



Development of Flipping Book Media Based on Self-Management to Improve Discipline of Slow Learner Students

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Abstract: This study aims to develop Flipping book media in behavioral self-management counseling to improve the discipline of slow learner students. The media is utilized within behavioral counseling services. The research method employed is the ADDIE development model, which consists of five stages: Analysis, Design, Development, Implementarion, and Evaluation The research subjects were slow learner students experiencing difficulties in learning discipline. Data were collected through observation, interviews, and questionnaires. The validity test results conducted by media experts, material experts, and practitioners indicate that the web-based flipping book media is feasible and valid for use. Effectiveness analysis using the Wilcoxon Signed Rank test shows a significant difference before and after the intervention. Thus, the use of flipping book media in behavioral self-management counseling services is proven effective in improving the discipline of slow learner students.

Keywords: Flipping Book, Discipline, Slow Learner

INTRODUCTION

Discipline is an essential aspect of everyday life, particularly in the context of education. Discipline can be defined as an individual's ability to manage and utilize time effectively, including aspects such as punctual school attendance, meeting deadlines for assignments, and optimal time management for learning activities (Rohmah & Hidayat, 2021). Time discipline is considered as students' ability to efficiently utilize time during learning activities, which ultimately contributes significantly to improving learning outcomes (Simatupang et al., 2023).

Inclusive schools are educational institutions that provide learning services to students with diverse needs and abilities, including both students with and without disabilities. One group that falls under the category of students with special needs is slow learners. According to Piaget (1954, as cited in Babullah, 2022), slow learner students are individuals who experience difficulties in processing information and forming concepts due to limitations in their cognitive structures, as explained in cognitive development theory.

Empirical facts in the field indicate that slow learner students frequently encounter challenges in the aspect of discipline that require special attention. They tend to have difficulty following rules because they need more time to understand instructions and often forget routines that have been taught. This causes them to appear less disciplined compared to other students. The impact of this lack of discipline is reflected in their low class attendance rate, which in turn affects

their participation in learning activities. A high rate of absenteeism results in the loss of important information and valuable learning experiences (Imaroh, 2015).

An observation involving fifteen (15) slow learner students at SMPN 1 Pilangkenceng revealed that they shared similar main problems, namely difficulties in organizing and following daily routines. More specifically, besides struggling to carry out routines, they also felt uncomfortable with the structure of school activities. The school was perceived as demanding and difficult for them to follow the predetermined daily schedule. In other words, slow learner students tend to experience difficulties in forming structured habits, especially in managing their daily time and activities. This lack of discipline is manifested in behaviors such as frequently arriving late at school, leaving before the designated time, returning late to class after breaks, and skipping classes.

Moreover, they also demonstrated a low level of self-awareness regarding the importance of punctual attendance at school. They did not understand the impact of tardiness or absenteeism on the learning process in the classroom. As a result, they did not feel responsible or obligated to arrive on time or avoid skipping class.

This description highlights the gap between the school's expectations of discipline and the ability of slow learner students to manage their time. Interventions that have been applied so far, such as warnings and summoning parents, have not been sufficiently effective because they do not address the

root problem, namely the low level of self-management skills.

Slow learner students are individuals with characteristics that differ from their peers in physical, mental, intellectual, emotional, or social aspects. These differences necessitate that they receive special education and counseling services to achieve optimal development. Therefore, a more personalized educational approach, such as behavioral counseling, is highly relevant to be applied.

According to Sudiarsana et al. (2023), behavioral counseling aims to help students change maladaptive behaviors into more positive ones through a structured approach. The main focus of this counseling is on reinforcing desired behaviors while reducing undesired behaviors.

The self-management technique in behavioral counseling was chosen in this study due to its effectiveness in helping students develop positive habits independently. The self-management technique emphasizes the formation of concrete behaviors through practice and positive reinforcement.

Through the guidance of counselors and teachers in behavioral counseling using the self-management technique, slow learner students can develop the ability to face learning and daily life challenges in a more independent, directed, and disciplined manner (Monica & Gani, 2016).

Based on the Multimedia Learning theory proposed by Mayer (2001), the learning process becomes more effective when information is delivered through a combination of text, images, and animation that complement each other. The flipping book adopts this principle by presenting interactive content that can enhance students' attention and information retention. Furthermore, the visual display that resembles a printed book, combined with modern digital features, makes this media easily accepted and attractive to slow learner students. According to Afifah et al. (2024), the direct instruction learning model based on interactive digital books can facilitate students in learning and practicing how to provide English language stimulation to young children. This study serves as one of the foundations for developing a web-based flipping book media for the application of the self-management technique in efforts to improve the discipline of slow learner students. It is expected that through proper counseling processes and the use of engaging interactive media, students' discipline behavior can be significantly enhanced.

