RELATION OF IMPLEMENTATION OF LEARNING COMPOSITES IMPROVING HIGH LEARNING SKILLS (HOTS) WITH STUDENTS’ ACHIEVEMENT IN ISLAMIC EDUCATION LESSONS

HUBUNGAN PELAKSANAAN KOMPOSIT PEMBELAJARAN PENINGKATAN KETERAMPILAN BELAJAR TINGGI (HOTS) DENGAN PRESTASI SISWA PADA PELAJARAN PENDIDIKAN ISLAM

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Abstract:

This study aims to see the relationship between the implementation of learning composition that integrates HOTS with the achievement of students through Islamic education subjects in primary schools. This study examines the profile of the aspect of student learning composition and the relationship with the current student achievement. The instrument used is the adaptation of the HOTS questionnaire which has adapted the modified Anderson instrument from Bloom’s taxonomy, ‘Learning and Study Strategies High Order Thinking, Islamic Education teaching practice assessment instrument by (Mohd Aderi, 2010) And teaching monitoring instructional materials (JNJK, 2011) to measure the implementation of student learning composition with the reliability value of Cronbach Alpha (α) 0.902. Samples involved were year five students who were taken randomly stratified and grouped from national schools around the state of Perak. The data were analyzed using frequency, percentage, mean, standard deviation, and Pearson correlation. The results showed that the level of correlation between the composition of learning and the achievement of the students was moderate high for six constructs ie planning (min = 3.43, SP = 0.54, r = 0.457), objective setting (min = 3.31, SP = 0.49, r = 0.455) The use of educational resources (mean = 3.35, SP = 0.48, r = 0.673), implementation of questionnaire (min = 3.32, SP = 0.57, r = 0.535) (Min = 3.07, SP = 0.59, r = 0.4781), while performing reflection (mean = 3.15, SP = 0.55, r = 0.0931) summarize the teaching content (mean = 3.34, SP = 0.60, r = 0.183) = Low relationship. The findings also showed that the composition of learning in terms of overall and student achievement was moderate (r = 0.031, p = 0.579, r = 0.0852). Therefore, the implementation of learning composition is related to student achievement, but there are other factors contributing to student achievement in Islamic education subjects.

Keywords: Learning composition, HOTS, student

Abstrak:

Penelitian ini bertujuan untuk melihat hubungan penerapan komposisi pembelajaran yang mengintegrasikan HOTS dengan prestasi belajar siswa melalui mata pelajaran Pendidikan Agama Islam di Sekolah Dasar. Penelitian ini mengkaji profil aspek komposisi belajar siswa dan hubungannya dengan prestasi belajar siswa saat ini. Instrumen yang digunakan adalah adaptasi angket HOTS yang telah menghadap dan instrumen Anderson yang dimodifikasi dari taksonomi Bloom, ‘Strategi Pembelajaran dan Pembelajaran High Order Thinking, instrumen penilaian praktik pengajaran Pendidikan Islam oleh (Mohd Aderi, 2010) dan bahan ajar pemantauan pembelajaran (JNJK, 2011) untuk mengukur keterlaksanaan komposisi belajar siswa dengan nilai reliabilitas Alpha Cronbach (α) 0,902. Sampel yang terlibat adalah siswa kelas lima yang diambil secara acak bertingkat dan dikelompokkan dari sekolah nasional di sekitar negara bagian Perak. Data dianalisis menggunakan frekuensi, persentase, mean, standar deviasi, dan korelasi Pearson. Hasil penelitian menunjukkan bahwa tingkat korelasi komposisi pembelajaran dengan prestasi belajar siswa tergolong sedang tinggi untuk enam konstruk yaitu perencanaan (min = 3.43, SP = 0.54, r = 0.457), penetapan tujuan (min = 3.31, SP = 0.49, r = 0.455) Penggunaan sumber daya pendidikan (mean = 3.35, SP = 0.48, r = 0.673), pelaksanaan angket (min = 3.32, SP = 0.57,
Education is an area that is constantly undergoing changes based on a clash with the environment that determines how the direction of change can be implemented. So, based on the 21st century learning transformation movement, every change that is formed needs to be in line with the developments in the environment as any change will affect the overall component of education including in the aspect of Islamic educational pedagogy. For that reason, Islamic education is an important nerve for the development of a country, especially in terms of quality human capital formation.¹

