

INFORMATION MASTERY BY TEACHERS AS A STRATEGY TO SUCCEED IN THE IMPLEMENTATION OF TEACHING AND LEARNING ACTIVITIES

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Abstract: The objectives of this research are to know trying to master information that can support and make him succeed in teaching and learning activities This research is descriptive qualitative research The sample of this research 108 teacher equivalent high school. The data were gathered by using questionnaire and were analysed by using the mean approach. The findings showed the strategies used by the teachers in information mastery to succeed in teaching and learning activities are understanding teaching materials, reading various available sources, searching for the latest information, trying to find reliable sources, observing all the recent references, studying theories about learning, attending a training, workshop, and seminar, and writing scientific works. In conclusion this data clearly reveal that the main effort taken by the teachers is to deepen their knowledge about teaching materials. However, writing a scientific work in order to widen their horizons and to obtain a lot of information is low so that only few teachers concern about this issue.

Keywords: *Teachers, Information, Teaching And Learning, Student*

Education is a system that is built to make humans insightful and knowledgeable. Through his insights and knowledge, he encouraged himself to be better. Insight and knowledge that humans have encourage them to a better life. In addition, education provides them experience and skills and makes them qualified. A person who plays an important role to make humans qualified is a teacher. A teacher plays a very important role to educate humans. He puts a milestone in transferring information needed by students. The teacher must improve himself as good as possible since students will get knowledge from him.

As a teacher, he must be able to provide information to students, especially during learning. One of the factors that determines the success of a teacher in teaching and learning activities is the ability of a teachers to convey information to his students. Therefore, a teacher has to broaden his insight in order that learning activities take place effectively. In some cases, the learning activities undertaken by a teacher do not run well. It might happen because a teacher lacks information about learning needs. Narrow insight that a teacher has may make interaction between a teacher and his students not run smoothly. Curious students might keep asking questions to their teacher, analyzing problems and insisting their teacher helping them to solve their problems.

Learning activities will be uninteresting if a teacher is unable to help his students solve problems that they have, especially those related to students' curiosity about information. To ensure that learning activities run well, a teacher must prepare himself with current information related to the teaching material or topic of learning he teaches. One of the paragraphs of the Law of Teachers and Lecturers highlights that a teacher is required to have informative competency that belongs to the pedagogic competence. A teacher shall be reliable with a variety of knowledge. Studying in a university merely is not enough to be a teacher. He should have a lot of information and explore it so that he is always ready to teach.

This issue encourages the writer to carry out a research and analysis on senior, vocational and Islamic high school teachers in the city of Pekanbaru regarding their efforts to master information in accordance with learning activities. The information obtained from this study is used a basis for improving the quality of teachers, especially to assist them to succeed in teaching and learning activities. It is undeniably that the success of students in learning cannot be separated from the success of a teacher in teaching the students.

A teacher must take the best action for his students. He can motivate his students to be good individuals. As an educator, he has a moral responsibility for his students. He also should encourage his students to keep learning and working and make them skillful through a long processes. Mizell (2010: 13) and EOCED (2009: 48) said that a teacher must participate in the development of his students. Such participation aims to enhance the quality of students.

A teacher must be able to educate students and have a sense of responsibility to develop his students (Hamalik, 2002: 43) and (Muhaimin, et al, 1996: 54). These responsibilities encourage a teacher to be able to work professionally in doing his duties. For this reason, Hamalik reviewed from the point of view of the teacher that in order to guarantee this step the teacher should master information both theoretically and conceptually. In this case, a teacher should master various information to support his knowledge. An Nahlawi (1995: 170) emphasizes that a teacher must keep broadening his insight and knowledge since development of students may not run well because the teacher does not master and has a sufficient of knowledge.

A teachers who has broad information quality can encourage the success of learning. Rivaie (2011: 62) said that one of the determinant factors in successful teaching and learning is the quality of a teacher. Henard & Ringuet (2008: 4) stated that various information possessed by teachers can enhance the quality of teaching and learning, students, learning and teacher's satisfaction. A teacher should have broad knowledge, especially knowledge relating to teaching and learning activities and materials. Students may know more than their teacher does. However, a teacher is commonly believed to know more than students.

