

REVISION USING EXPLANATION AND RECALL (E&R) AT KOLEJ MARA BANTING

Satinah Awang¹

Zanaton Binti Hj Iksan²

Kolej MARA Banting, Labohan Dagang, 47200 Banting, Selangor, Malaysia.

Fakulti Pendidikan, Universiti Kebangsaan Malaysia, 43600 Bangi, Malaysia.

Abstract

The objective of this research is to increase the level of International Baccalaureate (IB) student achievement at Kolej MARA Banting by using Explanation and Recall Revision Tools. This was done by identifying the level of student's confidence toward the IB Examination after went through two months programme in the Explanation and Recall technique. In this research the reflection of IB 2015 Candidates toward E & R Program are analyzed based on self-administered questionnaire that have been written by them. The purposive respondents for this action research are Engineering and Medic IB 2015 Candidates. The overall findings are summarized based on reflection from Candidates of International Baccalaureate Diploma programme (IBDP) 2015. Based on the findings, E & R are a good technique in order to prepare IB Examination 2015 Candidates in term of confidence level. From the finding also, majority of the candidates agree E & R Revision Tool is effective provided that the student do the revision before the explanation and recall. Based on the reflection given in the research, 2 themes have been identified which are confidence level and effectiveness. A further investigation need to be carried out in order to identify others factor that contribute to the IBDP Candidates achievement. Analysis performance of the student also suggested to be analyzed upon receive of the IBDP results.

Key words : E & R, Effectiveness and Confidence.

INTRODUCTION

International Baccalaureate (IB) offers a constitute international education. The programmes encourage both personal and academic achievement, challenging students to excel in their studies and in their personal development. IB was first offered in 1968. International Baccalaureate Diploma Programme (IBDP) is a two-year programme of study taken in six subjects. Three subjects are taken at Higher Level (HL) and three at Standard Level (SL). In addition, learners are required to produce or partake in the three central components of the IB Diploma; these are Theory of Knowledge, Creativity, Action and Service (CAS), and an Extended Essay in a personal research topic. Learners select one subject from each group of subjects and decide whether to study these at SL (four lessons per week) or HL (six lessons per week). Learners must select three SL subjects and three HL subjects. The IB Diploma course encourages breadth of knowledge, understanding, and experience. Those are promoted through the following

compulsory areas. The IB Diploma course encourages breadth of knowledge, understanding and experience.

Based on Education Development Plan 2013-2015, Malaysia is preparing to achieve international educational quality status. The benchmarking of learning are language, Mathematics and Science with International Standards. It is started with launch of the High School (KSSM) and follow by Primary School Curriculum Standard (KSSR). In order to achieve International level of education , one of the curriculum which is International Baccalaureate can be implement because it start from primary school.

EXPLANATION AND RECALL

Explanation and Recall is a technique that has been formulated by former Director of Kolej MARA Banting, Mr. Mathias Francisco De Menezes (2002). Explanation and Recall (E & R) is a technique that is a part of Intensive Revision Program (IRP) package program. There are 2 parts in the IRP Program which are E & R and Simulation of examination. In this research, the researcher only focus on E & R which involves 3 tasks which are note building, collection of notes and the last part is explanation and recall.

Explanation and Recall is based on sociocultural theory (Eggen and Kauchak.2001). A cognitive view of learning that emphasizes student participation in communities of learning (Lev Vygotsky. 1986). Vygotsky stressed the importance of social interaction in learning. A major way learning by dealing with others, exchanging ideas and comparing ideas with other people. This sociocultural theory emphasizes the importance of students' active participation in authentic tasks such as Explanation and Recall. The classrooms is transferred into communities of learning where students work together toward common goals. The important task by instructor or teacher is to create positive learning environment, productive work groups, monitoring work group and facilitating inquiry through questions. Vygotsky believed that cognitive development in an intentional and systematic manner can be done by engaging students in challenging and meaningful activities.