The novelty of this research lies in the development of interactive flipping book media based on digital and web platforms applied in behavioral counseling with the self-management technique to improve the discipline of slow learner students. This media is specifically designed for use in behavioral self-management counseling processes. Unlike previous studies that predominantly used physical format

media, this flipping book development adopts digital technology, allowing for more dynamic and engaging interactions for slow learner students.

This interactive media is designed to help students learn self-management skills in their daily activities, particularly in time management. The interactive features in the self-management flipping book enable students to participate in the counseling process in a fun and comfortable manner. The use of the flipping book is considered effective in teaching self-management because it allows students to manage their time and activities more structurally and efficiently, as stated by Kusumawati (2019). Based on the aforementioned background, the purpose of this research is to develop web-based flipping book media for use in behavioral self-management counseling aimed at improving the discipline behavior of slow learner students. The study conducted by Muslihah, Rahmawati, & Wibowo (2024) serves as an important foundation that recommends the application of self-management techniques for students to enhance their learning discipline. This forms the basis for the researcher to develop interactive web-based flipping book media to be used in behavioral self-management counseling processes to support the improvement of discipline among slow learner students.

METHOD

This development research employed the ADDIE development approach. According to Bouchrika, I. (2025), the ADDIE model consists of five stages: Analysis, Design, Development, Implementation, and Evaluation (ADDIE). The flipping book media was designed as an interactive learning tool aimed at reducing tardiness levels among slow learner students. This approach integrates both qualitative and quantitative methods and incorporates modern features from applications such as Canva and Hyzine to produce innovative, interactive, and measurable media.

The initial stage of the research design using the ADDIE model begins with the Analysis stage. In this phase, problem identification related to the low level of discipline among slow learner students was conducted through observations, interviews, and the distribution of questionnaires to the slow learner students. The analysis results indicated that these students face difficulties in managing their time, understanding rules, and maintaining consistent disciplined behavior in the school environment. Therefore, a web-based learning medium is needed to support the process of behavioral self-management counseling. In addition, the observation results showed that most slow learner students respond more positively to visual and interactive media compared to text-based learning methods alone. This finding served as the basis for developing the web-based flipping book media.

Table 1. Data on Indiscipline of Slow Learners Before the Intervention of Flipping Books

Name	Frequency of Indiscipline (times/month)				Total indiscipline (times/month) x1	Total indiscipline (%)	Category
	T	I	B	C			
AIM	3	0	1	0	4	19%	Moderate
DQF	2	1	1	1	5	24%	sedang
DTA	9	0	1	1	11	52%	High
EAP	2	2	1	0	5	24%	Low
EWP	1	1	0	0	2	10%	Low
FAM	2	0	0	1	3	14%	Moderate
HWY	3	0	0	0	3	14%	Moderate
RNF	3	0	0	0	3	14%	Moderate
RSM	3	0	0	0	3	14%	Moderate
RAP	2	0	0	0	2	10%	Low
RAF	3	0	0	1	4	19%	Moderate
SIP	2	1	1	0	4	19%	Moderate
TNA	3	1	0	0	4	19%	Moderate
UBF	1	1	1	1	4	19%	Moderate
ZFM	3	1	0	1	5	24%	Moderate

Table 2. Data on Indiscipline of Slow Learners After the Intervention of Flipping Books

Nama	Frequency of Indiscipline (times/month)				Total indiscipline (times/month) x1	Total indiscipline (%)	Category
	T	I	B	C			
AIM	3	0	1	1	5	24%	Moderate
DQF	1	1	1	1	4	19%	Moderate
DTA	8	1	2	1	12	57%	High
EAP	2	2	1	0	5	24%	Moderate
EWP	0	0	0	0	0	0%	Low
FAM	4	0	1	0	5	24%	Moderate
HWY	2	0	0	0	2	10%	Low
RNF	0	0	0	0	0	0%	Low
RSM	0	0	0	0	0	0%	Low
RAP	0	0	0	0	0	0%	Low
RAF	2	0	0	0	2	10%	Low
SIP	2	0	0	0	2	10%	Low
TNA	2	0	0	0	2	10%	Low
UBF	2	1	0	0	3	14%	Moderate
ZFM	4	1	0	0	5	24%	Moderate

Table 3. Difference in Student Data Between Before and After Flipping Book Media Intervention