Determining the learning strategy that focuses on the composition in PdP is through research on the differences in individual capabilities and how these differences can be translated into the same framework of understanding. The production of learning strategies practiced by each student varies from one another and this has been established since the birth process took place. Furthermore, this development process takes place based on the increase in age, in parallel with the development of cognitive, affective and psychomotor elements to be translated into the learning process.²

For this purpose, this study uses the PdP model proposed by Le Francois and al-Qabisi, which is the right guide based on the main framework that puts the learning content in

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each phase of the teaching and learning process. In addition, this model describes the interaction with the environment to influence and practice each activity in the context of learning relationships with students’ achievement and understanding.

The PdP al-Qabisi and Le Francois models have also been used in this pedagogical study, especially those requiring the application of learning composition elements. This Le Francois model explains how the learning process is based on the way a phase transforms into a phase begins with the beginning until the end of PdP. In other words, the Le Francois Model is a learning style that requires a lot of skills to master something in the subject. Le Francois also divides the learning process into three phases namely before, during and after.

For the al-Qabisi model which deals with the problems of PdP, it states that in the process of learning it is necessary to pass some components involving the constructs of PdP, student readiness, teacher preparation, student behavior and student involvement. For that, through the study, this unstructured structure was structured on three main elements based on past studies conducted. The construction was the beginning, development and closing.

For HOTS based learning, it will happen if a student exhibits something in the form of a new idea, whether in the form of understanding, awareness and skills. Through this HOTS learning process there are some tendencies that are owned and practiced by individuals. This tendency includes the tendency to apply experience while learning something, the tendency to

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implement categorization, the tendency to draw conclusions and the tendency to ensure the details of the description.


Kamarul Azmi Jasmi, Ab. Halim Tamuri & Mohd Izham Mohd Hamzah, (2012) also states that learning that does not apply the HOTS element has no relation to the addition of knowledge, recalling what has been learned. On the other hand, HOTS-oriented learning will result in basic principles and concepts that can be applied to the real world situation and thus form an understanding. Learning also needs to be seen as a qualitative change of people through the activities of seeing, experiencing, understanding and appreciating something in the world of reality. When one can do this thing as best as possible, it can be argued that learning has generated revenue. 8

For that reason, the role of the school as an institution plays an important role in shaping the desired generation in a country based on deep understanding and detailed appreciation of the HOTS concept. 6 This can be translated through the adaptation of PdP based on 21st century learning such as contextual learning, constructivist, collaborative, translating behavior, self-learning, group discussion and so on. The clear relationship between the role of the school is to provide motivational courses such as HOTS application understanding seminars, workshops of excellence, collaborative collaboration with external communities, service delivery of thinking skills, lectures and so on. Schools should also have enrichment classes and excellence for students with good level of achievement and recovery class for disadvantaged students. 7

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However, based on past studies conducted, most students still recorded lower achievements in Islamic education subjects, especially those who were not exposed to HOTS-

based learning methods. This situation has raised the question of whether is there any link between the teacher's approach and the student learning process. Because of this problem, the need for this assessment to be implemented on learning compilations is to determine the degree of effectiveness and relevance of the students' learning performance. In addition, this study also highlights how the relationship between the HOTS learning composition and the HOTS-based student achievement level is based on predetermined constructs. This study aims to identify the composition of learning among students in Islamic education subjects and to connect with students' achievement. Details of the specific objectives are as follows:

1. To identify the composition of learning by students who intend to HOTS
2. To identify relationships between learning compositions that integrate HOTS with academic achievement of students.

B. Research Methodology 1. Research Design

The design of this study is a quantitative survey method. The findings of this study are seen through the form of arrangements which include specific numbers and formulas. According to (Creswell, 2009; J. Pallant, 2010) the survey method is a specific way of collecting information about a large group of populations. This survey method uses questionnaires to evaluate the main components of planning, objective setting, implementation of induction sets, use of educational resources, conducting questionnaires, reflection, formulating teaching contents and evaluating students' understanding.

This study is a preliminary survey that only uses questionnaires and measurement methods based on descriptive and inferential analysis tests that involve the relationship between student learning composition and achievement. This study sets the instrument produced based on the adaptation of the questionnaire and has been confirmed by a predetermined expert.

