

MANAGEMENT MEASUREMENT OF HUMAN CAPITAL DEVELOPMENT IN SD NEGERI 2 TURPUK SIHOTANG KECAMATAN HARIAN, SAMOSIR

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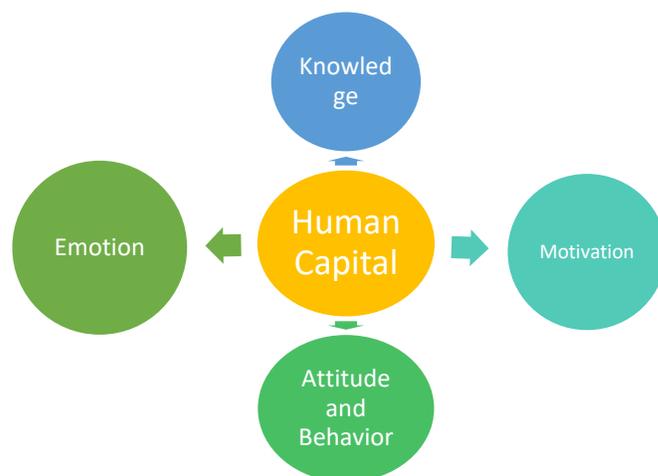
Abstract. This research is interested in carrying out research using dimensions of human capital (Human capital) such as education, competence and work experience as a measurement of teacher human capital development at SD Negeri 2 Turpuk Sihotang, Harian District, Samosir Regency. In this research activity, the subjects of research related to measuring the development of teacher human capital at SD Negeri 2 Turpuk Sihotang, Harian District, Samosir Regency, namely the Principal and Teachers. The data collection technique used in this study was a questionnaire technique and documentation of research subjects. The process of data analysis in qualitative research begins by examining all data collected from various sources, namely from interviews, personal documents, official documents, drawings, photographs and so on that are related to the effectiveness of the principal's leadership on teacher job satisfaction to improve teacher performance. by compiling, connecting and reducing data, presenting data, drawing data conclusions during and after data collection. Based on the data analyzed, measurement of the contribution of Human Capital to the goals of an organization can still be explored further by measuring the value of Human Capital's contribution to salary increases and performance appraisal per teacher. Thus, the approach to measuring the contribution of Human Capital is not only seen from the increase in the class of teachers, but also by looking at approaches to other measurement factors such as the level of education and the level of training of the human capital itself.

Keywords: Human Capital; Management Measurement.

1. INTRODUCTION

An educational institution is a center for educational activities to grow and increase the potential of children as human beings who have knowledge, skills and social abilities. It can be concluded that a school can be successful and advanced if all school components related to the world of education participate in carrying out this function.

One component of a school that plays an important role in the quality of education of a school institution is the quality and quantity of teachers as *human capital* in an organization. *Human capital* is the knowledge, skills and abilities of a person that can be used to produce professional services, in this case, namely in the field of education. *Human capital* reflects the ability of an organization collectively to produce the best solution based on the knowledge possessed by the people in the organization (Prasojo, 2017). Agreed, according to Prasojo (2017) states that in practice, paradigm changes related to *human capital* as a valuable asset in every institution are not fully understood by organizational leaders such as state schools. According to Gaol (2014) stated that *Human Capital* is knowledge (*knowledge*), expertise (*expertise*), abilities (*abilities*) and skills (*skills*) that make humans or employees as capital or assets of a company. The simple definition of human capital can be summarized in the following figure:



Based on the results of observations made at SD Negeri 2 Turpuk Sihotang, Harian District, Samosir Regency through interviews with the principal and several teachers, it is known that the *human capital component* has never been measured at all and used as a comparison in improving the quality of education at SD Negeri 2 Turpuk Sihotang, Harian District Samosir Regency. The causes of these problems are the lack of required *human capital* measurement instruments and a lack of understanding regarding the importance of *human capital measurement*.

Apart from that, previous studies also used different factors such as motivation (Ardiana, 2017; Diana et al., 2020), factors of education, training and work experience (Harlina et al., 2019), leadership factors, training and compensation (Sumiaty, 2020), teacher motivation and competency factors (Hafid, 2017), and school principal leadership factors, academic supervision, and work motivation (Hardono et al., 2017). Thus, no research has been found that uses the *Human Capital dimension* as a measuring tool.

