

Full Length Research Paper

Franklin's economic graph formula/rules: A set of rules and procedural guidelines through which economic and non-static diagrams can be skeletonized and converted to simpler model diagrams for easier study, explanation and comprehension of economic diagrams

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A reference book on economic diagrams is strongly believed to be a good solution to the challenge posed by graph in Economics. Graph has posed a challenge to many in the field of Economics, thus increasing the need to create a solution for it. Therefore, this research employs some set of rules or formula set of procedural guidelines through which economic diagrams can be skeletonized and converted to simpler model diagrams for explaining economic diagrams which are a proposed procedure for creating a graph reference book.

Key words: Mono- facet, multi facet, static and non static diagrams, Franklin's economic graph (FEG).

INTRODUCTION

What is a reference book? According to Merriam-Webster © 2014, a reference book is a book such as dictionary, encyclopedia, Atlas intended primarily for consultation rather than for consecutive reading. Therefore, creating a graph reference book is believed to be a welcome development that will benefit the field of Economics immensely.

Economics is a course that has confronted people with difficult and confusing diagrams over the years. According to Robyn and Paul (2008), graphs can be misleading by being complex or poorly constructed. Graphs and other

visual displays can be helpful in depicting a quantitative or scientific concept, particularly when the concept is expressed explicitly in the display (Larkin and Simon, 1987; Pinker, 1990). In some cases, however, the comprehension of graphs can take an effort and are error prone (for example, Bell and Javier, 1981; Carpenter and Shah, 1998; Culbertson and Powers, 1959; Maichle, 1994). School-aged children and even adults commonly make systematic errors interpreting graphs, especially when graphs do not explicitly depict the relevant quantitative information (Gattis and Holyoak, 1995; Guthrie et

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al., 1993; Leinhardt et al., 1990; Shah et al., 1999; Shah and Carpenter, 1998; Vernon, 1950); thus, there has been an urgent need to find a lasting solution to the problem.

Economics is a discipline that cannot be studied without the use of diagrams for illustrating and explaining Economic situations. Graph is to Economics as air is to life (Lamurde, 2010).

It is a discipline that has many diagrams that are used in explaining economic situations. The difficult nature of many diagrams makes it difficult for students and teachers to be able to understand and retain these diagrams, because the more explanation a graph needs, the less the graph itself is needed (Craven, 2000). Thus, the cumbersome nature of most diagrams creates difficulty in understanding and explaining the issue at hand, which many a time confuses and makes researchers and teachers avoid some topics.

It is thus in this regard that there comes the need for a system or method that can be used to eliminate or reduce the difficulties associated with economic diagrams because, poorly constructed graphs can make data difficult to discern and thus interpret (Arocha, 2011). It is believed that with this achievement, teachers, researchers and students will become more interested in studying economic graphs due to their simplified nature. Actually graphs are designed to allow for easier interpretation of statistical data. However, graphs with excessive complexity can obfuscate the data and make interpretation difficult (David et al., 2009)

The goal here is to simplify Economics and make it understandable and retainable by creating a formula set of procedural guidelines through which Economics diagrams can be simplified and broken down. It is on this note that this research seeks to address the following questions:

- (i) Are Economics teachers comfortable with teaching students with cumbersome diagrams that students and researchers cannot understand let alone retain in their memories, while a new approach exists to eliminate such difficulty?
- (ii) If researchers, students and concerned individuals are given the chance to create a new approach to the problem or assuming a new method exists to tackle the current problem, would not any interested and concerned individual take it?
- (iii) Does it make any sense to create a graph reference book? Or will it add to existing knowledge and help improve the study and performance of those in the field of Economics?
- (iv) Are we dealing with a real problem or just making an unnecessary noise?
- (v) Are researchers, students and concerned individuals not interested in finding new ways, methods or approach for solving the current situation?

(vi) How beneficial will this new method or approach be to concerned parties?

(vii) What do concerned and interested individuals stand to gain from this new approach?

(viii) How does the skeletal feature of a diagram look like?