A teacher that has weak knowledge and narrow insight may make him difficult to convey ideas in teaching and learning activities. Kamamia, Ngugi, & Thinguri (2014: 644) said that teaching and learning process may fail, but broad insight can enrich and assist him. Lack of knowledge can obstruct the relationship and interaction between teachers and students. On the other hand, broad knowledge can establish a communicative interaction. The issue of mastering information and knowledge or insight has a broad impact on the success of the teacher in teaching.

Having informative competence makes a teacher more confident and the competence is very important in learning activities (Windschitl, 2004: 9 & 11). A teacher must explore various sources and keep learning to improve his insight in order not to be left behind. The world continues to develop. A teacher should keep learning in order that his knowledge develops more and more. Accessing information, nowadays, is much easier than that in the twenty-five years ago.

Rosenshine (2012: 13) said that a teacher can enrich or improve the information mastery by conducting a research. Such research will connect theory to the experience gained in the research. The research needs to be carried out because it can build other skills of the teacher. In addition to increasing knowledge and knowledge, writing skills of the teacher can also increase. The teacher can also review the knowledge he has and find out new concepts. The concepts he formulated can help him to carry out teaching and learning activities, especially in explaining his lessons and solve various problems.

Method

The approach used in this study is the descriptive qualitative approach that emphasizes the numerical data obtained. The data, then are analyzed and interpreted to describe various elements related to the research findings. The main instrument used to collect the data is a questionnaire. There are eight important points on which the research analysis is based. This instrument is distributed at senior, vocational and Islamic high schools in Pekanbaru.

The number of the sample is 108. They are senior high teachers that are asked to answer questions written in the questionnaire. The teachers are from 6 high schools; 2 senior high schools, 2 vocational high school and 2 Islamic senior high schools. Data are analyzed by observing each item of questionnaire that has been filled in by the respondents. The analysis also uses the descriptive and correlation statistical approach. The approach is used to find out data on the average of activities carried out by the respondents and the relationship of each item to the mastery of information by the teachers of high schools in the city of Pekanbaru.

Results and Discussion

Understanding Various Teaching Materials

Understanding various teaching materials is very important for a teacher. A teacher must be able to compile and to design teaching materials. The distribution of data on understand various teaching materials can be seen in the following table:

Table 1. Distribution Data on Understanding Various Teaching Materials

No.	Description	Findings
1	Average	4.78
2	Value of r	0.436**
3	Never	0
4	Rarely	0
5	Sometimes	0
6	Often	22.2
7	Always	77.8

Source: research data of 2018

From the above table, it can be seen that the activity of teachers is very high in understanding various teaching materials in which the average is 4.78 and the value of r is 0.436 **. The table also shows that 22.2% of the respondents often and 77.8% of the respondents always learn and understand the teaching materials before teaching and learning activities run in a classroom. The data show that senior, vocational and Islamic high school teachers in Pekanbaru have made very good efforts in order to be succeed in teaching and learning activities. Weimer in Paolini (2015: 22) explained that understanding various teaching materials helps a teacher to improve his quality.

Understanding various teaching materials is very important for a teacher in carrying out his duties. Hackathorna et al (2011: 44) said understanding teaching materials comprehensively is a way to improve the ability of teachers. Learning activities can take place communicatively with broad insight and a ot of knowledge that a teacher has. Paolini (2015: 26-27) said that it is necessary to understand and develop insight and knowledge well. He, furthermore, said that insights and knowledge make a teacher easy to respond his students and confident in carrying out his duties.

Reading Various Available Resources

Reading should be a hobby so that it brings advantages to develop insights of readers. Reading is like a gateway to insights. Some people do not take formal education but they might have broad insight because they like reading. Therefore, a teacher should read a lot and reading should be a hobby of a teacher, not an obigation. The distribution of data of reading various available sources can be seen in the following table:

Table 2. Distribution Data of Reading Various Available Sources

No.	Description	Findings
1	Average	4.45
2	Value of r	0.551**
3	Never	0
4	Rarely	0
5	Sometimes	4.6
6	Often	45.4
7	Always	50.0

Source: research data of 2018

Table 2 shows that the activity of teachers is very high in reading various available resources in which the average is 4.45 and the value of r is 0.551 **. The table also shows that 4.6% of the repondents sometimes, 45.4% of the repondents often, and 50% of the respondents always read various available sources, especially those related to their subjects. Reading varios available resources makes teachers' insight and knowledge develop. A teacher, as Park (2003: 190) suggested, should rea a lot to help him in teaching and learning process.