Human capital which is often also called *intellectual capital* is an intangible asset that is not easy to measure, considering that humans have a dynamic nature and relatively change with changing situations and conditions. To measure human resources, of course, the right dimensions and indicators are needed so that the measurement results are more accurate. Determination of dimensions and indicators as a manifestation of the operationalization of a variable will determine the validity of the instrument that will be used to measure the human capital variable.

The value of feedback in education grows as an interest in adopting ideas in increasing productivity and performance by educational staff. The value of educational returns is one of the things to evaluate the development program of educational staff. Educational feedback value is also one of the new approaches that can help organizational management. The value of educational returns according to (Prasojo, 2017) is divided as follows:

1. Measurement of Educational Return Value.
2. The length of time the payback is used in educational investments
3. Benefits and Costs of Educational Investment (*B/C Ratio – Benefit Cost Ratio*).
4. Percentage Rate of Return on Education Investment (*Return on Investment*).
5. Total Present Value (*Investment*) with Total Present Value of Income from Education (*Net Present Value*).
6. IRR (*Internal Rate of Return*) rate.
7. Human Capital Efficiency.

In calculating *human costs* and benefits *capital* education, there are several factors that need to be considered. Here are some factors to consider:

1. Education Costs: Education costs are costs that must be incurred to obtain education, such as school fees, books, and other equipment. The cost of education can vary depending on the type and level of education taken.
2. Study Period: Study period is the amount of time spent on completing education. The longer the study period, the higher the educational costs that must be incurred.
3. Education Level: Education level is the final level of education taken, such as elementary, junior high, high school, or college. The higher the level of education achieved, the higher the educational costs incurred.
4. Salary Level: Salary level is the income received by an individual after graduating from education. The higher the level of education achieved, the higher the level of salary that can be received.

By considering the factors above, we can calculate *the costs* and benefits of educational *human capital* by calculating the cost of education incurred and comparing it to the long-term benefits that can be obtained from investment in education. However, it should be remembered that the returns from investing in education cannot always be measured directly. Meanwhile in a *Human Capital organization* (Human Capital) must indeed be formed in such a way that can be reproduced in the following equation:

$$\text{Hits} = f(\text{Ai, Sit, Eit, Hit})$$

Based on the description above, this research is interested in carrying out research using human capital dimensions *such* as education, competence and work experience. In accordance with the background and problems above, the research focus is to focus on measuring the development of teacher *human capital* at SD Negeri 2 Turpuk Sihotang, Harian District, Samosir Regency.

2. RESEARCH METHOD

This research on measuring the development of teacher *human capital* at SD Negeri 2 Turpuk Sihotang, Harian District, Samosir Regency uses a qualitative research type. This is in line with what was expressed by Sugiono (2010: 22) which states that the qualitative method is a type of research whose findings are not obtained through statistical data or forms of calculation but use various data collection tools. In this research activity, the subjects of research related to measuring the development of teacher *human capital* at SD Negeri 2 Turpuk Sihotang, Harian District, Samosir Regency, namely the Principal and Teachers. The data collection technique used in this study was a questionnaire technique and documentation of research subjects. The process of data analysis in qualitative research begins by examining all data collected from various, namely from interviews, personal documents, official documents, drawings, photographs and so on that are related to the effectiveness of the principal's leadership on teacher job satisfaction to improve teacher performance. by compiling, connecting and reducing data, presenting data, drawing data conclusions during and after data collection.

