crimson*
- e. In spite of OLOT, students can lose interest during a lecture if the environment of learning is exacting and uncondusive. We should not overrate OLOT in this respect. *Black*
- f. If a student is disciplined, he or she can develop interest in class lectures. *Walnut*

Q2 Submission

- a. I believe in the potential of OLOT to promote students' interest in learning during lectures but I can't overstretch this point because I have not practiced it with students. *Grape*
- b. If audio-visual learning tools are adequate, OLOT can deliver well and generate interest. *Red*
- c. A distinguished professor will attract more interest in students because he commands respect. *Mint Green*
- d. The fear of failure is always a student's interest booster during lectures. *Green*

Q3 Submission

- a. Just like I said in the case of attendance I submit that OLOT should increase students' interest during lectures. *Grape*
- b. A lecturer's instructional approach matters to students' interest, OLOT or no OLOT. *Cyan*

Q4 Submission

- a. OLOT can pull an edge over the conventional system in terms of student's interest. *Grape*
- b. I know inadequate physical activity can reduce students' interest during lectures. *Magenta*

Q5 Submission

- a. The interest of students during lectures should improve with OLOT. *Grape*
- b. I support an earlier submission that note-taking by students will increase to aid revision before the test. *Crimson*
- c. I support the point that interest may be higher with professors for respect. *Mint Green*
- d. Teacher's ability to talk well will increase students' interest, OLOT notwithstanding. *Brown*
- e. The way teachers gesticulate and emote to students can ginger up their interest. *Orange*

Q6 Submission

- a. OLOT can enhance interest. *Grape*
- b. But this is not automatic. Some things must be in place

for the enhancement to happen. *Dark Brown*

- c. Interest will depend mainly on how a teacher handles his class, especially concerning talking. *Brown*

Int.	a	b	c	d	e	f
Q1	purple	brown	yellow	dark brown	black	dark brown
Q2	purple	red	light green	dark green		
Q3	purple	cyan				
Q4	purple	magenta				
Q5	purple	dark brown	light green	brown	orange	
Q6	purple	dark brown	brown			

Figure 3: Opinions representation – Interest

In Figure 3, 21 opinions were expressed. The 6 grapes mean that all discussants think OLOT can promote interest. Three browns and two mint greens mean respectively that lecturers’ communication and students’ respect for their teachers matter to OLOT. Other colors with their corresponding variables appear as singles. They are: red – audio-visual learning tools; magenta – inadequate physical activity, orange – teacher’s gesticulation and emotions, black – conducive learning environment, cyan – instructional approach, dark brown – putting things in place, crimson –

note-taking, green – fear of failure, yellow – efficiency/teacher’s performance, and walnut - discipline.

Discussion of Item 3: Participation

Q1 Submission

- a. No harm in saying that OLOT can enhance the participation of students during a lecture. *Grape*
- b. We should realize that there is a difference between participating to pass a compulsory test that is only one hour away and

participating to gain knowledge. *Ice Blue*

- c. OLOT or conventional, the participation of students is limited by sickness. *Olive*

Q2 Submission

- a. Students are more likely going to ask questions in OLOT than where there is no test. *Grape*
- b. In spite of OLOT, student traits can limit students' participation. For example, a shy student may not want to ask a question in class. *Purple*
- c. If a student is sick, he or she may not function in OLOT. *Olive*
- d. "Well done, "thank you, etc." do encourage students to participate more. *Deep Rose*
- e. Teacher's performance would enhance students' participation. *Yellow*

Q3 Submission

- a. OLOT can enhance a student's participation. *Grape*
- b. OLOT could elicit group discussion. For instance, a student might ask another student: "Do you understand what the lecturer has just explained? *Olive Drab*
- c. Cracking nice jokes to start an OLOT class will make students participate. *White*
- d. What happens where a student is mentally deranged. Can

OLOT save that situation? *Olive*

Q4 Submission

- a. I believe OLOT can enhance participation among slow and average learners. *Grape*
- b. Praising students, showering them encomiums can increase OLOT participation. *Deep Rose*
- c. OLOT can elicit group discussion. An impending test will make a student seek a friend's help. *Olive Drab*
- d. Students facing disciplinary action will find it difficult to participate during lectures. *Sand*
- e. Note-taking supports students' encoding process. OLOT encourages this. *Crimson*
- f. Can promising students' gifts [not just encomiums] increase their participation? *Pink*