2. Population and Sample Study

This study involved 400 primary school students in Perak with distribution of research using 3 main zones in Perak involving North Perak, Middle Perak and South Perak. The total
population of fifth year Islamic students in Perak was 35,502 based on information from the Islamic Education Sector, Perak Education Department. However, based on the table, the sample was determined by a population of 382 people, but in this study 400 students were involved in this study. These selected students have been suggested by Islamic education teachers covering the setting of location, gender and current achievement.

3. Scope and Limitation of Study

This study was conducted at national primary schools in Perak based on sampling and stratified sampling. Sample selection was made based on this student following the primary school standard curriculum (KSSR) based on the HOTS element. For the restriction of this study, it is recommended that only students attending national schools only, for schools that are not state-funded are excluded. Research instruments has divided the questionnaire into three sections.

Part A

Profile of student personal information covering location, gender and current achievement.

Part B

Forty-four items have been translated and adapted from the learning composition style questionnaire (Misnan, 2008; Paharuddin, 2014), PdP Monitoring Instruments (Pilgrims and Quality Assurance, 2016) and Instrument Appreciation Principles (Norsaleha, 2015).

Part C

15 questions aimed at evaluating students' understanding of the HOTS. This test is adapted from the Malaysian Examination Board questions.

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4. Pilot Study

Pilot studies were conducted before actual studies were initiated. The main purpose of the pilot study was to determine the reliability of the questionnaire. Therefore, this study was conducted on 30 fifth year students at national schools in Manjung district. The reliability value obtained is 0.9060. According to (Mohd Najib, 1998; Creswell, 2009), if the high coefficient value of 0.8 above, reliability is high. Therefore, the questionnaire has high reliability.³

Table 2: Value of Survey Coefficient of Coefficient

<table>
<thead>
<tr>
<th>Cronbach</th>
<th>(Value Variables)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>(0.7727)</td>
</tr>
<tr>
<td>An objective setting</td>
<td>(0.8905)</td>
</tr>
<tr>
<td>Execution of induction set</td>
<td>(0.8020)</td>
</tr>
<tr>
<td>Use of educational resources</td>
<td>(0.7672)</td>
</tr>
<tr>
<td>Execution of questioning method</td>
<td>(0.8431)</td>
</tr>
<tr>
<td>Objective reflection</td>
<td>(0.8542)</td>
</tr>
<tr>
<td>Summed up teaching content</td>
<td>(0.7965)</td>
</tr>
<tr>
<td>Evaluate student understanding</td>
<td>(0.7367)</td>
</tr>
</tbody>
</table>

The five-point Likert scale is used in this study. The scores used are Very Disagree (STS) with 1 point score, Disagreement (TS) with 2 points, Less Sure (KP) with 3 points, Agree (S) with 4 points and Strongly Agree (SS) with a score of 5 points. The data obtained in the analysis uses descriptive statistics that involve frequency, percentage and mean.

5. Data Analysis

Data analysis is an important part of the study. Hence, the data obtained were analyzed and processed using computer with Statistical Package for Social Science (SPSS) software 20.0. The SPSS program is used as it is easier and saves time (Pallant, 2010). The approach used in analyzing data is descriptive and inferential statistical approach.

Descriptively, the data obtained will be presented in the table showing the frequency, percentage, mean and standard deviation form. The researchers will use inferential approaches such as Pearson correlation. The inference approach is used to formulate and interpret data in more detail.

1. **Descriptive Analysis**

The data were summarized and analyzed based on Table 3 on the frequency and percentage analysis for gender, location and current achievement as compared to the composition of learning in integrating Islamic higher-education thinking skills (HOTS) of Islamic education.