3. FINDINGS AND DISCUSSION

3.1 Description of the Human Capital Dimension

Development of *human capital* is an integrated effort to obtain higher and higher quality levels of quality and quantity of teachers and to create value in human resources. Because

humans capital or commonly referred to as human resources is treated as an asset in an educational institution, including:

A. Education

As for the results of the questionnaire sheet that has been given, the following data is obtained:

Table 4.1 Human Data Teacher Capital Category Level of Education

No	Employee Data	Educational Level	Cost of Education
1	Headmaster	S2	Rp. 55.000.000,-
2	Class 1 teacher	PGA	Rp. 20,000,000,-
3	Class 2 teacher	high school	Rp. 8,000,000,-
4	Class 3 Teacher	S1	Rp. 30,000,000,-
5	4th Grade Teacher	S3	Rp. 100,000,000,-
6	5th Grade Teacher	S1	Rp. 30,000,000,-
7	6th grade teacher	S1	Rp. 30,000,000,-
8	Christian Religious Teacher	S1	Rp. 30,000,000,-

From the data above, it can be concluded that the latest education data for Masters level employees is 2 people including the school principal and 4 teachers who completed their Bachelors level, and the data for teachers who completed their senior high school level education were 1 person, and 1 teacher with PGA education level.

A. Trainings

As for the results of the questionnaire sheet that has been given, the following data is obtained:

Table 4.2 Human Data Teacher Capital Training Category

No	Employee Data	Training Attended for the Last 2 Years	Training Fees
1	Headmaster	15	Rp. 1,000,000,-
2	Class 1 teacher	8	Rp. 300,000,-
3	Class 2 teacher	10	Rp. 500,000,-
4	Class 3 Teacher	12	IDR 1,200,000,-
5	4th Grade Teacher	20	Rp. 600,000,-
6	5th Grade Teacher	10	Rp. 300,000,-
7	6th grade teacher	7	Rp. 0,-
8	Christian Religious Teacher	11	Rp. 600,000,-

From the data above, it can be concluded that the trainings attended by Mr/Mrs teachers and including the school principal are included in the category of frequently participating in training activities, with not too much cost, some are even free of charge.

B. Work Experience

As for the results of the questionnaire sheet that has been given, the following data is obtained:

Table 4.3 Human Data Capital Teacher Category of Work Experience

No	Employee Data	Teaching Experience (Years)	Earned Salary (Per Month)
1	Headmaster	25	Rp. 5,600,000,-
2	Class 1 teacher	40	Rp. 2,750,000,-
3	Class 2 teacher	50	Rp. 2,100,000,-
4	Class 3 Teacher	21	Rp. 3,750,000,-
5	4th Grade Teacher	19	Rp. 2,750,000,-
6	5th Grade Teacher	33	Rp. 3,900,000,-
7	6th grade teacher	45	Rp. 3,900,000,-
8	Christian Religious Teacher	24	Rp. 3,900,000,-

Based on the data above, it can be seen that the salary earned by the teacher is adjusted to the class of teacher, so that even though the length of service is not related to the salary earned.

Human Capital Development Measurement

Human costs and benefits educational *capital* based on the data obtained. Calculation of education personnel who invest their income by upgrading their educational qualifications from the bachelor's degree to the master's level. And educational staff who improve their educational qualifications from the Masters level to the Doctoral level, the calculation of income can be measured using the *payback period*.

Payback period can be calculated using the following formula:

$$\text{Payback Period} = \frac{\text{Cost pendidikan}}{\text{keuntungan pendidikan per tahun}}$$

Based on calculations with *the Payback Period*, it can be seen that the measurement of the return value based on the human capital possessed by the teacher is as follows:

Table 4.4 Return Value Based on Payback Period

No	Employee Data	Education	Teaching Experience (Years)	Training
1	Headmaster	30.5 years	25	0
2	Class 1 teacher	0	40	0
3	Class 2 teacher	0	50	0
4	Class 3 Teacher	0	21	0
5	4th Grade Teacher	27.7 years	19	0
6	5th Grade Teacher	0	33	0
7	6th grade teacher	0	45	0
8	Christian Religious Teacher	0	24	0

Based on the calculations above, it can be seen that the measurement of *human capital* on the average employee is determined by the teacher's work experience.

CONCLUSION

Measurement of the contribution of *Human Capital* to the goals of an organization can still be

explored further by measuring the value of *Human Capital's contribution* to salary increases and performance appraisal per teacher. Nonetheless, the measurement of *Human Capital* in this study has been able to provide an overall picture and evaluation for school management of strategic planning to be carried out in the future, especially those related to *Human Capital*. Thus, the approach to measuring the contribution of *Human Capital* is not only seen from the increase in the class of teachers, but also by looking at other measurement factors such as the level of education and the level of *human training. capital* itself.

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