The Semester Credit System For Curriculum Design In Indonesian Islamic Schools

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Abstract

Curriculum structure for Islamic schools in Indonesia is less competent compared to other schools due to lack of consideration from various stakeholder's expectation in their curriculum content. Current learning lesson period seem a bit longer and only focusing on cognitive-oriented that purposely as the guidance for national examination. Therefore, restructuring current curriculum by reducing learning lesson and combined with student centered learning experience is capable to enhance student competency with other skills and knowledge.This study aims to provide a curriculum design model to match not only the expectations for students to graduate and acquire grades as the learning process outcomes, but also the competency required for them to furtherstudy in their desired higher learning institution and excel in various competitions and also to gain other excellence. The qualitative research method using in-depth interview collections, observations and documentations was applied while to analyze the data, interactive analysis was used. All the Aliyah Madrasah in East Java were selected in this research. This study suggests that the Semester Credit System (SCS)-based curriculum designs, which consisted of compacted curricula, resulted in a curriculum design that was met the stakeholder's expectations and had succeeded in taking Aliyah madrasah as favorite madrasah.

Keywords: Curriculum designs, madrasah, stakeholder's expectations and learning time reduction.

Introduction

The curriculum design has been emerged as a new interest in the various developed countries in order to produce competent graduates. The students are not expected excellent in term of academic, but, also in their co-curriculum activities. Those elements are considered as the academic merits to apply for higher learning institutions (Barkley and Cross, 2005; Thomas, 2017). The content of the curriculum become the focus of attention in the curriculum design in order to meet various stakeholders demands (Reid, 2011). Students are not focusing only the academic learning requirement for graduates, but also expected to explore other learning process to accommodate their outcome up to professional levels.

The schools is expected to fulfillthis new demand to ensure the students graduates with good academic results and attributes in order to qualify for better higher learning institutions. Other than that, students also equipped with the capabilities in sports and have a high self-motivation to choose their career path by choosing desired major courses in the universities. Schools are not only seen as a business unit in the economic market but also social capital for the country (Tvorogova, 2017). However, the Islamic school, called madrasah, seem less competent compared to other schools because of their curriculum structured are not attractive and did not meet the stakeholder requirement.

The current curriculum structured for madrasah are based on national curriculum called Curriculum 2013. This curriculum structured only focus on cognitive element and not considered other elements such as psychomotor and affective elements. The standard learning structured just focusing the courses that student shall learn as guidance for students to pass the national examination. The learning time allocated for the students only covered for the academic learning session, which are the dissatisfaction factors from the stakeholders. In response to this issues, the introduction of the integrated Islamic schools such as Al-Hikmah, Al-Firdaus, Al-Azhar and Amanatul Ummah that offers more interactive curriculum design to meet stakeholder's demands.

According to (Scott, 2016), the curriculum shall have dynamic characteristic to meet the expected outputs from the stakeholders. The schools management shall aware the expectation from their stakeholders and shall design their curriculum to satisfy those requirements. This required the time management to allocate the essential elements in the learning process for student acquired to meet the desired outputs. With the same learning time frame, the students capable to learn courses for the designed curriculum and also prepared themselves to become more competent graduates.

It is deniable that the textbook in the curriculum is the main source for student to gain skills and knowledge (Khine, 2016). However, in order to occupy the expectations from the stakeholders, the teacher shall play very important rules to interpret the content of the textbook and accurately deliver the required knowledge and skills to the students (Irez, 2009).A study conducted by Devetak and Vogrine (2013) indicates that one of the causes for the failure in the formation of students' understanding is the poor quality of the curriculum due to the inadequate preparation of the curriculum.In this context, it is shown that there is a close correlation between the curriculum design with the achievement of educational goals and objectives, so that the existence of the curriculum is dependent on the demands desired by the stakeholders. Gracia-Martinez andGil-Quilez (2006) confirm that the curriculum (books) can be utilized by teachers as teaching orientation as well as guidance to make a decision when they select teaching materials that they will use to teach their students.The lack of synchronization between the curriculum and the demands from or needs of the stakeholders might occur because the material in the existing curriculum differs from the desired materials and students' goals and because of the inadequacy in the material coverage or the incompatible curriculum arrangement that cannot accommodate various needs and objectives of the stakeholders.