Table 3: Frequency and percentage, analysis of sexes, locations and current achievements

<table>
<thead>
<tr>
<th>Bil</th>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1)</td>
<td>Men</td>
<td>183</td>
<td>37.75</td>
</tr>
<tr>
<td>2)</td>
<td>Female</td>
<td>249</td>
<td>62.25</td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1)</td>
<td>City</td>
<td>113</td>
<td>28.25</td>
</tr>
<tr>
<td>2)</td>
<td>Rural</td>
<td>188</td>
<td>47.00</td>
</tr>
<tr>
<td></td>
<td>Current achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1)</td>
<td>Excellent</td>
<td>68</td>
<td>17.0</td>
</tr>
<tr>
<td>2)</td>
<td>Medium</td>
<td>211</td>
<td>52.75</td>
</tr>
<tr>
<td>3)</td>
<td>Weak</td>
<td>83</td>
<td>20.75</td>
</tr>
</tbody>
</table>

2. **Relationship Between Learning Composition and Student Performance**

The relationship between the composition of learning and students’ achievement was analyzed based on several theories of learning composition namely Anderson and al-Qabisi theory. From the analysis on the composition of this study and its relationship with students’
achievement, it was found that six variables exhibit a positive correlation index while two variables exhibit a negative correlation index.

The overall relationship between the learning composition and the achievement of students is significant, at a moderate level. Under the 0.05 significance level selected and the correlation value $r$ obtained from the eight components of the learning composition is between 0.3 to 0.4. Whereas, the significant value of $p$ is greater than 0.05 ie from 0.155 to 0.683. The situation shows that there is a simple relationship between the composition of learning and students’ achievement. Overall, the findings can be concluded that the composition of student learning does not fully affect the students' achievement, there may be other factors contributing to the achievement of this student.

3. **Relationship Between Learning Planning Component and Students’ Achievement**

   The relationship factor between these planning components is based on an activity-based analysis of the relationship between the variables. The formulation of the relationship between the planning components and the achievement found that there was a moderate relationship with the achievement of students based on their significant value record ($r = 0.457$). This proves that planning factor plays an important role through the creation of a conceptual framework of execution, activity guide, skills in conducting HOTS-oriented activities and the ability of students to understand. However, there needs to be an improvement to formulate plans to ensure success of students.

4. **Relationship Between Objective Setting Components with Students’ Achievement**

   The relationship factor between objective setting components and students’ achievement is among the important factors in influencing students’ achievement (Winkel, W.S. 1998). The findings of the researcher's findings on the constructs of the teaching objectives were found that there was a moderate significant relationship with the achievement factor at the significant level of $p = 0.01$, it showed that the value of $p => 0.05$. The correlation index is 0.455 and this shows a moderate relationship.

5. **Relation Between Implementation of Induction Sets with Students’ Achievement**
From the overall analysis of the implementation of the induction set and its relationship with the achievement of students found a significant moderate relationship. Based on the information obtained, it is clear that induction sets play an important role in achieving achievement among students. The resulting correlation findings show significant relationship with the achievement factor at the significant level p = 0.01, it shows that the value of p => 0.05. The correlation index is 0.324 and this shows a moderate relationship. Therefore, other factors may also affect students’ achievement such as teachers' readiness, reference materials, backgrounds, intelligence and school culture.

6. Relationship Between the Use of Educational Resources and Students’ Achievement

The relationship between the use of educational resources and the achievement of students in the analysis and shows the correlation of the positive and significant correlation index. Where the relationship between the use of educational resources and students’ achievement is linear, as long as many educational resources are used, the higher the student's achievement. The resulting correlation findings show significant relationship. with the achievement factor at the significant level p = 0.01 at the value of p => 0.05. The correlation index is 0.673 and this shows a high correlation. Therefore, this finding demonstrates the need for teachers to provide more teaching aids in improving students’ academic performance.

7. Relationship Between the Implementation of Questioning Methods and Students’ Achievement

From the analysis on the implementation of questioning methods and their relationship to students’ achievement, it was found that all showed a positive correlation index. Where the relationship between the method of questioning and student achievement is linear. With the 0.01 significance level chosen and the value of r correlation obtained with a significant value of p is greater than 0.05 which is 0.535. The situation shows that questioning plays an important role in ensuring that there is an increase in students’ achievement, especially Islamic education subject.

8. The Relationship Between Objective Reflection and Students’ Achievement
From the analysis on objective reflection and its relationship with student achievement, it was found to be a negative correlation index. Where the relationship between objective reflection and student achievement is inverse. This is determined by the significant value recorded at the table is 0.0931 at the significant level $p = 0.01$, it shows that the value of $p => 0.05$. The correlation index is 0.155 and this shows a very weak relationship. This situation shows that there is no reflection exercise implemented in PdP Islamic education.