A source that has been read, can be forgotten. A teacher does not always remember what he reads. Acher, Arca, & Sanmart'i (2007: 405) said that it is no problem if a teacher forgets what

has read, the important thing is that the teacher will read it repeatedly. A teacher should prepare himself. As a result, he not only understands what he reads but also analyzes, relates and even judges what he reads.

Searching for the Recent Information in Accordance with Current Development

Information continues to spread through various media, let alone with the existence of online media. A teacher can follow developments and search for information according to his needs. Getting the recent information makes a teacher's insight developed and broad. Teacher data distribution in searching for recent information in accordance with current development can be seen in the following table:

Table 3. Distribution Data of the Teachers in Searching for Recent Information in Accordance with Current Development

No.	Description	Findings
1	Average	4.36
2	Value of r	0.610**
3	Never	0
4	Rarely	0
5	Sometimes	4.6
6	Often	54.6
7	Always	40.7

Source: research data of 2018

Table 3 shows that the activity of teachers is very high in Searching for Recent Information in Accordance with Current Development in which the average is 4.36 and the value of r is 0.610**. The table also shows that 4.6% of the respondents sometimes, 54.6% of the respondents often, and 40.7% of the respondents always search for recent information to develop their insights and to master a topic. Carpenter II, Crawford & Walden (2007: 58-59) said that searching for or obtaining recent information, of course, makes a teacher developed and gives advantages to a teacher. It is important that a teacher be not left behind and the information obtained provides an important role for the advancement of knowledge of students and a teachers.

Searching for Information from Objective Sources

A teacher must be able to identify whether information he obtains is true or not. Information that is classified as hoax is not meaningful for both teachers and students. By using his broad knowledge, a teacher can select or sort information well. A teacher must be able to obtain and select information from objective sources. The distribution data of the teachers in Searching for Information from Objective Sources can be seen in the following table:

Table 4. Distribution Data of the Teachers in Searching for Information from Objective Sources

No.	Description	Findings
1	Average	4.28
2	Value of r	0.603**
3	Never	0
4	Rarely	0
5	Sometimes	6.5
6	Often	59.3
7	Always	34.3

Source: research data of 2018

Table 4 shows that the activity of teachers is very high in Searching for Information from Objective Sources in which the average is 4.28 and the value of r is 0.603**. The table also shows that 6.5% of the respondents sometimes, 59.3% of the respondents often, and 34.3% of the respondents always search for information from objective sources. A teacher does need to think

about information he obtains. It is objective, the information given to students will be meaningful and true. Nowadays, there is no guarantee that information that spreads to various media is true. For this reason, Zaliwski (2011: 78-79) said that the issue of objective or subjective information can be traced, even though the truth of information has dimensions. Therefore, the role of the teacher is very necessary to identify information that spreads is objective or not.

Reading the Latest Sources

A teacher needs to obtain latest sources to improve his knowledge reference. The broader the insight that a teacher has, the more critical the teacher is to cope with various problems he encounters. A teacher can obtain latest sources from libraries, bookstores, and online media. Obtaining latest sources can improve the ability of a teacher. The distribution data of the teachers in Reading the Latest Sources can be seen in the following table:

Table 5. Distribution Data of the Teachers in Reading the Latest Sources

No.	Description	Findings
1	Average	4.04
2	Value of r	0.605**
3	Never	0
4	Rarely	1.9
5	Sometimes	19.4
6	Often	51.9
7	Always	26.9

Source: research data of 2018

Table 5 shows that the activity of teachers is very high in Reading the Latest Sources in which the average is 4.04 and the value of r is 0.605**. The table also shows that 1.9% of the respondents rarely, 19.4% of the respondents sometimes, 51.9% of the respondents often, and 34.3% of the respondents always read the latest sources. Reading the latest sources aims to obtain the latest and correct references. This activity can be used as an observation (Retnowati, 2009: 35) to find out information that continues to grow. A teacher can use reliable sources to establish his insight.