Based on the above considerations, this article focuses on the efforts of the schools to meet the needs of the stakeholders through the design of Semester Credit System (SCS)-based curricula. The schools involved in this study were all Aliyah Madrasah in East Java, and this curriculum design is a description of the implementation of a new-perspective curriculum in the schools, which is based on Curriculum 2013 but has the aim of more than achieving high national exam scores.

Curriculum Design

The modification of curricula, better known as curriculum development, has indeed become a separate scientific study and this development becomes very prominent when the curriculum is studied in the different perspective. One curriculum differs from others because of the different goals and needs (Tomlinson, 2008; Tomlinson, 2000; Tomlinson, 2010). Modification is intended as an effort to adjust a regular curriculum into a contextual curriculum in accordance with the intended goals.

Curriculum modification is legal in Indonesia, according to the provisions of the Minister of Education and Culture number 158/2014. Furthermore, in a more broadly scale, the curriculum modification have been observed around the world. In developed countries, this modification has been carried out, not only in its relations to students' needs, but also to the demands in the employment sector.

A study conducted by Griffin (2012) shows that the thrust of school curricula must change in line with changes in the way people work and live and in how the needs of the stakeholders must be fulfilled so schools must also adapt the way the curricula need to be organized. More specifically, school graduates must be superior in terms of skills in order for them to become productive and creative people. However, total curriculum adjustments is rarely take place. Partial adjustments often happen because it is possible for curriculum adjustments to occur only in some components such as modifications in objectives or time settings. Curriculum modifications related to this study is the time management through the SCS-based curriculum design.

The school effectiveness is defined as how well the student's achievement. The feasible curriculum designs is the main factor contribute to the school effectiveness (Marzano, 2003). In addition, the learning objective of the education is achieved by 20% through the curriculum design (Marzano, 2003). Achievements in this context must be interpreted as the schools' achievements in attempting to simultaneously match the demands from the stakeholders such as the student is qualify to further study in high ranking learning institution and achieved a high national examination scores.

Curricula can be designed by developing a curriculum that provides opportunities for students to learn according to their interestwithin the allocatedlearning period. A curriculum design based on the credit system is selected because of the effective learning opportunities and time can be acquired. According to (Marzano, 2003) the combination of these two aspects has a very strong influence on students and schools' achievements. Learning opportunities have a profound effect on the achievement of high exam scores so that the more opportunities to learn, the better the scores that will be achieved (Husen, 1976; Wilkins, 1997).

Curriculum designs must produce an enacted curriculum type, which means a curriculum that is actually learned by students to achieve their goals. The weakness that has been observed in madrasahis the gap between the formal curriculum produced by the government (intended curriculum) and the curriculum that is typically able to be applied by teachers (implemented curriculum). The gap between the intended and implemented curriculum is the one which is processed by structuring it in the curriculum as an addition to learning opportunities for students.

The curriculum model examined in this article mostly takes into account on the time aspect. Thus, the implementation of time management becomes very dominant because allocating the time rightly in the structure of the applied curriculum will allow the accommodation of all demands of the stakeholders to take place.

