

Vol.17 No.1 | 2023

APPLICATION OF THE MFEP METHOD IN DETERMINING STUDENTS' INCLUDING LEARNING DIFFICULTIES TEACHING

Ari Sahbana Purba*¹⁾, Hambali²⁾, Febby Madonna Yuma³⁾
¹²³Sekolah Tinggi Manajemen Informatika dan Komputer Royal
*Corresponding Email: aripurba290@gmail.com

• •

Submit: 30/09/2022

Accept : 27/01/2023

Publish: 28/02/2023



Abstract

Background: Inclusive students are children with special needs who participate in general or ordinary classes with other children, such as children who have difficulty seeing or hearing, unable to walk, autistic, or slower in learning Problems that are often faced in determining students inclusion is when organizing the teaching and learning process Sometimes in the process of selecting students there are often mistakes and not right on target so that there are problems when determining students who are classified as inclusive students during examinations at school. Method: In this study, the Multi Factor Evaluation Process (MFEP) method was chosen to determine the decision assessment to determine the inclusion of students with teaching and learning difficulties. Result: the MFEP method of assessment that has been carried out through many calculation processes, ranging from weighting the values of all criteria and determining grades to getting candidates for Determining Inclusive Students with Teaching and Learning Difficulties at SMK AL AZMI Tanjung Asri. Conclusion: from the 19 students selected into 3 students, it can be obtained from the calculation of alternative preferences Determining Inclusive Students with Teaching and Learning Difficulties above, then the decision for the selection of alternatives is chosen from the highest score, then the one chosen as Determining Inclusive Students with Teaching and Learning Difficulties is students with learning difficulties on behalf of Subuhari Hasibuan.

Keywords: Student, Inclusion, Multi Factor Evaluation Process (MFEP), Score

© 2022 Lembaga Layanan Pendidikan Tinggi Wilayah X. This is an open access article under the CC Attribution 4.0 license (https://creativecommons.org/licenses/by/4.0/).

http://publikasi.lldikti10.id/index.php/jit

DOI: https://doi.org/10.22216/jit.v17i1

PAGE: 98-99



ISSN : 1979-9292

E-ISSN: 2460-5611

INTRODUCTION

Education is one of the human rights without exception. Every child has the right to get a proper education, including students with special needs. In Indonesia, students with special needs can attend education in regular schools in inclusive school settings which are legally formally accommodated in Article 31 of Law and specifically regulated in Permendiknas 2009 number 70. This inclusive education is a progressive step in supporting the educational progress of students with special needs. specifically so that their potential can be developed properly. The ability of students with speech and language hearing impairments also increases when placed in a language-rich environment (Hamilton et al., 2017). Milla's research results also show the influence of inclusive education on social skills and self-esteem of students with special needs. With the increase in skills and self-esteem in students with special needs, they are able to develop their potential (Milla et al., 2018). Among them are the conditions of teachers who are still low on confidence in practicing inclusive education and parents who have not fully provided full support and attention to students with special needs (Amka et al., 2017). Learning designs for students with special needs in inclusive schools were developed based on a collaborative learning model with the principle of flexibility, modification, and support (Sunanto et al., 2017). This school also has harmonious relationship between teachers and parents in providing support support for the growth and development of students (Andriyani et al., 2017). This decision support tool is expected to provide accurate calculations

for inclusive students with teaching and learning difficulties, so that decision support for determining inclusive students with teaching and learning difficulties is expected to provide the right solution for the Principal of SMK AL AZMI Tanjung

RESEARCH METHODS

The Multi Factor Evaluation Process (MFEP) is used for decision making by considering the factors that will affect the chosen alternative and each criterion used is given an appropriate weight (R. A. Sina, K. Letelay, D. M. Sihotang. Et al., 2018) (R. Y. Ningsih, D. Andreswari, A. Johar et al., 2019). And in making decisions, MFEP uses a collective approach from the results of its decision making Syahrizal, D. Maulidza et al., 2018).

Multi Factor Evaluation Process (MFEP) is an appropriate decision-making method when an individual, group, or organization faces a number of factors in making a decision. With MFEP, the decision maker assigns a weighting system to each factor. The weights range from 0 to 1. Then, for each alternative, all factors are evaluated. The factor weights are multiplied by each given alternative factor evaluation and summed. The alternative with the highest overall score will be chosen (A. Djunaedi, A. Subiyakto, and E. Fetrina et al., 2017.)

Below are the steps of the calculation process using the MFEP method, namely:

- 1. Determine factors and factor weights where the total weighting must be equal to 1 (\sum weighting = 1).
- 2. Fill in the value for each factor that influences decision making from the data to be processed, the value entered in the

LLDIKTI Wilayah X



95



ISSN: 1979-9292

E-ISSN: 2460-5611

decision-making process is the objective value, which is certain, namely the evaluation factor whose value is between 0

3. The process of calculating the weight evaluation which is the process of calculating the weight between the factor weight and the evaluation factor with the summation of all the results of the weight evaluations to obtain the total evaluation results.