This research is thus extremely important and beneficial first and foremost to all in the field of Economics all over the world who due to the difficulty in understanding its diagrams may be yearning and thinking of a new simpler and easy approach to the current situation.

This research will be of great importance to all tertiary institutions all over the world that offer Economics and its related field with a simple and easy method of studying and understanding its diagrams.

Above all, this research will succeed a great deal in simplifying Economics, thereby eliminating the difficulties surrounding the study of its diagrams for there to better decision on its phenomena or conditions

This research examines the new approach for solving the current issue. It is therefore concerned with diagrams and all issues concerning Economics diagram.

One of the major constraints of this research is diagrams involving mathematics.

To construct a model diagram for explaining Economics diagram involving calculation is very difficult, if not impossible. Due to the calculation involved in some diagrams, constructing a model diagram may alter the explanation of Economics diagram. But it is still possible for such diagrams to be manipulated by using another mathematical approach.

Example of this is calculation involving multifaceted diagrams (double-single or two same diagrams). An example of this is the topic deriving demand curve from price consumption curve (Advanced Economics theory 13th edition by Jhingan 2009 (p. 144 - 145).

One limitation of this research is funding. The financial cost of this research was almost single handedly undertaken and borne by the researcher. This is why the research used two methods of survey in conducting its analysis namely PRACTICAL method and the NEED method.

The financial cost involves cost of going from one school to another to conduct a survey on the effectiveness and relevance of the research; which limited it to four schools. Also this research is limited by static diagrams, that is, those diagrams whose source of origin are from physical or tangible sources.

THE NEW APPROACH

The new approach in question is known as the FEG (Franklin's Economics Graph) rules/formula. Using the taxonomy of diagram by Anderson et al. (2002) (A Meta-Taxonomy of Diagram research), we can justify the use

of the Franklin's Economics Graph rules/formula to skeletonize and convert Economics graphs into simpler models. These taxonomies are grouped into nine aspects of diagram and their uses of which due to time and space will only be mentioned and summarized into properties and characteristics of diagrams. This is because it legitimizes and justifies the use of the FEG.

The nine aspects of the diagrams and their uses are:

1. The components of diagram
2. Basic graphic vocabulary
3. Pictorial abstraction, graphic structure of a diagram
4. Graphic structure, meaning
5. Mode of correspondence
6. The represented information
7. Task and interaction
8. Cognitive processes
9. Social context

All these are the cell structures of the diagrams.

Properties/characteristics of a diagram

A diagram has:

- (a) Shape and size - big, small, medium or microscopic
- (b) Elements/structures which summarize what the diagram is all about. For example in explaining the cost curve, AC and MC are the elements or components that show that the curve is explaining everything about cost, likewise the revenue curve. It is the MR, AR and TR that show that the curve is explaining everything about revenue.
- (c) It has an information/situation or condition that it is trying to convey or depict.
- (d) A source from which its data is obtained; for example, from a topic with actions/activities and situations that can be explained diagrammatically.

For example, the MR and AR curves were derived from the topic "CONCEPT OF REVENUE", with the Sub-topic TOTAL REVENUE. Thus, MR and AR were derived from TR. Also the source of a diagram can be obtained from past experiences, scenarios and events that bring back memories which can be used as a source of reference, economic or financial decision, planning and prevention of a negative future occurrence. For example pictures can be used to preach peace to a society that is riddled with or just came out of crisis.

- (e) It pictures a scenario where a particular event, activity or action took, takes or is taking place, at the wrong or right time and the players/elements and phenomena involved.
- (f) It depicts the outcome or consequences of any action

that is taken or will be taken regarding any problem being encountered at any specific time and location.

(g) It depicts how actors/elements adjust to any condition or situation.

(h) It has an invisible image or scenario it tries to show or explain whether real life or not.

(i) It is inferable that is it can serve as a point of reference to any specific or particular topic/issue.

Thus from the above listed properties, it is pertinent to note that all graphs/diagrams are built in these. The properties are the cell of all diagrams.