Concept of Time Management in the Curriculum Design

TheSemester Credit System (SCS)-based curriculum design is setting the time plot in accordance to the abilities and interests of students so that the SCS-based curriculum must consider the adequacy of time to accommodate students' demands. The time allocation must ensure the coverage of the curriculum content. Hence, the curriculum content shall mappedin order to fulfill all existing demands in the duration structured in the curriculum design. For example, the learning periodshall not entirely used for the lessons session. The learning hours shall be distributed to fulfill the needs of students apart from cognitive oriented learning session especially for national examination purposes. So, the possible reduction in lesson-presentation time is desired as some of the learning hours are allocated for other learning oriented such as psychomotor or affective as shown in Figure 1. Thus, teachers shall effectively mapped the curriculum content in order to distinguish the learning output for the student's need as an effort to reduce the existing learning hours allocated for the students. This mapping process called the concept map. This concept map is helpful for teacher to focus on the materials need which is less time required for lesson session and extra learning hours can be effective allocated for other learning interest.
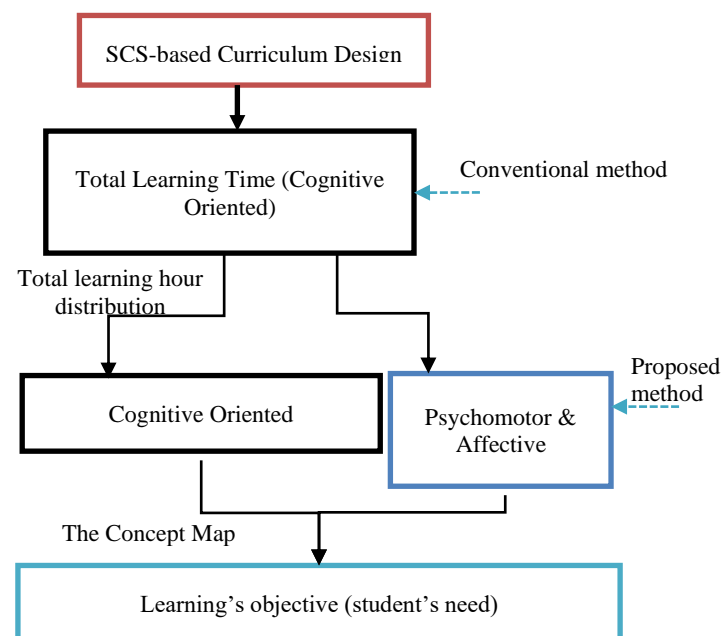

Figure 1: Concept of time management in the SCS-based curriculum

The procedure for creating a map of curriculum contents is carried out by sorting out the learning materials. The learning materials that are considered not necessary to be taught in class as students have learned these through other learning resources apart from teachers can be omitted. The capabilities and knowledge that have been learned by students before being taught by teachers in class are called prior knowledge.By taking prior knowledge out of the contents of the regular curriculum, the actual time allocation needed to deliver the learning materials can be determined. This will also avoid repetition in learning the materials of prior knowledge. The existing remaining learning time is no longer used to teach prior knowledge included in the curriculum but is used to fulfill other needs of the students.

The concept of time management in the curriculum design is no longer seen as a static time allocation to be used as the range of time needed to deliver the learning materials. This time range is adjusted according to students' ability to concentrate during class. Time is now associated with the effectiveness of students in completing learning materials in the classroom. Thus, the concept of time management in units of study hours in the curriculum will greatly depend on the variants of

demands that students want to achieve. The duration range of study time in high schools, for example, is observed about 45 minutes per session. In the proposed curriculum design, the duration can be reduced to about 30 minutes of the learning session in the classroom.

(Hattie, 2014) theoretically develops learning time reduction. He emphasizes that the true learning is a process in which the students pay full attention to the ongoing lesson, which means that the duration of time documented in the curriculum does not have any contribution to strengthening students' achievements. According to this definition, learning time is divided into four categories, namely:

1. Allocated time. This is the unit of study hour documented in the curriculum. In the senior high school level, it is scheduled for 45 minutes while in the junior high school or MadrasahTsanawiyah, it is 40 minutes of face-to-face meetings.

2. Instructional time. This is the time that a teacher or lecturer spends on the actual teaching. Therefore, instructional time results from the deduction of the time a teacher uses up before teaching from the scheduled duration of time structured in the curriculum. For example, a teacher has to use the toilet right before he or she teaches and does not actually start teaching until seven minutes later. Then, this means that the teacher's teaching time, or the instructional time, is only 33 minutes.