The formula for MFEP is:

 $WE = (FW \times E)$

Information:

- WE = Weighted Evaluation

- FW = Factor Weight

-E = Evaluation

In the MFEP, first of all, all the criteria that are important factors in making considerations are given an appropriate weighting. The same steps are carried out for the alternatives to be selected, which can then be evaluated in relation to these consideration factors. The sum of each criterion weight (w) must be equal to 1 and have a range of criteria evaluation values (e) 1-9.

The advantages of the MFEP method (R. Mahardika, R. Sovia, and S. A. Lusinia et al., 2017). The concept is simple and easy to understand, this simplicity is seen from the process flow of the MFEP method which is not complicated and the order of factors can be determined subjectively according to their importance.

RESULTS AND DISCUSSION

Assessment of Students with Learning Difficulties in SMK AL AZMI Tanjung Asri is based on criteria that have been

determined by the Principal so that this is a problem for SMK AL AZMI Tanjung Assessment of Students with Asri Learning Difficulties is given once every year, where the current number of students at SMK AL AZMI Tanjung Asri is 19 students

Definition of Value	Definition of Value
Not Good 1	1
Not Good 2	2
Medium 3	3
Good 4	4
Very Good 5	5

Table 1. Weight Value

The weighting of communication skills, attitudes, numeracy skills, drawing abilities and task completion has been approved by the administrative staff of SMK AL AZMI Tanjung Asri.

Value Scale Criteria	Value Scale Criteria	Value Scale Criteri a
Excellent Communication Skill 5	Excellent Communication Skill 5	5
	Good 4	4
	Enough 3	3
	Not Good 2	2
	Not Good 1	1

Tabel 2. Table Weighting of Communication Ability Criteria

Value Scale Criteria	Value Scale Criteria	Value Scale Criteri a
Counting Ability Criteria	Excellent Communication Skill 5	5
	Good 4	4
	Enough 3	3
	Not Good 2	2
	Not Good 1	1

Table 3. Weighting of Counting Ability

Criteria

LLDIKTI Wilayah X 96



ISSN : 1979-9292

E-ISSN: 2460-5611

Value Scale Criteria	Value Scale Criteria	Value Scale Criteri a
Drawing Ability Criteria	Excellent Communication Skill 5	5
	Good 4	4
	Enough 3	3
	Not Good 2	2
	Not Good 1	1

Table 4. Weighting of Drawing Ability
Criteria

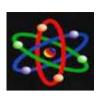
Ciliciia				
Value Scale Criteria	Value Scale	Valu		
	Criteria	e		
		Scale		
		Criter		
		ia		
Task Completion	Excellent	5		
Criteria	Communication			
	Skill 5			
	Good 4	4		
	Enough 3	3		
	Not Good 2	2		
	Not Good 1	1		

Table 5. Weighting of Task Completion Criteria

In this criterion, thirteen data samples will be used for Inclusive Students with Teaching and Learning Difficulties

N		Criteria				
u m b	Student's Name	C1	C2	СЗ	C4	C5
e	Name	CI	C2	CS	C4	CS
r						
1	MHD. Hair	2	2	3	2	4
2	Suparman	2	3	3	2	5
3	Sartiyem	4	3	3	3	4
4	Rahmadan iah	5	4	3	2	3
5	Surung B. S	4	4	3	4	4
6	Subuhari, Hsb	5	5	5	4	4
7	Ngatiman	4	2	2	4	3
8	Paimen	4	2	2	3	3
9	Mhd. Masyhuri	5	4	3	2	2
1	Afrianti P	3	4	3	3	4
1	Suyono	3	3	4	3	2
1 2	Rahmadi	4	2	4	4	3
1 3	Fatma Erawati	5	2	3	3	2
1 4	Sukamsi	2	3	2	3	2
1 5	Rubiah	1	2	2	1	3
1	Umar	3	2	2	2	2
1 7	Heri Kurniawa n	3	2	2	2	3
1 8	Muhklis	4	3	3	3	3
1 9	MHD. Yasin D.	2	3	3	2	4

Table 6. Scores of Criteria for Each Inclusion Student with Learning Difficulties