Importance of the properties of a diagram

1. It justifies the use of the FEG because it is the property of all diagrams.
2. It legalizes the use of the FEG.
3. Being the property of all diagrams, it welcomes the use or application of the FEG rule/formula.
4. It legitimizes the FEG rule/formula.

In creating the FEG rules, foundational factors were considered which in the preceding chapter are structured.

The foundational factors are:

1. Topic: The FEG rule is used based on topic: For example in trying to draw a graph of theory of consumer behavior, the first glimpse here is the topic "THEORY OF HUMAN BEHAVIOUR". In other words, it deals with human behavior. This thus becomes your starting point.
2. Composition: This theory of consumers' behavior, is it composed or made up of human behavior? How do consumers react in certain economic situations? This concept is very important for one to know the manner or mood of the consumer and what makes the consumer behave in a certain way depending on the economic condition surrounding him, which is a very clear blue print in drawing graph. One should understand the conditions and factors that influence his/her actions/decisions that is, whether it makes consumers increase/decrease/save or spend their incomes.
3. Understanding terms and concepts, knowing the meaning of terms and concepts or language of a topic will go a long way in helping to derive a curve; for instance, trying to use FEG in explaining LONG RUN COST OF INDUSTRY IN MONOPOLIST MARKET. There is the abbreviation, LMC whose meaning you should try to know for faster comprehension and construction of a prototype diagram.
4. Form: The FEG diagram can take any form or shape.
5. Effects: The question here is what the outcome is or how does the theory of consumers' behavior correlate with consumers' behavior? Since Economics is all about managing scarce resources in its most maximum best at a minimum cost, the

question here is what is/are the consequences of a decision, action taken by player/players between one or two elements in any given situation?

For example, during inflationary period, how or what is the outcome/consequence of decisions or actions taken by government, producers and consumers to the economy?

In international trade, how does friction or benefit between two trading partners affect trade and the consequences/outcome of actions taken by both parties to resolve the situation?

For instance, when explaining effects of tax on consumers and producers, the question is, How does tax affect or influence consumers' consumption/lifestyle behavior? How does tax affect production?

How will an increase or decrease in tax affect producers and consumers? With this blue print you now picture a diagram that can explain these scenarios. It is in this note that the FEG Economics graph can be derived upon. After understanding these concepts, you now go ahead and draw a diagram that shows how this happens using the effects of tax, income on producers and consumers. In summary, effects give a real life condition which is used to picture a diagram that can explain it.

The need for FEG formula

The creation of the FEG formula arose as a need to pave way for a clearer, easy and better understanding of Economics diagrams/conditions. It is a well known fact, that Economics as a subject or course is a discipline that explains itself with diagrams. Diagrams/graphs therefore can be seen as Economics itself because it is what Economics uses and relies upon to reveal its identity and purpose. It is a well known fact that diagrams in Economics are scattered in their thousands with many difficult graphs, which makes it difficult for a researcher to wake up at a particular time to explain a topic/issue with ease.

There is therefore the need for a formula or rule that can be used to create a model graph that can explain Economics diagram. This formula or rule will serve as a basis for the drawing of all model graphs of Economics. It also x-rays the skeletal structure of all Economics diagrams.

Organization of the FEG formula

The FEG revolves or is structured by the following,

(a) Source (Topic): Every graph has a topic from which it was derived. For instance, drawing cost curve has THEORY OF COST as its source.

(b) Inquiry (Investigation) – Any diagram has to be studied or looked into for a deeper insight into the issue/situation being investigated. This gives a blue print for drawing the diagram.

For instance, if you understand tax very well, you can draw a diagram that shows its effects on the economy.

(c) Effects - After you have known a fact from inquiry, the question here is how or what does the condition/situation affect or do to a particular setting, that is, the economy or government, or consumers and producers and foreign market. For instance, when talking about inflation, the question here is: how does inflation affect the economy? What does it do to the economic units, government, businesses, household and foreign markets?

(d) Finding - From the effects what where you able to observe or find out? For instance, the finding from the effects of inflation is that it either increases or decreases the cost of production and the volume of money in circulation, thereby reducing or increasing money demand and supply and consumption.