3. Engaged time. This is the time when students are actually engaged in the lessons presented in class. This study shows that this type of time comprises only 20% to 25% of the allocated time, which is only 21 to 39 minutes of the scheduled 100 minutes.

4. Academic learning time. The time used to reach a high level of achievements of the students.

The implementation of Hattie's theory contains a number of obstacles. One of them is that the learning time is determined by the state and formulated in the rigid schedule of the school, while time efficiency is a variable to help students achieve their performance (McLeod, 2003).

The main principle in the time management of the curriculum design is the student centered learning. Student centered learning focusing on the students' interests where the student voice is acknowledged in the learning experience. Student's engagement is essential in their learning space where they have to choose what they will learn, the method of the learning and their assessment. Therefore, they responsible in their own learning process and their learning pace. It is contrast to the conventional method where teacher in control what the students will learn, how they will learn, and how the student will be assessed on their learning.

Research Methodology

The main objective for this study is to produce the curriculum structure model for the madrasahthat is suitable not only assisting students to pass the national examination but also fulfilling the expectations of various demands from different stakeholders. The propose curriculum structure will provides a time slots for other learning interest in order tomeet the stakeholders demand.

The instruments of this research are semi structure interview, documentations and an observation has been used to realize the research objectives. This method is able to obtain information in a unique and comprehensive way so that the roots of the problems can be identified. The method provides greater opportunity to interpret data in accordance with the context and psychological conditions of the research subjects. The interviews come from two open ended interview protocols, one for teacher, and another one for the students were developed. There are two optional to conduct the interview for the participant there are the interview by using phone or e-mail. Observation will be conducted to know and interpret the behavior of

the subject research or participant. In addition, the documentation isapplied to recording portfolio such as schedule subject matter and lesson plan of the teacher.The qualitative research is used to produce an SCS-based curriculum model that is appropriate to accommodate a variety of demand and expectations of stakeholders formulated into a curriculum structure called the full-of-expectation curriculum.

The flow analysis model is used for qualitative data analysis (Huberman, 2014). This data analytical method is capable to cover all stages of data collections, to verify and to conclude the data, so that it is more compatible with the character of the research methodology used. The analytical method must undergo four stages, namely data collection, data verification, data conclusion and data presentation.

This subject research focusing the public and private Madrasah in East Java. There were 54 Madrasah involved and these schools were chosen because they had implemented the proposed SCS-based curriculum as shown in Table 1.

Tabel 1: Distribution of madrasah in East Java, Indonesia

No	District	Quantity	Private	State
1.	Mojokerto	7	4	3
2.	Surabaya	8	5	3
3.	Madiun	5	2	3
4.	Ponorogo	8	5	3
5.	Kediri	9	6	3
6.	Malang	8	6	2

These schools then divided into two groups, which are gorup (a) for private madrasah, while group (b) for state madrasah. Private madrasahis run by private foundation while state madrasah school is run by state government.

Results and Discussions

The curriculum structured for selected schools, which based on Curriculum 2013 have been studied before implemented the proposed designed curriculum. The time conversion process was carried out in order to specify the value of equivalence per study hour. The calculation was based on the technical guidelines of the Directorate of Secondary Education issued in 2014. Based on the calculation on the time conversion, the study hour of the regular curriculum is valued half of that of the SCS-based curriculum. It means that one hour of study time of the regular curriculum is equal to two hours of study time of the SCS-based curriculum. The curriculum content remained within the range of basic competency which had been standardized by the government. This is important because of the curriculum development including the development of the SCS-based curriculum model is basically one of the variants of the curriculum formulation that is more time-oriented.

