

A Study of Student's Learning Outcomes from an Entrepreneurship E-Pocket Book

Akbariansyah^{1(⊠)}, Sri Setyaningsih¹, Suhendra¹, Sovia Aisyah Putri², Neta Dian Lestari², and Depi Pramika²

 Universitas Pakuan, Bogor, West Java, Indonesia akbariansyah.073120029@unpak.ac.id
Universitas PGRI Palembang, Palembang, South Sumatra, Indonesia

Abstract. The purpose of this study is to determine the use of entrepreneurship e-pocket books to improve learning outcomes. This study uses a quantitative descriptive method. The data collection technique used was a test, the research sample was 29 students. The results showed that student learning outcomes had an effect on student learning outcomes which increased by 47.4%. This shows that the entrepreneurial e-pocket book has the effect of increasing student learning outcomes.

Keywords: Book · E-Pocket · Learning Outcomes

1 Introduction

Education is an effort to prepare oneself to welcome and face the times in the global era, therefore education must be prepared early because education is an important part of life, this is in line with [1] education is an important part of life. Understanding like this may seem unreasonable, but if we try to follow the flow and progress of one's life, it cannot be denied that education has gone a long way in one's life from beginning to end. Education is actually part of basic human needs.

The findings show that the quantity of professional development in which teachers participate is strongly related to inquiry-based teaching practices and the culture of the investigative classroom. At the school level, the socioeconomic status of schools was found to influence practice more than principal support or available resources [2]. The results indicate that teachers' ability to apply and reflect on new information and practices is positively impacted by the involvement of school leaders in teacher professional development programs. In addition, they demonstrate a beneficial impact on the leaders' own professional development. In addition to school administrators and teacher educators, this study has implications for professional development design [3].

Entrepreneurship is an ability to be creative and innovate in which individual character and character can produce ideas, values, and energy to get things done with all kinds of risks that will be faced to create things that are useful. and worth selling [4].

Entrepreneurship is the ability to make work happen. Creativity requires constant creativity and innovation to get something else out of the box [5]. Entrepreneurship Needs

(NE) has not been covered in the literature, especially with the speed of development, service needs of entrepreneur's survival and the type of mindset they are reviewing, along with their best practices. Brazil's success as a model NE country is included as an example of what any country can do to get people out of poverty through the NE scheme. Other NE schemes such as: backward system, close mentoring and coaching are explored in this review to demonstrate their importance compared to financial support. [6] Understanding the effect of CBC on sustainable growth was made possible by the analysis, which also identified the ways in which the region should use particular tools to develop structural alternatives and open new routes to desired sustainable cities by using entrepreneurship as a development catalyst.

Based on the results of the researchers' observations using initial data at SMK Muhammadiyah 3 Palembang, there were several majors, but in this study the researchers conducted research in class XI, majoring in culinary. The problem that occurs in students often has difficulty understanding the material in class because students tend to be more interested in practical learning compared to reading thick books, the sentences are too long and difficult to carry anywhere. For this reason, students are less interested in reading and studying the book. Students also don't have other reference books to help them study independently, are comfortable, interesting and can be taken anywhere at any time.

Learning outcomes are the result of one's learning process. Learning outcomes related to the increase in self-students. The increase is a result of learning such as changes in opinion, understanding, behavior and behavior. Changes due to progress are not treated as learning outcomes. Changes in learning are relatively long lasting and have the potential to develop [6].

Learning outcomes are the final assessment in a way that has been implemented many times. It will be buried for a long time, it will not disappear forever because learning outcomes have made someone's personality consistent in order to achieve better results, therefore changing the way of thinking [7]. Learning outcomes are visible changes, a set of understandings, attitudes and having power in a person after acquiring learning skills for a certain period of time [8].

So learning outcomes are changes that occur during the learning process not only in insight, but also in behavior, understanding, behavior, skills and abilities, these changes also depend on what the students have learned and achieved.

A pocket book is a small and light book that fits in a pocket and is very convenient to carry [9]. A pocket book is a small book containing information that can be stored in a pocket for easy portability and reading [11] that a pocket book is a book containing information that is small in size and can be placed in a pocket so that it is easy to carry anywhere. According to [12] "Textbooks or textbooks can be developed into pocket books or better known as pocket books".

So it can be concluded that a pocket book or pocket book is a small book containing a collection of brief and detailed information, which can be taken anywhere and easily stored.