Q5 Submission

- a. I agree with the previous speaker OLOT can provoke participation during lectures. *Grape*
- b. In OLOT, teaching should make students participate cooperatively rather than compete. *Sky Blue*
- c. Fear can affect students in OLOT, e.g. fear of been jeered at, of lack of making mistakes, of teacher correction and so forth. *Green*

d. Fluency and grammar problems can minimize participation in an OLOT class. *Brown*

c. Fear can hinder students' participation if he is less self-efficacious. *Green*

Q6 Submission

a. I don't doubt that OLOT has the potential to enhance participation during lectures. *Grape*

d. Some students participate to show off, OLOT or no OLOT. *Peach*

b. Students will likely see the need to consult one another during lectures especially where the teacher is less approachable. *Olive Drab*

e. OLOT can realize its student's participation if a teacher starts the lecture with anecdotes. *White*

f. Can a student who is broke and thinking about how he will eat participate really in OLOT? *Chartreuse*

Part.	a	b	c	d	e	f
Q1	■	■	■			
Q2	■	■	■	■	■	
Q3	■	■	■	■		
Q4	■	■	■	■	■	■
Q5	■	■	■	■		
Q6	■	■	■	■	■	■

Figure 4: Opinions representation – Participation

Figure 4 shows that 28 opinions were expressed regarding participation. Six grapes are in favor of participation while olive and olive drab claim three times each that sickness and student's consultation

with one another, respectively, are OLOT's factors. White, green and deep rose opines twice each respectively that starting a lecture anecdotally, the problem of fear and saying thank you to students are

OLOT variables. Other variables came up as singles: They are yellow – teacher’s performance, peach – participation to show off, chartreuse – hungry/broke student, brown – teacher’s communication, sky blue – student’s cooperation rather competition, ice blue - options of passing test and gaining knowledge, crimson – note-taking, sand – students facing disciplinary action, pink – giving out gift and purple – shy student.

Solving the Problem of Color Scarcity

At this point, all the 33 colors listed in Figure 1 except one – Dusty plum, have been engaged to represent opinions while there are still many opinions left to be

depicted. This challenge can be resolved by simply creating a new set of colors. Other colors exist that can be created. They are indigo, wheel blue, ultra-marine, ivory, mauve, azure, teal, and several others. But what if no colors exist again to be listed? The challenge can still be resolved by creating tint versions of the original colors to represent the remaining opinions. In the figure below, 60 and 20 percent tint versions of four of the 33 original colors in Figure 1 were created. In this case, the full hue of violet can be named Violet³, the 60 percent tint version tagged Violet² while the 20 percent version can be marked Violet¹ as shown in Figure 5 below.



Figure 5: Colors and 60/20 per cent tint versions

Another challenge may yet arise: How do all these colors appear if this document is printed in black and white. This can be resolved by simply marking colors with one or two letters (preferably the first two

letters) of the names of those colors. For instance, Grape can be marked "Gr". Therefore, Figure 5 and Figure 1 above become as shown in Figure 6 below.



Figure 6: Colors and 60/20 percent tint versions in black and white

Discussion of Item 4: Concentration

Q1 Submission

- a. I don't doubt that OLOT can promote concentration during a lecture. *Grape*

- b. Inconvenient lecture arena will hamper concentration even in an OLOT system. *Black*
- c. A student can develop the capacity for concentration

overtime in OLOT and make it a habit. *Dusty Plum*

- d. Seating positions do affect concentration OLOT or no OLOT. Students in the front seats concentrate more than those at the back. *Violet²*
- e. Overloading students with non-academic matters can reduce concentration but OLOT can assuage that. *Neon Red²*
- f. Stress trouble students these days. Stress can minimize concentration in OLOT. *Peach²*

Q2 Submission

- a. OLOT can promote students' concentration in class. *Grape*
- b. Poor ventilation and lighting will hinder concentration in class even if it is OLOT. *Black*
- c. The teacher's presentation style, i.e. gesticulation, etc. can affect concentration in OLOT. *Orange*
- d. I also agree excess workload will hamper a student's concentration in OLOT. *Neon Red²*

Q3 Submission

- a. OLOT can promote concentration. Maybe not all students, but at least a few. *Grape*
- b. Hunger and poor feeding won't make a student

concentrate in spite of OLOT. *Chartreuse*

- c. Concentration can be developed over time with OLOT. *Dusty Plum*
- d. A sick student cannot concentrate even in OLOT. *Olive*

Q4 Submission

- a. OLOT holds great promises in terms of making students concentrate in class. *Grape*
- b. But the conducive environment is necessary to make it realize its potential. *Black*
- c. Hormonal changes in the female will reduce concentration in OLOT. This is natural. *Chartreuse²*