Then, the teachers are required to analyze the class atmosphere so that all characteristics of the class and students can be included as considered factors in the process of determining the class curriculum format.This situational analysis is very important for teachers to do at school because the class curriculum must be in accordance with the context of the class. Therefore, the adjustments made by the teachers, for example, by rearranging the materials of Curriculum 2013 according to the characteristics of the students. Based on the applied designed curriculum, the duration of one hour of study time at an Aliyah Madrasah is only 30 minutes rather than 45 minutes as in the regular curriculum.The decision to contextualize the curriculum according to the students need is not easy for the teachers. The teachers are often unaware and do not make use of time to contextualize the regular curriculum in terms of structuring and delegating the learning materials. One of the keys to success in working out this curriculum adjustment is the strong leadership for the management ofMadrasah in requesting modifications to the regular

curriculum to designed curriculum.

Time audit is used to determine how much time is needed to deliver a teaching material and this has been done, for example, in Amanatul Ummahmadrasah, which examined the 30 minutes of face-to-face meetings in class. This reduction period of face-to-face meeting in class related with the abilities of student to concentrate during learning session. Time reduction in the curriculum can be justified since there is a juridical basis governed in Article 9 of PERMENDIKBUD (the regulation of the Minister of Education and Culture) number 158/2014 which allows a reduction in study time at school.This learningtime reduction has become more important to improve existing teaching skills. For instance, in bachelor's degree of education, the chance to become a teacher is very high despite having just graduated. This is supported by Peraturan Presiden (Presidential Decree) Number 19/2017, established by the Indonesian President on 2 June 2017. When only the regular curriculum is implied, without this learning time reduction, it will be quite impossible to attain other expertise or special skills apart from teaching.

Learning time reduction is carried out in two methods, firstly, compacting different materials to produce one essential material and secondly, reducing the amount of time of face-to-face meetings. The remaining time determined through this mechanism will be used at the end of the school year to meet the demands and the needs of the stakeholders. The remaining time will also allow other learning targets besides good national exam grades to be included in the structure of the curriculum. Figure 2 shows the procedure implemented in modification of national curriculum into SCS-based curriculum.

The new curriculum design was tested for three years in fifty-four public and private Madrasahin East Java, Indonesia. This unique curriculum undergoes different development stages compared to the regular curriculum. The outcome in the curriculum development are follows:

1. The regular national curriculum is converted into the SCS-based curriculum.

2. The need assessment is conducted so that the new demands from the stakeholders apart from the need to graduate can be identified.

3. The curriculum materials are compacted to determine the suggestive remaining time to support the fulfillment of the new demands resulting from the need assessment.

4. The concept mapping is carried out. Moreover, a conversion map of compacted curriculum materials is prepared when possible. Then, it is combined with the materials of the new demands in the structure of the converted school curriculum.

5. If the curriculum is subjected to a group of more superior learners, an escalation must be made to the basic competencies.

6. The materials are synchronized with the activities.

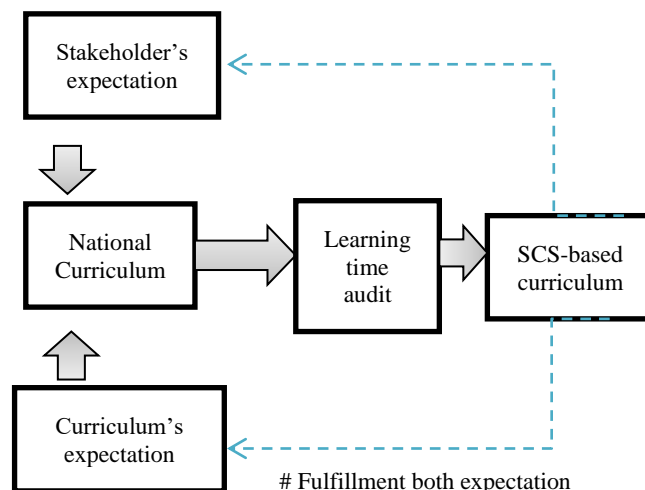7. The curriculum is arranged, structured and formulated and the schedule for lessons is prepared.