OBJECTIVE

The objectives of this research is to increase confident level and the effectiveness of E & R revision tools techniques towards IBDP 2015 examination.

METHODOLOGY

This study involved IBDP 2015 Medic and Engineering candidates. The scope of subject covered in this study is Chemistry. This study was conducted at Kolej MARA Banting. It was carried out using reflection from IB 2015 candidates. This analysis was carried out by using purposive sampling. Data was obtained from reflection which are based on perceptions of IBDP 2015 candidates towards E & R as a revision tool. Data were collected using self-administered questionnaire (R. Jenkins & A. Dillman, 1995) which is focus on the candidates perception towards E & R revision technique.

IMPLEMENTATION OF EXPLANATION AND RECALL (E & R)

Explanation and Recall (E & R) is a part of structured Intensive Revision program (IRP). The programs are used to prepare KMB Year 2 students for the IB exams in May 2015. In this research the focus subject is Chemistry Higher Level IBDP.

The step involved in E & R are Task 1: Note building, Task 2 : Collection of notes & presentation and Task 3: Explanation & recall.

Suggestion group members: 3 to 4 people in one group. Group leader must be selected by teacher so that group members can obey his/her instruction. In this research the focus subject is in chemistry specifically in the option topic Chemistry Higher Level IBDP. In this Chemistry Higher Level option topic candidates need to remember the reaction involved, process and term.

The note building was carried out for the option topic which are Medicines & Drug, Environmental Chemistry, Biochemical and Measurement & Analytical Chemistry.

TASK 1

The notes building need to be completed 5 weeks before the exam. Notes will be checked by subject teacher. Notes need to be arranged according to chapters. It is suggested that A4 paper with no lines used for the notes building. The handwriting must be clear and easy to read. The pages for every chapter must be 4 pages and maximum 6 pages. Notes include the concept, term, fact, reactions involved and related examples. The mind map (Tony Buzan, 1960) are encouraged to be used in this note building. The material that can be used are textbooks, reference book, notes from subject teacher and candidates own notes from his/her revision.

The group leader will segregate job need to be done by group members. Group leader monitor the process of making note and coordinate with group members and teacher. Completed final note will be checked by subject teacher (Do not exceed 3 pages front and back). Do not take a shortcut by taking others people notes because this is the process to understand the relevant chapters.

TASK 2

Task 2 involved a group presentation, teacher and the others student in the class will give a comment about the topic presented by the group representor. If the information is not adequate for the particular topic, the group leader and member of the group need to add and provide more information. It takes about 10 minutes for a group presentation.

Once the notes ready, set up a class presentation and discuss the ambiguity, discrepancy and if necessary to an amendment for the notes. A complete notes with an amendment will be submitted to the subject teacher for endorsement. Later a copy of notes will be duplicated for the all members in the class.

TASK 3

The time taken for each cycle of E& R is 7 minutes. 5 minutes for explanation and 2 minutes for recall. A small group of E & R with 3-4 members get together and make a circle, mahjong paper is putting in the circle. Each one of members stand by with a

different colour of pen. In this task, candidates will work with their group members. One of group member explain 1 page of note and the others just listen with a different colour of pen. Candidates are advised not to force themselves to remember the content when his/her friend do the explanation. Explanation take about 5 minutes.

Once finished each members in the group will do recall session by writing the information in the mahjong paper. It take about 2 minutes. The steps are repeated by other members for 2nd page and repeat it again by the next members and so on. Candidates may proceed with chapter 2 after chapter 1 and so on. 5 minutes to explain and 2 minutes to recall the topic in the particular chapter.

TIME CONSUMING

By using this E & R Revision Tool, candidates can save their time. Example if there are 20 chapters in Chemistry HL that need to cover. By using this technique, candidates need only 20 x 7 minutes, which is 140 minutes (2 hours 20 minutes). This is consider as one cycle. Candidates are advised to repeat E & R again by using the same Mahjong paper and recap the one that are not written in the 1st cycle. The suggested cycle to the candidates are 5 cycles.