(e) Components - This is the most important structure of the FEG because it is what locates point that connects points from the FEG to the Economics diagram.

Every graph has components which form the basis or summarize what the diagram is all about. For example, the diagram for the theory of cost has:

- (i) Cost per unit in the Y axis
- (ii) Output in the x-axis
- (iii) AV, FC, TC and MC as its components.

When using the FEG, these components must equally be there or there must be a representative symbol so that you will locate or connect the components to Economics diagram for easy comprehension.

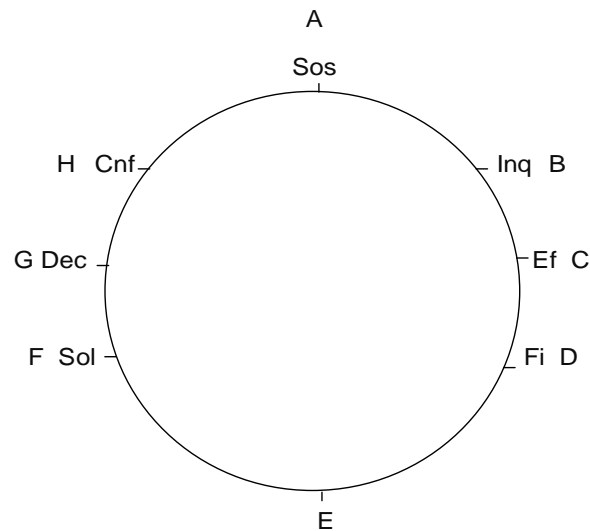
(a) Solution - After you must have identified the components and the rest or the above organization, you now begin the process of fusing them, that is, effects and findings together. For example, if you are treating the THEORY OF CONSUMERS' BEHAVIOUR, you are trying to find out how consumers behave in a certain time period due to certain economic situation in question, to find a solution.

(b) Decision - Can decision be taken from the diagram drawn? Can relevant accurate decision be derived from the Economics diagram? To put this in a simple way, can decision be taken from it just as decision can be taken from the economic diagram? For example, the decision taken from Economics diagram of THEORY OF COST can it be also taken from the FEG's version?

(c) Conformity- Does the diagram conform to the Economics diagram? For example, does the FEG diagram of THEORY OF COST conform to the Economics diagram?

The structure of the FEG formula (Figure 1) from A to G is the structure of all Economics graphs. The FEG formula

STRUCTURE OF THE FEG FORMULA



EXPLANATION

A	=	Sos (Source/Topic)
B	=	Inq (Inquiry)

Figure 1. Structure of FEG formula. A, Sos (Source/Topic); B, Inq (Inquiry); C, Ef (Effects); D, Fi (Findings); E, Com (Components); F, Sol (Solution); G, Dec (Decision); H, Cnf (Conformity).

is true, because in life everything has origin, effects or impact; they are investigated to reveal their identity and the outcome of such investigation and the decision to be taken based on the outcome. And it is also a fact in life that everything has elements, players/parties that make up a system (conditions/situations) being investigated.

Thus, with these facts, we are safe to conclude that you can use any meaningful and valid means to arrive at a valid conclusion and not to make the means the static standard. With this fact comes the need to create more ways of finding a solution, especially if the known static standard creates difficulty and ambiguity for the concerned parties or stakeholders.

Importance of the structures of FEG

1. It gives you the procedure of all drawn diagram.
2. It legitimizes evidently the procedure of the FEG. This is because the procedure of the FEG is the procedure of all Economics diagrams which are legitimate and valid.
3. Shows you how the FEG diagrams are arrived at.
4. Proves that the FEG and Economics diagram have the same procedure and use.
5. It justifies the means of arriving at and validating

(making a diagram true and useable) a diagram

REVIEW OF RELATED LITERATURE

According to Wikipedia, a diagram is a two dimensional geometric symbolic representation of information according to some visualization techniques. Sometimes, the technique uses a three dimensional visualization which is then projected onto the two dimensional surface. The word "Graph" is sometimes used as a synonym for diagram.