Figure 2: Procedure implemented in modification of national curriculum into SCS-based curriculum

Table 2 shows the modified curriculum structure compared to the existing curriculum which is based on Curriculum 2013. The new curriculum shows improvement in term of effective learning period where the entire course can be completed in two years, one-year less than existing curriculum structure. The learning lesson delivery is reduced 15 minutes compared to previous curriculum model. The learning materials are more innovative where it is more towards to student interest oriented. This SCS-based curriculum is totally produced by the schools and it is oriented towards respective stakeholder's expectation and national interest.

Table 2. Comparison of curriculumstructure between Curriculum 2013 and SCS-based curriculum

Curriculum 2013	Curriculum SCS
Baseline Curriculum	Modifiedcurriculum as the curriculum is developed from *Curriculum 2013*
Product of Government learning time (45 minute)	Produce by school learning time (30 minute)
3 years to complete study	2 years to complete study
Use original course from Government	Essential course according to student centered learning

Conclusion

The achievement of the selected schools that implemented the SCS-based curriculum model demonstrated that they capable to accommodate the different needs and expectations of the stakeholders. The curriculum model done by the compressing the learning materials and the reduction of face-to-face meeting period for each subject. This curriculum model is dependent based on stakeholders' expectations and it is more guaranteed as all the stakeholders' needs are systematically incorporated in the curriculum structure.

References

1. Barkley, E. F and Cross, K. P. 2005. Collaborative Learning Techniques: A Handbook for College Faculty. San Fransisco: Jossey Bass

2. Devetak, Iztok and Vogrinc, Janez. 2013. The Criteria for Evaluating the Quality of the Science Textbooks. New York: Springer

3. Griffin, Patrick. 2012. Assessment and Teaching of 21st Century Skills. New York:

Springer

4. Hattie, John. 2014. Visible Learning and the Science of How We Learn. New York: Routledge

5. Huberman, A. Michael. 2014. Qualitative Data Analysis: A Methods SourceBook. Los Angeles : Sage Publications Inc.

6. Husen, T. 1976. International Study of Achievement in Mathematics (vol.2) New York: John Willey and Sons. (163)

7. Irez, S. 2009. Nature of Science as Depicted in Turkish Biology Textbooks. Science Education 93 (3) 422-447

8. Khine, Myint Swe. 2016. Critical Analysis of Science Textbooks: Evaluating Instructional Effectiveness. New York: Springer

9. Martinez-Gracia, M. V., Gil-Quilez, M. J. 2006. Analysis of Molecular Genetic content in Spanish Secondary School Textbooks. Journal of Biological Education, 40 (2). 35-60

10. Marzano, Robert J. 2003. What Works in Schools: Translating Research into Action. Alexandria: ASCD

11. McLeod, Joyce. 2003. The Key element of Classroom Management: Managing Time and Space, Student Behavior and Instructional Strategies. Alexandria: ASCD

12. Reid, Anna. 2011. From Expert Student to Novice Professional. New York: Springer

13. Scott, David. 2016. vii. New Perspectives on Curriculum, Learning and Assessment. New York: Springer

14. Thomas, Theda Ann. 2017. Designing First-year Sociology Curricula and Practice. Asian Social Science. Vol. 13, No. 4. 2017. DOI: 10.5539/ass.v13n4pl

15. Tomlinson, Carol Ann. 2000. Leadership for Differentiating School and Classroom. Alexandria: ASCD

16. Tomlinson, Carol Ann. 2008. The Differentiated School: Making Revolutionary Changes in Teaching and Learning. New York: ASCD

17. Tomlinson, Carol Ann. 2010. Leading and Managing a Differentiated Classroom. Alexandria; ASCD

18. Tvorogova, N. D. 2017. Higher Education Institution and Its Representative, Which Applicants Have their Trust in.Journal of Advance in Social Science and Humanities. DOI: http://dx.doi.org/10.15520/jassh33198

19. Wilkins, J. 1997. Modeling correlates of problem solving skill: Effects of opportunity to learn on the attainment of higher order thinking skills in mathematics. Dissertation University of Illinois at Urbana