Q5 Submission

- a. OLOT is a possible promoter of a student's focus or concentration during lectures. *Grape*
- b. OLOT is outstanding. It effectively shuts out the problem of procrastination. *Dusty Plum²*
- c. OLOT notwithstanding, discomfort in a class environment won't allow concentration. *Black*

Q6 Submission

- a. Don't call me a Doubting Thomas. If OLOT can improve concentration, that word "possibility" also means

it may not be so. My submission is that it may not be so. Sand²

- b. OLOT or no OLOT, paying attention in class involves

both the biotic and abiotic factors. [Biotic = human elements, abiotic = prevailing situations and circumstances] Gold²

Conc.	a	b	c	d	e	f
Q1				 V2	 Nr2	 P2
Q2		 80		 Nr2		
Q3						
Q4			 C2			
Q5		 Dp2				
Q6	 S2	 G2				

Figure 7: Opinions representation – Concentration

Figure 7 shows 22 opinions and breaks the initial all-grape sequence of the previous three parameters by showing five grapes and Sand², meaning that all discussants agreed that OLOT could promote students' concentration except one who doubted that. Four blacks are saying the harsh environment is an OLOT variable, while grape look-alike color, dusty plum, shows in two places, each claiming that psychological issues can influence OLOT. Neon Red² also shows in

two places with each saying that overloading students with non-academic matters can influence OLOT. Eight other colors appear singly each with is OLOT variable. They are olive – sickness, chartreuse – hungry students, chartreuse² – hormonal changes, orange – teacher's gesticulation, violet² – seating position, peach² – stress, and gold² – biotic and abiotic and dusty plum² – procrastination.

Discussion of Item 5: Grade

Q1 Submission

- a. The four parameters may happen and still not translate to better grades. *Army Green*²
- b. But if OLOT helps in these four areas, then it is worth trying. *Light Violet*²

Q2 Submission

- a. Other factors influence grades. The four OLOT parameters are not enough. *Army Green*²
- b. Just like my colleague said, it is worth being put to the test. *Light Violet*²

Q3 Submission

- a. OLOT parameters are not enough to produce better grades. *Army Green*²
- b. The test wiseness abilities, which these four parameters do not relate with, go a long way in influencing scores or grades. *Walnut*²

Q4 Submission

- a. These four OLOT parameters have the potential to make students have better grades if combined. *Khaki*²

- b. If producing better grade is the reason for floating OLOT, then give it a shot. *Light Violet*²
- c. If we agree that OLOT can make students improve in these four areas, I think it is illogical to claim they don't promote better scores. *Mint Green*²

Q5 Submission

- a. The four parameters are not strong enough to influence grades substantially. *Army Green*²
- b. Whatever positive influence they have in terms of grade can easily be wiped off by the way the teacher scores a test. *Violet1*
- c. On the whole, I agree that OLOT is not a bad idea. *Light Violet*²

Q6 Submission

- a. That OLOT can produce better grades via these four parameters is plausible rather than possible. *Army Green*²
- b. Whatever the situation is, I encourage lecturers around the world to give it a try. *Light Violet*²

Grade	a	b	c	d	e	f
Q1	Ag2	Lv2				
Q2	Ag2	Lv2				
Q3	Ag2	W2				
Q4	K2	Lv2	Mg2			
Q5	Ag1	V1	Lv2			
Q6	Ag2	Lv2				

Figure 8: Opinions representation – Grades

Figure 8 displays the newly added 14 colors. Four opinions in army green² say the four parameters are not enough to boost grades while Khaki², showing up once, says otherwise. Discussant Q5, in army green², says that a consequent positive grade from the four parameters, though sounds nice, may not be feasible. Five discussants, each appearing as light violet², say, in any case, the OLOT system should be given a benefit of the doubt. Two of them give the reason for disagreeing. Q3, appearing as walnut², OLOT does not take into cognizance the issue of test wiseness

while Q5 appearing as Violet¹ says the teacher’s scoring style can easily wipe off whatever positive contribution the four parameters have to grade. Q4, showing up as mint green², differs. Mint green² says, however, that it is oxymoronic to claim that the for parameters are significant contributors to OLOT but not grade enhancer.

Discussion

The group discussed attendance, interest, participation, concentration and how they relate to grade in the OLOT system. The color analysis enables quick, prima facie determination of data generated from

the discussion. A total of 69 colors (Figure 1 and Figure 5) were generated of which 46 were used. Figure 9 shows that a total of 90 opinions were expressed, indicating that some colors emerged more than once. When the 14 in Figure 8 (on grade) are added, they become 104.

The participation variable was discussed most with 28 colors, followed by concentration and interest with 22 each and attendance with 18. This suggests that OLOT enjoyed a robust discussion, implying that it generated interest amongst the discussants.