Diagrams are pictorial. While abstract representations of information, maps, line graphs, bar charts, engineering blueprints and architects sketches are all examples of diagrams, photographs and videos are not (Anderson, 2002).

Lowe (1993) defines diagrams as specifically abstract graphic portrayals of the subject matter they represent. Hall (1996) states, "Diagrams are simplified figures, caricatures in a way intended to convey essential meaning. These simplified figures are often based on set of rules.

The basic shape, according to White (1984), can be characterized in terms of "elegance, clarity, ease, pattern, simplicity and validity. The elegance for a start is

Table 1. Response of students from selected university on the need for the creation of the graph reference book.

School	Yes	No	Total
ADSU	38	0	38
MAUTECH	10	0	10
AUN	17	0	17

The level of significance was tested at 0.005 Level. Df = 4.

determined by whether or not the diagram is the simplest and most fitting solution to a problem.

Looking at the words of Hall (1996) and White (1984), we can conclude that diagram is a visualization technique that must follow some set of rules. Hall and White from their statements prove that a diagram must follow a set of rules that validate the diagram and make it acceptable for use, which is the technique that this research employed to justify and validate it. In this case, the researcher believes these Rules (Hall, 1996) and Terms (White, 1984) to be the FEG Rules/Formula that this research employed to create the procedure of the proposed graph reference book.

The various statements prove that diagrams must not be necessarily static or constant but should use some rules and procedures to diagrammatically represent accurately the information being conveyed.

METHODOLOGY

X chi square was used to test the null hypothesis on the need to create a graph reference book. The data were analyzed from question 7 of the NEED Survey of the three Universities. H_0 : A graph reference book should be created.

From Table 1, we realize that, the table value (14.860) is greater than the calculated value of $X_2^2(0)$; we therefore conclude that H_0 should be accepted.

The need method

This is the survey method used to find out the number of people facing the problem this research intends to solve and how interested or not they are in welcoming a new approach or solution to the problem. This survey is very important because it reveals the relevance and urgency of this research work, thus either welcoming or condemning this new approach.

Since this survey method is least cost effective that the practical source method, the researcher was able to conduct it in three (3) universities:

1. Adamawa State University (ADSU) Mubi, Adamawa State, Nigeria
2. Modibbo Adama University of Technology (MAUTECH) Yola, Adamawa State, Nigeria
3. American University of Nigeria (AUN), Adamawa State, Nigeria

The questionnaire was divided into two forms, consisting of two categories of people:

(i) Lecturers

(ii) Students

Each of these gave their responses separately. Let us start with responses from lecturers in Adamawa State University, Mubi.

Lecturers' responses

Appendix 1 shows that the lecturers enjoy studying Economics. From Appendix 2, 100% of the lecturers do not encounter difficulty in teaching and studying Economics. Appendix 3 shows that 2 respondents (20%) encounter difficulty while 8 respondents (80%) said no; they do not encounter difficulty in the study of Economics. Appendix 4 shows 2 respondents (20%) who said diagram was a problem while 8 respondents chose other implying that it is not a problem. They chose no in the other option. From Appendix 5, 8 respondents (80%) were in favor. Their reason being that though they do not encounter difficulty, the reference book will go a long way in improving the study of Economics. While, two percent of the respondents were not sure whether it will help improve the study of graphs, because according to them it will make no difference. This is because it still involves the study of diagram in which those who encounter difficulty will still find it difficult. From Appendix 6, 7 respondents (70%) view the idea as an excellent one. According to them, though they do not find diagrams difficult it will go a long way in easing difficulty, which students encounter since they are the major victims; while 3 respondents (30%) were not sure. Their disposition is that it may or may not since it still involves the study of a diagram.

The ten lecturers were all in favor of creating the reference book. This, according to them, is because it is an addition to existing knowledge that will go a long way in improving the study of Economics. From Appendix 8, 6 respondents (60%) believed that the reference book will go a long way in helping students understand diagrams and topics. Two respondents (20%) held the view that it will not solve the problem since it still involves the study of diagram. Two respondents (20%) chose the other option with a view that it may or may not help out.