9. The Relationship Between Formulating the Teaching Contents with the Students’ Achievement

From the analysis on formulating the contents of the teaching and its relationship with the achievement of students found a negative correlation index. Where the relationship between the formulation of teaching contents and student achievement is inversible. This is determined by the significant value recorded at the table is 0.0852 at the significant level $p = 0.01$, it shows that the value of $p => 0.05$. The correlation index is 0.183 and this shows a very weak relationship. This situation shows that no formulation of teaching content is implemented within the Islamic Education PdP.

10. The Relationship Between the Evaluation of the Students' Understanding and the Achievement of the Students

From the analysis on the students' assessment of the students' understanding and their relationship with the students' achievement, it is found that the correlation index is positive. Where the relationship between the evaluation of the understanding and student achievement is linear. This is determined by the significant value recorded at table is 0.4781 at significant level $p = 0.01$, it shows that the value of $p => 0.05$. The correlation index is 0.683 and this shows a very high correlation. This situation demonstrates the implementation of the test whether a perceptive test or formative test has links to the student's achievement performance.

6. Discussion

The learning compositions that are given priority in the learning process show that the results of the study find that a large number of students follow the implementation of teaching planning, implementation of objectives and induction sets as prescribed. However, the
objective reflection component and the formulation of teaching contents cannot be fully implemented. This information indicates that the majority of national school students in the state of Perak have a tendency to follow the implementation of teaching planning, implementation of the induction set well.

The next composition of learning tends to be followed by students is the implementation of questioning methods. Based on the study (Noor Hisham Md Nawi, 2011; Partnership for 21st Century Skills, 2010, Abdul Munir 2018) students who have high cognitive power by using their logical and rational minds in making a decision. Students of this type are usually interested in theories and analyze. They are more prone to accuracy and perfection. This level of students has the nature of want to explore and implement experiments. So, the process of improvement in this stage of thinking ability will result in a more focused and structured question of power.

Implementation of learning compositions which is less practiced by students is to formulate the contents of teaching and objective reflection. According to (Rosnani Hashim, 2012), students who practice the composition in this learning practice are students who are focused and interested in PdP based theory, model, technique through the implementation of their application. What is arguing is that there are not many students who are difficult to practice the implementation of the component formulating the contents of the teaching. The difficulty was due to the lack of creative practice, idea generation and problem-solving approach (Siti Marlina, 2013; Saavedra, A. & Opfer, V, 2012 Ahmad Zaki et al, 2019). Overall, the findings show that the implementation of the learning composition of national school students in Perak is more focused on the implementation of the initial stage and the development of learning, but after that, the level of retention of the student's focus further decreases in the application of the HOTS. This may be due to the inconsistent implementation of teaching in the implementation of HOTS in the classroom. Therefore, it is necessary for teachers to improve the level of HOTS application by diversifying their skills and increasing knowledge about HOTS practices in the classroom.

Conclusion

As a result of the conclusions and discussions, several suggestions are presented to enhance the process of teaching and learning composition. The identified proposals are:
1. Diversify the activities of each student composition based on the student’s tendency. If students are focused on the use of educational resources, it becomes necessary for teachers to increase their resources and skills to apply them in the classroom.

2. During the teaching and learning process, the teachers need to follow the phases in the composition of PdP so that there is no knowledge dropout among students.

3. Applying the method in which the student seeks his own solution and gives the students the opportunity to present ideas or discoveries of new findings based on the implementation of the KBAT implementation.

4. Students need to be given practical tasks as they can guide students in linking the concepts and theories learned with real applications.

Researchers have also listed some suggestions as a guide for future studies. The proposals are as follows:

1. Sampling only involves national school students, not involving private schools, schools under state governments, national-type schools and missionary schools. These schools also contain many Islamic students who attend PdP sessions at these schools. Therefore, it is proposed that such studies be extended to those schools with larger sample sizes.

2. The sample of this study has focused on the students so it is suggested that the study be expanded by identifying the composition of educators.

3. This study was conducted on primary school students. It is therefore recommended that such studies be available to students at secondary, tertiary institutions and colleges.

REFERENCES