Nama	Total indiscipline (times/month) Before Intervention (x1)	Total indiscipline (times/month) After Intervention (x2)	Deference Between Before and After Intervention (x1-x2)
AIM	4	5	-1
DQF	5	4	1
DTA	11	12	-1
EAP	5	5	0
EWP	2	0	2
FAM	3	5	-2
HWY	3	2	1
RNF	3	0	3
RSM	3	0	3
RAP	2	0	2
RAF	4	2	2
SIP	4	2	2
TNA	4	2	2
UBF	4	3	1
ZFM	5	5	0

Table 4. Wilcoxon Signed Rank Test Calculation Based on the Differences

Nama	Total indiscipline (times/month) Before Intervention x1	Total indiscipline (times/month) After Intervention x2	Deference Between Before and After Intervention x1-x2	Abso lute Value	Rank delta	Rank +	Rank -
AIM	4	5	-1	1	5	0	5
DQF	5	4	1	1	5	5	0
DTA	11	12	-1	1	5	0	5
EAP	5	5	0	0	1,5	1,5	0
EWP	2	0	2	2	10,5	10,5	0
FAM	3	5	-2	2	10,5	0	10,5
HWY	3	2	1	1	5	5	0
RNF	3	0	3	3	14,5	14,5	0
RSM	3	0	3	3	14,5	14,5	0
RAP	2	0	2	2	10,5	10,5	0
RAF	4	2	2	2	10,5	10,5	0
SIP	4	2	2	2	10,5	10,5	0
TNA	4	2	2	2	10,5	10,5	0
UBF	4	3	1	1	5	5	0
ZFM	5	5	0	0	1,5	1,5	0

T1=
99,5 T2=
20,50

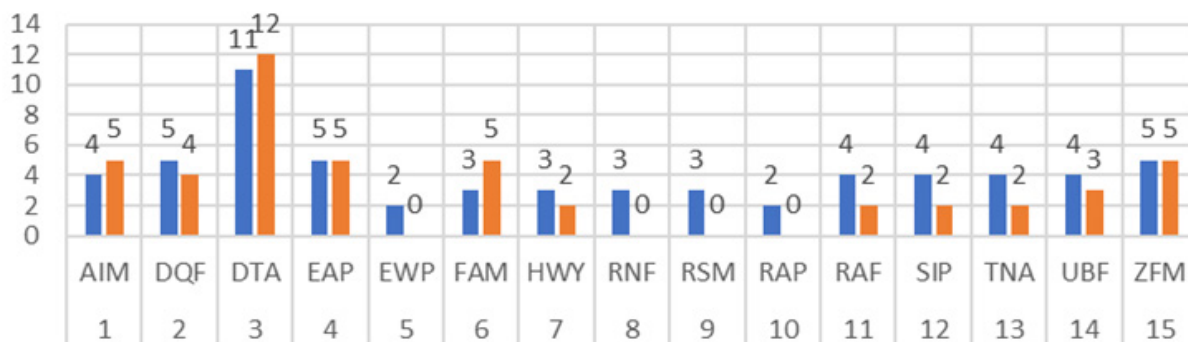


Figure 1. Chart of difference in student data Difference between Before And After Flipping Book Media Intervention

The second stage is the Design stage, which involved planning the concept of the flipping book media, including determining the theme or content material, visual appearance, and interactive features to enhance students’ understanding. The development of a storyboard, navigation system, and accessibility features was also carried out to ensure that the media structure matches the needs and capabilities of slow learner students. The themes presented in this flipping book design include discipline, self-management, motivation, reflection, quizzes, and games.

The third stage is the Development stage. At this stage, the flipping book was created with an attractive and user-friendly design to ensure easy access for slow learner students. In addition to media development, feasibility testing or validation was conducted, covering aspects such as media feasibility, content feasibility, and practicality of use in the counseling process. The feasibility tests involved assessments from media experts, content experts, and field practitioners.

The fourth stage is the Implementation stage. After the development and validation processes, the flipping book media was implemented during behavioral self-management counseling sessions in an inclusive school. Slow learner students were given access to the media and guided to follow the steps outlined in the provided interactive modules. Through the implementation or intervention of this flipping book media, it is expected that there will be improvements in the discipline of slow learner students. The fifth and final stage is the Evaluation stage. Evaluation was carried out by analyzing the observational data regarding changes in students’ discipline before and after the intervention with the flipping book media. The evaluation process employed the Wilcoxon signed-rank test method. In this study, there were two testing processes: the feasibility or validity test and the effectiveness test of the flipping book’s success in improving discipline. For the feasibility test, the data sources consisted of two media experts, two material experts, and two practitioners. Meanwhile, the data sources for the effectiveness test were 15 slow learner students.