Students' perception

We now move on to the perception of students. From Appendix 9, 27 respondents (75%) said they enjoy studying Economics, 6 respondents (16.67%) said that they do not enjoy studying it; while 3 respondents (8.33%) chose the other option, their reasons being that sometimes they encounter easy topics that they enjoy studying and sometimes they encounter difficult topics. Appendix 10 shows that 5 respondents (14%) believed that Economics is an easy course and that is why they study it. Twenty three (23) respondents (63%) said they like it and that is why they study it. Eight (8) respondents chose others option with varied reasons. Some said they do not understand it, some said diagrams, some said calculations. From Appendix 11, 19 respondents (52.8%) said they encounter difficulty in the study of Economics, while 14 respondents (38.9%) said they do not encounter difficulty in the study of Economics, 3 respondents (8.3%) chose the others option with varied reasons which include the understanding of topics and the teaching method of some lecturers etc. From Appendix 12, 50% said that diagram is their problem. Eleven (11) respondents (30.6%) said calculation is their problem, 7 respondents chose the other option, implying it could be both diagram and calculation and other problem as well. From Appendix 13, 23 respondents (63.9%) suggested that there should be a reference book. Four (4) respondents (11.1%) said nothing should be done about since it still involves the study of diagram which those who encounter difficulty in studying it will still have. Nine respondents (25%) chose the

others option. According to some of them, it may or may not help out, but they still supported the creation of the reference book.

Responses from Modibbo Adama University of Technology

Fifty one (51) questionnaires were administered to 10 lecturers and 41 to students. Twenty four respondents (66.7%) viewed it as an excellent idea. Nine (9) respondents (25%) viewed it as unnecessary with the same reason given to the question of Appendix 13. From Appendix 15, 75% said they are in support of creating the reference book; while 9 respondents (25%) chose the other option with the same reason of probability. From Appendix 16, 31 respondents (86.1%) agree that there will be better understanding of diagram and topic taught in class; while two respondents (5.6%) believed it will not solve the problem. Three (3) respondents (8.3%) chose the other option because of the same reason for probability. From Appendix 17, 30 respondents representing 73.17% said yes, 8 respondents representing 19.51% said no, while 3 respondents representing 7.32% have varied views which may be of an entirely different problem. From Appendix 18, 30 respondents representing 73.17% said they love Economics while 11 respondents representing 26.83% have varied reasons about problems in Economics, which sometimes may be teaching method. From Appendix 19, 28 respondents representing 68.3% said yes, 10 respondents representing 24.39% said no, while 3 respondents representing 7.31% have varied reasons which are sometimes they enjoy Economics, while other times they do not. From Appendix 20, 22 respondents representing 53.7% said diagram is their problem, 10 respondents representing 24.4% said calculation, while 9 respondents representing 21.9% chose others, implying they have varied reasons, which may be outside the scope of what is being investigated. From Appendix 21, 37 respondents representing 90.24% are in support of creating the reference book, while 4 respondents representing 9.76% chose others, which shows that they view it from probability point of being able to help or not help. From Appendix 22, 38 respondents representing 92.68% view it as an excellent idea, while 3 respondents representing 7.325 are of the probability point of view. From Appendix 23, 38 respondents representing 92.68% said yes, while 3 respondents representing 7.32% chose other options, implying their view of probability. From Appendix 24, 36 respondents representing 87.80% said the reference book will aid their study, while 3 respondents representing 7.32% do not believe it will help since it involves studying, 2 respondents representing 4.88% stated their view of probability.