FINDINGS

The findings were evaluated base on Action Research Theme (John and Ethnograph. 1998). Documented self-administered questionnaire was given to 85 IBDP 2015 candidates at Kolej MARA Banting. One of them not return back. Hence, the sample size remained restricted to 84 comprising 42 female (50%) and 42 male (50%) IBDP 2015 candidates, as per Table 1. Out of the 84 IBDP 2015 candidates 50 (59.5%) were taken Medic and 34 (40.5%) of the candidates taken Engineering course. Majority of the students were came from boarding school around Malaysia before they furthered study at Kolej MARA Banting.

Table 1: Demography of Respondent

Demography	Category	Frequency	Percentage %
Gender	Male	42	50
	Female	42	50
Class	Medic	50	59.5
	Engineering	34	40.5

Based on the reflection carried out to 84 respondents (Table 2), 71.4% of the IB 2015 candidates agree that the technique are effective for the IBDP exam preparation. The others 28.6% IBDP candidates are in doubt about the technique as per Table 2.

Table 2: The effectiveness of E & R

Category	Medic	%	Engineering	%	Total	Percentage %
Effective	41	82 %	19	55.8%	60	71.4
Not Effective	9	18%	15	44.2%	24	28.6
Total	50	100%	34	100%	84	100

Based on Table 3, more positive response on the effectiveness of the technique. Candidates gave a good views in the documented self-administered questionnaire. Only one candidate give a negative response, “ difficult to focus without seeing the notes” (R44).

Table 3: Response about the effectiveness of this technique based on the IBDP 2015 Candidates

Theme	Comment	Code	Frequency
Effectiveness	Difficult to focus without seeing the note	R44	1
	Effective if the student give a full effort, example i. coordination in the group in term of segregation of work. ii. arrangement of topic in note building”. “ failing to arrange the note will effect the effectiveness of the technic.	R11	1
	Effective if the student do the revision before the explanation and recall”	R15,R26,R45	4
	Effectiveness ? I’m not sure because this is the first time having this type of technic ”.	R79	1
	Effective for certain topic	R5	4
	The technic is effective if explanation done in short time instead of 5 minute.	R28,R30,R58	1
	Effective on me because I trained myself to remember.	R51. R29	1
	Very effective if you focus.	R31	1
	At first I was not sure using this technic but after that I discovered I can cover many topics.	R32 R41	1
	Effective but take time.	R42	1
	It Improves memory.	R54	1

Less because of recall depending on the R78 1
explanation.

Based on my experience it less effective. It R71 1
depend on the execution.

Candidates of IBDP 2015 gave a positive feedback towards the confident limit for IBDP Examination after went through E & R Revision tool are positive which is shown in Table 4. 60.7 % of candidates feel confident to sit for the exam., this represented by 51 respondents. The rest 39.3%, feel that they do not confident even though after went through the E & R Revision Tool. This particular candidates have less confident because no practice have been done after E & R program. They only involved with formal E & R in the class, no continue action taken to do more practice after the class. Table 5 shows a good comment on the level of confident after using E & R Revision Tool. A positive comment such as "makes me think fast", "good to strengthen memory" and others comment are consider as the way to improve E & R as a Revision Tool in the future.

Table 4: Confident limit for IB Exam after using the technique

Category	Medic	%	Engineering	%	Total	Percentage %
Confident	40	80%	11	32%	51	60.7%
Non Confident	10	20%	23	68%	33	39.3%
Total	50	100%	34	100%	84	100.0 %

Table 5: Level of confident for IBDP Examination after using E & R

Theme	Comment	Code	Frequency
Effectiveness	Good to strengthen memory	R1,R2,R3	3
	Makes me think fast	R8	1
	Less confident because no practice after the E & R Program.	R80	1
	I am not confident without a complete revision	R79	1
	Specify the topic / sub topic according to page.	R77	1

Time duration for E & R depend on the R77 1
no. of page.