For the feasibility test, data collection was carried out using questionnaires distributed to experts and practitioners. Meanwhile, for the effectiveness test, data collection was conducted using an observation technique to measure the level of indiscipline among 15 slow learner students at SMPN 1 Pilangkenceng, Madiun Regency. Data collection for the effectiveness test was conducted twice, namely before (commonly referred to as the pre-test in the Wilcoxon test theory) and after (post-test) the flipping book intervention. The selection of the 15 slow learner students was conducted using questionnaires and interviews among 50 potential slow learner candidates. For the feasibility test, data analysis used the Likert scale questionnaire results with a simple mean calculation from six expert respondents consisting of media experts, material experts, and practitioners. For the effectiveness test, data analysis of the observation results before and after the flipping book intervention used the Wilcoxon Signed Rank effectiveness test. The results of this analysis were used to determine the effectiveness of the flipping book media in improving students’ discipline, in accordance with the theory proposed by Wilcoxon (1945). The data from observations on 15 slow learner students at SMPN 1 Pilangkenceng can be seen in table 1.

After the observational data were obtained, the Wilcoxon Signed Rank Test was conducted with the following hypothesis formulation:

- 1) Null Hypothesis (H_0): There is no significant difference between the conditions before and after the intervention using the flipping book media.
- 2) Alternative Hypothesis (H_a): There is a significant difference between the conditions before and after the intervention using the flipping book media.

To determine which hypothesis is accepted, the Wilcoxon Signed Rank Test was calculated based on the differences between the pre- and post-intervention data. Based on the calculation results presented in the table above, the test statistic value T or $T_{calculated}$

was found to be 20.50, which is the smaller value between T_1 and T_2 . Meanwhile, the critical value T_{table} obtained from the Wilcoxon table was 25 ($\alpha = 0.05$; $n = 15$). Therefore, since $T_{calculated} < T_{table}$ or $20.50 < 25$, the alternative hypothesis (H_a) is accepted. This indicates that there is a significant difference between the conditions before and after the intervention using flipping book media.

RESULT AND DISCUSSION

Result

Flipping Book Media Development Results

The resulting product is an interactive digital media in the form of a flipping book stored on a web-based platform. This media can be accessed via smartphones or laptops with internet connectivity. The web-based flipping book is used as a tool in the behavioral self-management counseling process to improve the discipline of slow learner students. The media is equipped with multimedia features such as images, audio, videos, interactive forms, and games, thus facilitating a more engaging counseling experience.

Flipping Book Media Feasibility Test Results

The validation test was carried out by material experts, media experts, and practitioners to assess the feasibility of the web-based flipping book media. Based on the validation data analysis, the following scores were obtained; 1) Media validity level of 97%, categorized as very valid; 2) Material validity level of 79%, categorized as valid; 3) Practicality level of 78%, also categorized as valid.

These results indicate that the web-based flipping book media is considered valid for use in behavioral self-management counseling processes aimed at improving the discipline of slow learner students. The interactive and visual elements were deemed highly supportive in conveying the self-management concept and reflected the ease of use and accessibility across various devices.

Effectiveness Test Results of Flipping Book Media

Based on the evaluation analysis results ($T_{hitung} < T_{tabel}$ Wilcoxon, $(20.50 < 25)$), it was concluded that there was a significant difference between the discipline levels of students before and after using the flipping book media. Thus, the development of web-based flipping book media in behavioral self-management counseling is proven effective in enhancing the discipline of slow learner students.

Discussion

The implementation results at SMPN 1 Pilangkenceng indicated that prior to the use of the flipping book media, learning and counseling processes were still conducted conventionally without digital technology support. After the application of the web-based flipping book media equipped with interactive elements, there was an increase in student enthusiasm in attending counseling sessions and an improvement in their discipline behavior. These findings suggest that the use of digital technology in learning media can be an effective solution in supporting the improvement of discipline among slow learner students. This is in line with the opinion of Putri and Santosa (2023), who stated that using e-books with attractive and non-monotonous displays can increase students' enthusiasm and interest in learning.

CONCLUSION AND SUGGESTION

Conclusion

The results of this study indicate that the use of web-based flipping book media in behavioral self-management counseling is effective in improving the discipline of slow learner students. This is evidenced by the significant difference between students' discipline levels before and after the intervention using the flipping book media, as shown by the Wilcoxon Signed Rank test results. Additionally, the flipping book media has been declared valid for use based on the validation test results by media experts, material experts, and practitioners. This media offers a more interactive learning experience, facilitates easier access to materials, and helps students understand discipline concepts through engaging visual elements. The application of this media in behavioral counseling using the self-management technique contributes to increasing student engagement in both learning and counseling sessions.