Studying the Concepts of Teaching and Learning

The success of a teacher in carrying out his duty is inseparable from understanding the concepts of teaching and learning. Teachers must prepare himself with understanding of the concept of teaching and learning. Understanding the concept can help a teacher succeed in achieving learning objectives, including the curriculum and learning model. The distribution data of the teachers in Studying the Concepts of Teaching and Learning can be seen in the following table:

Table 6. Distribution Data of the Teachers in Studying the Concepts of Teaching and Learning

No.	Description	Findings
1	Average	3.69
2	Value of r	0.616**
3	Never	0
4	Rarely	3.7
5	Sometimes	30.6
6	Often	58.3
7	Always	7.4

Source: research data of 2018

Table 6 shows that the activity of teachers is high in Studying the Concepts of Teaching and Learning in which the average is 3.69 and the value of r is 0.616**. The table also shows that 3.7% of the respondents rarely, 30.6% of the respondents sometimes, 58.3% of the

respondents often, and 7.4% of the respondents always study the concepts of teaching and learning. A teacher should master the concepts of teaching and learning. Nowadays, At present, more and more issues dealing with teaching and learning come out. Therefore, Insights and knowledge that a teacher has are very helpful in carrying out teaching and learning activities both in class and outside the classroom. Hanafy (2014: 74) said that teachers need to understand these concepts as the basis for implementing teaching and learning activities. In addition, Kamamia, Ngugi, & Thinguri (2014: 644) said that understanding the concepts will assure of the quality of teaching and learning, both for teachers and students.

Attending Training, Workshops and Seminars

Attending training, workshops and seminars is very important to improve insights of a teacher. A teacher may get a lot information that support him in teaching and learning activities. In addition, a teacher may get new information and experience that he probably cannot get from written sources. The distribution data of the teachers of Attending Training, Workshops and Seminars can be seen in the following table:

Table 7. Distribution Data of the Teachers of Attending Training, Workshops and Seminars

No.	Description	Findings
1	Average	3.62
2	Value of r	0.625**
3	Never	0
4	Rarely	2.8
5	Sometimes	42.6
6	Often	44.4
7	Always	10.2

Source: research data of 2018

Table 7 shows that the activity of teachers is high in Attending Training, Workshops and Seminars in which the average is 3.62 and the value of r is 0.625**. The table also shows that 2.8% of the respondents rarely, 42.6% of the respondents sometimes, 44.4% of the respondents often, and 10.2% of the respondents always attend training, workshops and seminars. However, not all of the teachers attended them, It happened because the teachers did not have a lot of time and opportunities. Nevertheless, attending training, workshops and seminars is very important to enhance the quality and to improve the ability of teachers. Uche in Essien, Akpan, & Obot (2016: 31) said that these activities can facilitate and maximize the teachers' skills.

Writing Scientific Works

Writing a scientific work is a problem for many teachers. A teacher should be able to write a scientific work. A lot of advantages can be obtained from writing a scientific work. Insight of the teacher will be broad. When writing, a teacher is required to read a lot to express his ideas. A research carried out by a teacher will result in research findings that will not be obtained without carrying out a research. Writing scientific works enables a teacher to master a lot of information that can help him doing teaching and learning activities. The distribution data of teachers in Writing Scientific Works can be seen from the following table:

Table 8. Distribution Data of The Teachers of Writing Scientific Works

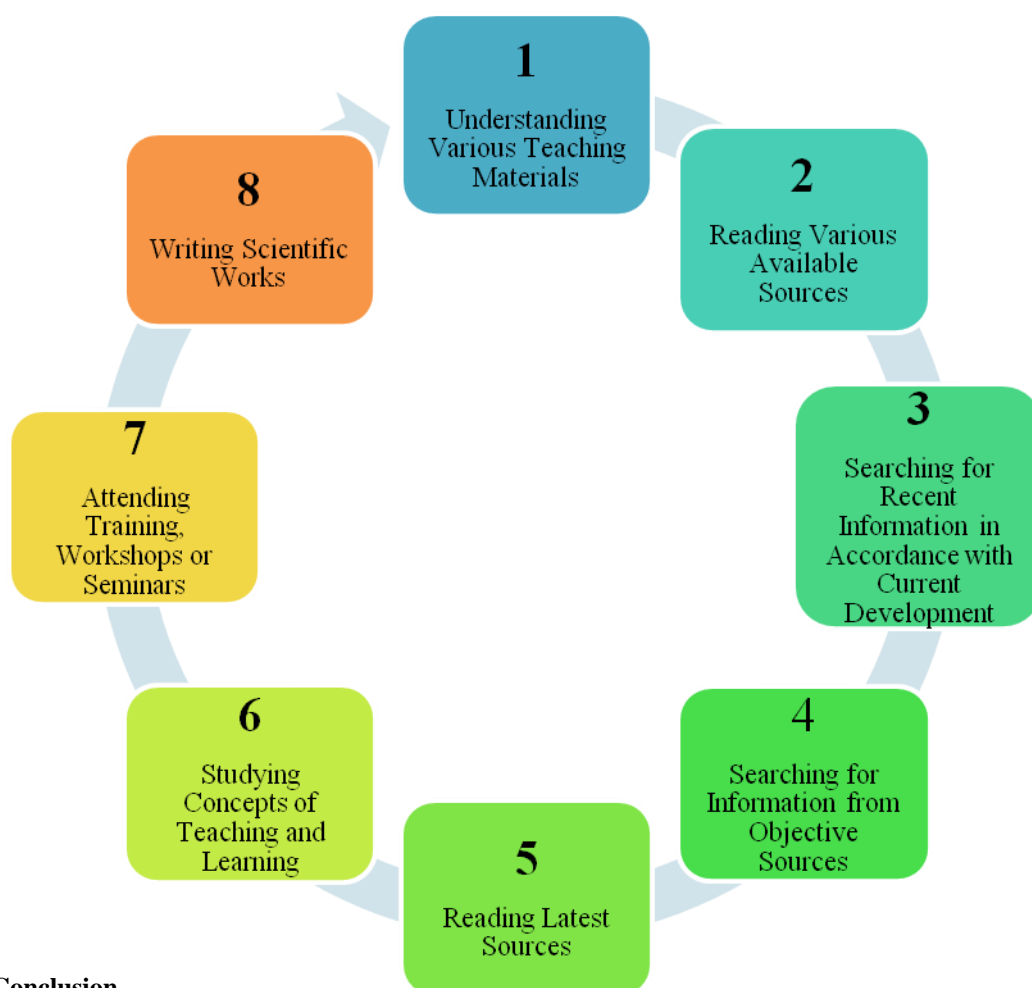
No.	Description	Findings
1	Average	2.38
2	Value of r	0.582**
3	Never	26.9
4	Rarely	26.9
5	Sometimes	28.7
6	Often	16.7
7	Always	0.9

Source: research data of 2018

Table 8 shows that the activity of teachers is low in Writing Scientific Works in which the average is 2.38 and the value of r is 0.582**. The table also shows that 26.9% of the respondents never, 26.9% of the respondents rarely, 28.7% of the respondents sometimes, 16.7% of the respondents often, and 0.92% of the respondents always write scientific works. A teacher should be accustomed to writing scientific works and there should be a good standard for writing scientific works. The data show that the teachers should be encouraged to write scientific works. To cope with this problem, Forlin (2012) said that teachers, basically, require services and training - writing scientific works. Cochran-Smith & Lytle (1993: 43) said that in order to improve insights of a teacher, he needs to express his ideas critically and write his ideas in scientific works. Writing and publishing scientific works are very good steps to increase the mastery of information and improve the image of a teacher that is innovative and productive.

Furthermore, based on the average approach, efforts done by senior, vocational and Islamic high school teachers in information mastery to succeed in the implementation of teaching and learning activities can be seen from the following figure:

Figure 1. The Information Mastery by the Teachers to Succeed in Teaching and Learning



Conclusion

The research findings reveal that a teacher is required to improve and broaden his insights to support teaching and learning activities. A successful teacher should not only understand the strategies and learning models but also master adequate information. In addition, a teacher should have the pedagogic competence. He should have broad insight that enables him to transfer his knowledge to students. It is believed that a teacher is a person who can answer questions and cope with various problems that students have. A teacher should prepare himself various information so that the teaching learning process can run interactively and effectively.