ISSN : 1979-9292

E-ISSN: 2460-5611

Λ.	C4	Criteria					
0	Student's name	C1	C2	C3	C4	C5	
1	MHD. Hair	Not enough	Not good	Enough	Not enough	Not enough	
2	Suparman	Not enough	Pretty good	Enough	Not enough	Not enough	
3	Sartiyem	Well	Pretty good	Enough	Enough	Enough	
4	Rahmadaniah	Very good	Well	Enough	Not enough	Not enough	
5	Surung B. S	Well	Well	Enough	Well	Well	
6	Subuhari, Hsb	Very good	Very good	Very	Well	Well	
7	Ngatiman	Very good	Not good	Not enough	Well	Well	
8	Paimen	Well	Not good	Not enough	Enough	Enough	
9	Mhd. Masyhuri	Very good	Well	Enough	Not enough	Not enough	
10	Afrianti P	Enough	Well	Enough	Enough	Enough	
11	Suyono	Enough	Pretty good	Care	Well	Well	
12	Rahmadi	Well	Not good	Care	Well	Well	
13	Fatma Erawati	Very good	Not good	Enough	Enough	Enough	
14	Sukamsi	Not enough	Well	Not enough	Enough	Enough	
15	Rubiah	Not good	Not good	Not enough	Not	Not	
16	Umar	Enough	Not good	Careless	Not enough	Not enough	
17	Heri Kurniawan	Enough	Not good	Careless	Enough	Enough	
18	Muhklis	Well	Enough	Enough	Not enough	Not enough	
19	MHD. Yasin D.	Not enough	Enough	Enough	Not enough	Not enough	

Table 7. Student Assessment Data with Learning Difficulties

CONCLUSION

MFEP method of assessment that has been carried out through many calculation processes, ranging from weighting the values of all criteria and determining grades candidates to getting for Determining Inclusive Students with Teaching and Learning Difficulties at SMK AL AZMI Tanjung Asri. The data for students with learning difficulties is about 19 students at SMK AL AZMI Tanjung Asri, for that the researchers took samples (alternatives), from 19 students selected into 3 students, it can be obtained calculation of from the alternative preferences Determining Inclusive Students with Teaching and Learning Difficulties above, then the decision for the selection of alternatives is chosen from the highest score, then those who are selected as Determining Inclusive Students with Teaching and Learning Difficulties are students with learning difficulties on behalf of Subuhari Hasibuan.

BIBLIOGRAPHY

- [1] Hamilton. (2017). Missy Hamilnook Reflects on Early Childhood Education. Parker.
- [2] Amka. (2017). Problems and Challenges in the Implementation of Inclusive Education in Indonesia. International Journal of Humanities and Social Science, 7(10), 159–167.
- [3] Andriyani, S. (2017). Implementasi Strategi Multiple Intelligences pada Pembelajaran Bahasa Inggris (Studi Kasus di SD Inklusi Semai Jepara). At-Tarbawi: Jurnal Kajian Kependidikan Islam, 2(2), 121.

LLDIKTI Wilayah X 98





ISSN : 1979-9292

E-ISSN: 2460-5611

- [4] Milla, I. (2018). Pengaruh Pendidikan Inklusif Terhadap Keterampilan Sosial dan Self Esteem Siswa Berkebutuhan Khusus Di Sekolah Dasar Se-Kecamatan Lowokwaru Kota Malang. Program Studi PGMI Pascasarjana UIN Maulana Malik Ibrahim, Tesis.
- [5] Sunanto. (2017). Desain Pembelajaran Anak Berkebutuhan Khusus dalam Kelas Inklusif. Jassi Anakku, 17(1), 47–55.
- [6] Pinjam Gloria, J-Icon, vol 6, Hal 35–39. [17] R. Y. Ningsih, D. Andreswari, A. Johar., 2019,
- [7] Sistem Pendukung Keputusan Penentuan Pemenang Tender Proyek Menggunakan Metode Multi Factor Evaluation Process (MFEP), J. Rekursif, vol. 7, Hal 144–154.
- [8] M. Syahrizal, D. Maulidza., 2018, Sistem Pendukung Keputusan Pemilihan Televisi Bekas Terbaik Dengan Menggunakan Metode Multi Factor Evaluation Process (MFEP), Jurikom, vol 5, Hal 382–389.
- [9] A. Djunaedi, A. Subiyakto, and E. Fetrina, "SISTEM PENDUKUNG KEPUTUSAN PENILAIAN KINERJA PEGAWAI (Studi Kasus: PT . PLN (Persero Distribusi Jakarta Raya Area Pondok Gede))," *J. Sist. Inf.*, vol. 10, no. 1, pp. 37–44, 2017.
- [10] R. Mahardika, R. Sovia, and S. A. Lusinia, "Sistem Pendukung Keputusan Untuk Penjurusan di SMAN 1 Ampek Angkek Kab. Agam dengan Metode Multifactor Evaluation Process (MFEP)," J. Teknol. Inf. dan

- Pendidik., vol. 10, no. 1, pp. 129–139, 2017.
- [11] R. A. Sina, K. Letelay, D. M. Sihotang., 2018, Penerapan Metode Multi Factor Evaluation Process Pada Aplikasi Sistem Pendukung Keputusan Penentuan Permohonan Pinjaman Nasabah Pada Koperasi Simpan.

LLDIKTI Wilayah X 99