Suggestion

This study has limitations as it only involved slow learner students from one junior high school in Pilangkenceng, Madiun Regency. This limitation may affect the generalization of the findings if the media is used on a broader population or in different contexts. Therefore, further studies with a larger scope and involving various educational institutions are needed to obtain more representative results.

REFERENCES

- Afifah, D. R., Chasanatun, F., Lestari, S., & Murtafiah, W. (2024). Development of Learning Devices Using the Direct Instruction Model Based on Digital Books for Slow Learner Students. *EDUKASIA: Journal of Education and Learning*, 5(1), 723–728. <https://doi.org/10.62775/edukasia.v5i1.842>
- Babullah, R. (2022). Jean Piaget's Cognitive Development Theory and its Application in Learning. *Epistemic: Scientific Journal of Education*, 1(2), 131–152.
- Bouchrika, I. (2025). The ADDIE Model Explained: Evolution, Steps, And Applications For 2025. *Research.com*. Retrieved February 26, 2025, from <https://research.com/education/the-addie-model>.
- Firdaus, I., & Pradipta, R. F. (2020). Implementasi Treatment and Education of Autistic and Related Communicationhandicapped Children (TEACCH) pada Kemampuan Bina Diri Anak Down Syndrome. *Jurnal ortopedagogia*, 5(2), 57-61.
- Imaroh, I. N. (2015). Development of Self-Management Strategy Modules to Improve Learning Discipline of Junior High School Students (Undergraduate Thesis, Universitas Negeri Malang). <https://repository.um.ac.id/2205/>
- Kusumawati, I. (2019). The Use of Flipping Book to Improve Students' Self-Management Ability in Science Learning. *Journal of Science Education*, 8(2), 123-135.
- Monica, M. A., & Gani, R. A. (2016). The Effectiveness of Behavioral Counseling Services Using Self-Management Techniques to Improve Students' Learning Responsibility. *KONSELI: Journal of Guidance and Counseling (E-Journal)*, 3(2), 111-120. <https://doi.org/10.24042/kons.v3i2.576>
- Muslihah, U., Rahmawati, R., & Wibowo, B. Y. (2024). Application of Book Planner Self-Management for Students to Improve Learning Discipline. *Journal of Education Research*, 5(3), 2946–2952. <https://doi.org/10.37985/jer.v5i3.1319>
- Pradipta, R. F., & Andajani, S. J. (2017). Motion Development Program for Parents of Child with Cerebral Palsy. *Jurnal Penelitian dan Pengembangan Pendidikan Luar Biasa*, 4(2), 160-164.
- Pradipta, R. F., & Dewantoro, D. A. (2019). Origami and fine motoric ability of intellectual disability students. *International Journal of Innovation*, 5(5), 531-545.
- Putri, L., & Santosa, C. (2023). Problem-Based Learning-Based E-Module Containing Local Cultural Knowledge to Improve Problem Solving Skills. *Journal of Education*, 9(2), 880–890. <https://doi.org/10.31949/educatio.v9i2.5002>
- Rohmah, N., Hidayat, S., & Nulhakim, L. (2021). Implementation of Discipline Character Education in Supporting Student Learning Quality Services. *Scientific Journal of Education and Learning*, 5(1), 150–159. <http://dx.doi.org/10.23887/jipp.v5i1>
- Searmadi, B. P. H., & Harimurti, R. (2016). Application of Flipbook Innovation as a Learning Medium to Improve PHP Introduction Learning Outcomes for Class XI RPL at SMK Negeri 2 Mojokerto. *Journal of IT-Edu*, 1(2), 42–48. <https://doi.org/10.51574/jrip.v4i3.2286>
- Simatupang, A., Siregar, B., & Putra, D. (2023). The Influence of Learning Discipline and Learning Environment on Students' Learning Outcomes in Economics Subjects. *Edu Cendikia: Scientific Journal of Education*, 3(2), 45-58. <https://jurnal.itscience.org/index.php/educendikia/article/view/3052>
- Sudiarsana, I. K., Dharsana, I. K., Suarni, N. K., & Lestari, L. P. S. (2023). Cognitive Behavioral Counseling Modeling Technique Procedures to Increase Student Learning Motivation and Concentration. *Bisma The Journal of Counseling*, 7(3), 407–414. <https://doi.org/10.23887/bisma.v7i3.75219>
- Wilcoxon, F. (1945). Individual Comparisons by Ranking Methods. *Biometrics Bulletin*, 1(6), 80-83. <https://doi.org/10.2307/3001968>