In addition, the strategies used by the teachers in information mastery to succeed in teaching and learning activities are understanding various teaching materials, reading various

available sources, searching for recent information in accordance with current development, searching for information from objective sources, reading the latest sources, studying the concepts of teaching and learning, attending a training, workshops, and seminars, and writing scientific works. The teachers involvement in writing scientific works is low. Therefore, academicians and stakeholders in education should concern with this issue so that the involvement of teachers in writing scientific works will be better in the future.

References

- Acher, R., Arcà, M., & Sanmartí, N. (2007). Modeling as a Teaching Learning Process for Understanding Materials: A Case Study in Primary Education. *Science Education*, doi.org/10.1002/sce.20196, 3 April: 398—418.
- An Nahlawi, A. (1995). *Pendidikan Islam di Rumah, Sekolah, dan Masyarakat*. Jakarta: Gema Insani Press.
- Carpenter II, D.M., Crawford, L., & Walden, R. 2007. Testing the Efficacy of Team Teaching. *Learning Environ Res*, DOI 10.1007/s10984-007-9019-y, 10: 53—65.
- EOCD. (2009). *Creating Effective Teaching and Learning Environments*. Washington DC, American: OECD Publishing.
- Essien, E.E., Akpan, O.E., & Obot, I.M. (2016). The Influence of In-Service Training, Seminars and Workshops Attendance by Social Studies Teachers on Academic Performance of Students in Junior Secondary Schools Incross River State, Nigeria. *Journal of Education and Practice*, 7 (22): 31—35.
- Forlin, C. (2012). Future Directions: What is Needed Now for Effective Inclusive Teacher Education? In C. Forlin (Ed). *Future Directions for Inclusive Teacher Education: An International Perspective*. London: Routledge.
- Hackathorn, J., et al. (2011). Learning by Doing: An Empirical Study of Active Teaching Techniques. *The Journal of Effective Teaching*, 11 (2): 40—54.
- Hamali, O. (2002). *Pendidikan Guru Berdasarkan Pendekatan Kompetensi*. Bandung: Bumi Aksara.
- Hanafy, M.S. (2014). Konsep Belajar dan Pembelajaran. *Lentera Pendidikan*, 17 (1), Juni: 66—79.
- Henard, F. & Ringuet, S.L. (2008). *The Path to Quality Teaching in Higher Education*. <http://www.oecd.org/education/imhe/44150246.pdf>
- Kamamia, L.N., Ngugi, N.T., & Thinguri, R.W. (2014). To Establish the Extent to Which the Subject Mastery Enhances Quality Teaching to Student-Teachers During Teaching Practice. *International Journal of Education and Research*, 2 (7), July: 641—648.
- Mizell, H. (2010). *Why professional development matters*. United States of America: Learning Forward.
- Muhaimin, et al. (1996). *Strategi Belajar Mengajar*: Surabaya: Citra Media.
- Paolini, A. (2015). Enhancing Teaching Effectiveness and Student Learning Outcomes. *The Journal of Effective Teaching (JET)*, 15 (1): 20—33.
- Park, C. (2003). Engaging Students in the Learning Process: The Learning Journal. *Journal of Geography in Higher Education*, 27 (2), July: 183—199.
- Retnowati. (2009). Pengamatan Lingkungan Eksternal Organisasi dalam Penggunaan Tehnologi Informasi: Suatu Investigasi Empiris. *Jurnal Teknologi Informasi DINAMIK*, XIV (1), Januari: 35—43.
- Rivaie, W. (2011). Faktor Intelektual yang Menentukan Keberhasilan. *Jurnal Pendidikan Sosiologi dan Humaniora*, 2 (1): 62—73.
- Rosenshine, B. (2012). Principles of Instruction Research-Based Strategies that All Teachers Should Know. *American Educator*, Spring 2012: 12—39.
- Smith, M.C., & Lytle, S.L. (1993). *Inside/Outside: Teacher Research and Knowledge*. New York: Teachers College Press.
- Windschitl, K. (2004). What Types of Knowledge do Teachers Use to Engage Learners in “Doing Science”? _____ Rethinking the Continuum of Preparation and Professional Development for Secondary Science Educators. A Paper Commissioned by the *National Academy of Sciences*. Washington, DC: High School Science Laboratories: Role and Vision.
- Zaliwski, A.S. (2011). Information – is it Subjective or Objective? *Cognition Communication Co-Operation (tripel C)*, 9 (1): 77—92.