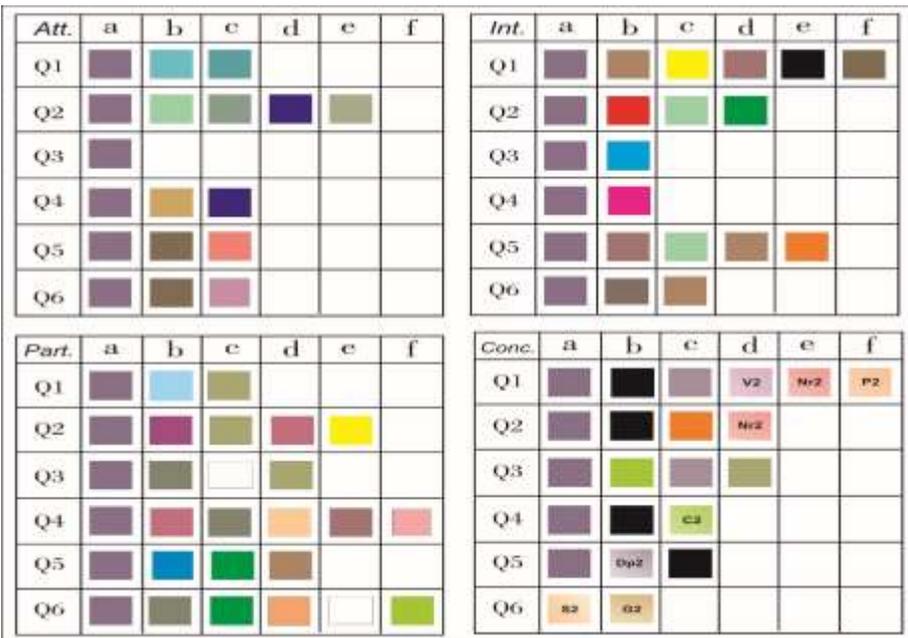


Figure 9: Opinion colors combined for attention, interest, participation and concentration variables

Of the 90, gray, the most popular color, carries 23 opinions that saw OLOT in a good light with the only discussant - sand² - expressing her reservation. Next is black, which carries five analogous views on how harsh environment influences OLOT while brown and olive follow, each

with four comparable opinions. Their opinions are teacher's communication and students' sickness respectively. The next most prevalent are colors that carry 3 similar views each. The colors with their respective views are olive drab – student's consultation with one

another in class, crimson – note-taking, walnut – student discipline, green - fear and mint green – respect for professors.

The next set of colors in the order of significance carries two opinions each. These include white – starting lecture with jokes and anecdotes, dusty plum – developing overtime, orange – teacher's posture and gesticulation, blue – bad company, yellow – teacher's performance, chartreuse – hungry students, deep rose – pouring encomiums on students, and neon red² – excess workload.

The remaining colors carry one opinion each. Each of these opinions was expressed to be a variable that could influence the OLOT system. These and their corresponding opinions are: army green – laziness issues, chartreuse² – hormonal changes, gold – targeting higher grades, gold² – biotic and biotic factors, peach – showing off, peach² – stress, violet² – sitting in the front, dusty plum² – procrastination, neon red – friendly teachers, sea green – attending social gatherings, sky blue – participating cooperatively, ice blue – difference between participating for the test or for knowledge, dark brown – some things being in place, pink – giving out gifts, magenta – inadequate physical activity, cyan – lecturer's instructional approach, sand – disciplinary actions, red – learning

tools, turquoise - death, khaki – desire to achieve and purple – students' traits including shyness.

If the results from the four predictors' 90 opinions are juxtaposed with the 14 on the criterion *grade* (Figure 8), a surprise emerges. Five of the six discussants agree that the OLOT system has the potential and the capacity to improve the performance of students during lectures but reject astoundingly that they lead to better grades. Q4 ends her contribution with a mild protest: "If we agree that OLOT can make students improve in these four areas, I think it is illogical to claim [that] they don't promote better scores." One fact is, however, universal among the discussants: OLOT may not or may not be able to produce better grades in students, but it is worth putting to the test because of its ability to influence students' attendance, interest, participation, and concentration in class in some way.

Conclusion

Results from a previous study conducted for one year showed OLOT to be a valuable learning system in terms of the four parameters though it showed a marginal improvement in grades. The longitudinal study of three years validated this outcome. The analysis of the focus group transcripts has also proved that OLOT is useful,

though less significant concerning grade. The three results are not distant from one another – perhaps the reason why it should be given

the benefit of the doubt by prospective adopters as suggested by the discussants.

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