In the Table 6, the suggestion for improvement of E & R Revision Tool are very important as it can be used for new batch of IBDP. There are 5 input that need to be consider for the next round of IRP program especially in the Explanation and Recall Part. The input from candidates that said, “I don’t see any room for improvement” need to be clarify as the reason is not specify in the using self-administered questionnaire.

Table 6: Suggestion how to improve E & R Revision Tool

Theme	Comment	Code	Frequency
Study before E & R	Need to do a revision before do E & R	R80	1
	Need detail explanation not only read the notes.	R79	1
	I don’t see any room for improvement	R78	1
	Specify the topic / sub topic according to page.	R77	1
	Time duration for E & R depend on the no. of page	R77	1

DISCUSSION

This study sought is to see the effectiveness of E & R as a revision tools for IBDP and to increase confident level of IBDP Candidates 2015 at Kolej MARA Banting towards IBDP Examination. Based on the data collected from IBDP Candidates 2015 by using self-administered questionnaire a lot of thing need to be consider in order to ensure E & R Revision tool are effective and will increase confident level of the candidates. 2 themes are identify in this research which are effectiveness and confident level IBDP Candidates 2015. Based on the finding in Table 2, 80% of Medic IBDP candidates agree that the E & R Revision Tool is effective compare to Engineering IBDP Candidates that only 55.8 % agree with the E & R Revision Tool effectiveness. Based on (Abbas. 2012) learning style is important for many reasons. In this research E & R is a type of kinesthetic that candidate involve in explanation and recall by writing in the mahjong paper. It is like a drilling task. However, there is limitation that need to be consider why less Engineering candidates feel that E & R Revision Tool is effective because people’s learning styles will vary because everyone is different from one another naturally. This is mentioned R1, “effective if the student give a full effort”. “coordination in the group in term of segregation of work” and “arrangement of topic in note building”. “failing to arrange the note will affect the effectiveness of the technic”

All the task involve a group work which is not suitable for candidates that like individual study.

In term of confident limit, one of respondent said that “ I am not confident without a complete revision”. In making justification about complete revision respondent not realize that this is a complete revision if they follow the sequence of the task thoroughly. In spite of that the E & R program is only introduced in Kolej MARA Banting and in a few Junior Science College (MRSM). Respondent is not used with the new cooperative learning style. Besides that the program is started at the end of semester 4 which is consider late as respondent need to do 5 cycle to master in the certain topic. Further investigation need to be carried out to identify the suitable time for E & R to be conducted so that candidates have ample time to do E & R practice.

This E & R revision technique is recommended to all students provided that a guidance from the teacher or facilitator. This is because E & R is very good in terms of time consuming. By following the task , students can save their time and can do repetition revision a day before the real exam.

REFERENCES

- Abbas Pourhossein Gilakjani. (February 2012). *Visual, Auditory, Kinaesthetic Learning Styles and Their Impacts on English Language Teaching*. English Language Department, Islamic Azad University, Lahijan, Iran.
- Cleo R. Jenkins and Don A. Dillman. (July 2015). *Towards a Theory Questionnaire Design*. Washington State University.
- Collins E & Giren, J. (1992). *Learning in classroom settings*. H. Marshall. Ed. Redefining Student Learning: Roof of educational change Norwood: NJ: Ablex.
- Dawson, C. (1992). *The scientific and the everyday : Two Different Ways of Knowing, Some Implication for Science Teaching. The Australia Science Teachers Journal* 38 (1.)
- Lev Vygotsky. (1896-1934). Social Development Theory.
- Matias Francisco De Menezes. 2002. Kaedah Menangani Peperiksaan Melalui Ulangkaji Terancang (Program IRP). ELMS Associates.
- Paul D. Eggen and Donald P. Kauchak. 2001. *Strategies for Teachers Teaching Content and Thinking Skills* University of North Florida and University of Utah
- Seidel John and Friese S. Ethnograph v 5. 0:. 1998. “A Program for the Analysis of Text Based Data.”. Colorado Springs: Qualitative Research Associates.

_____0000_____