Perception of lecturers from ModibboAdama University of Technology, Yola

From Appendix 25, 10 respondents said yes, they enjoy studying Economics, none respondent chose no and others. From Appendix 26, 2 respondents representing 10% said it is an easy course, 8 respondents representing 90% said they love Economics, while none chose other options. From Appendix 27, 3 respondents representing 30% said yes, while 7 respondents representing 70% said no, while none chose other options. From Appendix 28, 2 respondents representing 20% chose diagram, 1 respondent representing 10% chose calculation, while 7 respondents representing 70% gave varied reason why they do not encounter problem. From Appendix 29, 6 respondents representing 60% are in support of creating reference book. Four (4) respondents representing 40% chose other options, implying their view of probability. From Appendix 30, it is indicated that 8 respondents representing 80% view it as an excellent idea, while none chose not necessary; 2

respondents representing 20% chose other options, implying their view of probability. From Appendix 31, 10 respondents representing 100% said yes that they are in support of the creation of reference book, none chose no and other options. From Appendix 32, 3 respondents representing 30% believe it will aid study, while 2 respondents representing 20% said it will not solve the problem since it involves studying, 5 respondents representing 50% chose others, that it may or may not help out.

RESULTS AND DISCUSSION

About 123 questionnaires were distributed among three (3) Universities. Only 102 were answered: 46 from Modibbo Adama University of Technology, Yola, Adamawa State, Nigeria (MAUTECH), 36 from Adamawa State University Mubi, Adamawa State, Nigeria (ADSU) and 20 from American University of Nigeria, Adamawa State, Nigeria (AUN). From the calculated χ^2 it was discovered that majority are fully in support of creating the reference book even though opinions of lecturers and students vary (going by the responses of teachers and students in the need survey) on the problem which this research intends to solve. Nonetheless, both teachers and students agree that it will benefit the field of Economics immensely when the book is created as it is observed in the need survey. The chi square indicates that there is a need for the creation of the graph reference book.

Conclusion

The findings of this surveys show that the creation of a graph reference book is important because it will go a long way in improving the study and performance of many in the field of Economics especially students in most cases. Lecturers as well also stand to benefit when the book is created. This is because they teach Economics and use graph to depict and illustrate. This is evident in the agreement with students of the need to create a graph reference book. This is because diagram/graph is something that cannot be ignored in the teaching of Economics. Therefore, tackling the issue of diagram in Economics will go a long way in improving Economics because it relies on it to express itself. It is therefore on this note that we make the following recommendations.

RECOMMENDATIONS

On the basis of the findings of this research work, the following recommendations are made.

1. That the FEG rule/formula should be given a thought and chance to succeed.
2. When considered and approved should be written in a form of an Economics graph textbook or Economics graph dictionary so that it will be a book where students,

teachers and researchers can go and consult when they find an Economics diagram difficult to understand.

3. Room is being given for further study on this new approach should there arise a need.

4. The academic authorities, stakeholders or concerned authorities should ensure that this new approach is understood and embraced whole heartedly in their communities through enlightenment and awareness campaign of this new approach.

5. When eventually approved the FEG to be compiled in a form of Economics a graph textbook or graph dictionary must follow the procedure of drawing (structures) of the FEG diagram which must first start with a source (Topic) inquiry and its explanation. This is to simplify the topic in question to an interested individual so that when he or she eventually gets to the diagram and its explanation he or she will have by then already understood what the diagram is all about and will not have difficulty in comprehension.

6. When finally approved as a textbook or an Economics graph dictionary room should be given for periodic revision. This is because when better ideas of simpler and easier diagrams evolve it should be a welcome development that can only be achieved through revision. Just like dictionaries are been revised periodically with the advent of new words, so also should room be given for periodic revision of the graph textbook or Economics graph dictionary.

7. To achieve the FEG aim of being compiled in a textbook form or a graph dictionary involves the coming together of professionals in the field of Economics. This is going to involve dividing portions of topic to these professionals to skeletonize these diagrams by following the FEG rules/formula procedure. By this, the dream of an Economics graph textbook can become a reality that will be achieved within the shortest possible period of time.

8. The style of the arrangement of the proposed FEG rule/formula, to be compiled in a form of graph textbook or Economics graph dictionary should be decided upon, that is, whether it should be in the format of an English dictionary or whether there should be a standard Economics textbook worldwide from which all Economic diagrams can be skeletonize from and compiled in a form of a graph textbook or a graph dictionary.

Conflict of Interests

The author has not declared any conflict of interest.

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