Based on the background above, research for the development of e-pocket books has the aim of knowing the use of entrepreneurial e-pocket books to improve learning outcomes. Approach scored higher than students receiving traditional instruction in math

self-concept, and these scores fell between fairly good and medium levels [13]. In terms of students' starting skills, the independent learning of mathematics by school leavers whose learning through reciprocal teaching was superior to that of learning through regular learning [14]. The Reciprocal Teaching Approach was one approach that can help students write more effectively about concepts and theorems using symbolic forms in courses on sets, kinds of connections, and functions in logic and set theory [15].

There were similarities in teaching and learning activities of teachers and students on strategies in the scientific method and the approach of reciprocal teaching, including (1) Observing (scientific approach) was similar to predicting and clarifying (reciprocal teaching approach); (2) Asking (scientific approach) was similar to questioning (reciprocal teaching approach); (3) Gathering information (scientific approach) was similar to visualizing (reciprocal teaching approach); (4) Reasoning (scientific approach) was similar to connecting and calculating (reciprocal teaching approach); (5) Communicating (scientific approach) was similar to summarizing-giving feedback (reciprocal teaching) [16]. In the experimental class, a two-party comparative case study exam was required since, given this similarity, it was impossible to decide which strategy was superior. Through this research it was hoped that learning would be created that could encouraged the achievement of mathematical self-concept.

This research was conducted in class VIII, this was in accordance with the results of the study that employing a reciprocal teaching paradigm had an impact on eighth-grade students' capacity for creative thinking in mathematics [17]. The topic applied in this research is Circle. This was because students struggle with understanding the steps involved in circle learning, such as how to calculate phi and use it in a variety of real-world situations used circle circumference [18]. This study also involved students' Prior Mathematical Knowledge (PMK). This was in accordance with the results of the study that based on students' PMK, students who learned using a scientific approach showed a greater development in mathematical higher-order-thinking skills than pupils who benefited from a reciprocal teaching strategy (high and low) [19, 20]. This study's goals were to look at and describe: (1) Based on students' PMK, the attainment of the mathematics self-concept for students who receive instruction with a scientific method was contrasted to students receiving instruction with a reciprocal teaching method (high and low); (2) the results of the interaction among scientific and reciprocal instruction, pupil PMK, and the level of their mathematical self-concept.

2 Methods

This research uses a quantitative descriptive method. The research was carried out at SMK Muhammadiyah 3 Palembang. The research was carried out for approximately one month, namely in June 2022. The subjects of this research were students at SMK Muhammadiyah 3 Palembang. Students who were used as research subjects were Class XI students in the Culinary Department. The number of respondents was 29 students, consisting of 4 male students and 15 female students. Observation as a data collection technique has more specific characteristics than other techniques, namely interviews and questionnaires [13]. It is used at the beginning of the observation of teachers and students so they can find out what problems often occur in the learning process, such as learning

media that are less attractive which only use thick printed books of school supplies and equipment that are not maximized and students who only focus on practical learning. And the test is used as a collection of data on student learning outcomes during learning before and after using e-pocket book media. Analysis of test data to see the percentage of completeness of student learning outcomes, with the formula [14].

$$\%$$
 Appropriateness = $\frac{EarnedScore}{MaxScore} X 100\%$

3 Results and Discussion

Based on the results of my observations and interviews with Pkkwu subject teachers at SMK Muhammadiyah 3 Palembang, the average student score was 76 in the good category. At this field test stage, the entrepreneurship e-pocket book developed was tested on students who were given 40 min to see the results. Learn to use entrepreneurship e-pocket books. Before the learning process was carried out using the entrepreneurship e-pocket book by giving pretests and protests to all 29 students in class XI culinary management to find out the extent of students' abilities and 25 multiple choice questions. The following are the results of the student pretest before using the entrepreneurship e-pocket book (Table 1).

Based on the calculation results, it is known that the results of the student pre-test 58% are in very good criteria, 32% are good criteria, 10% are pretty good criteria. So, it can be concluded that the results of the student pre-test with an average result of 43.7% are in the unfavourable criteria. The results of the pre-test calculations can be seen in the diagram (Fig. 1).

After conducting the pre-test on students, the next step is to carry out a protest test to see the results after using the e-pocket book, along with the pre-test results in class XI Culinary with 29 students (Table. 2)

Based on the calculation of protest, it is known that the average result of the student's post-test is 80% with good criteria.

Score Scale	The Number of Students	Percentage	Criteria
85–100	17	58	Very good
75–84	9	32	Good
60–74	3	10	Pretty good
46–59	-	-	Not good
0–45	-	-	Very Less Good
Amount	29	100	Very good
Average Yield		94,7	

Table 1. Student Pretest Results

Source; Results of processing researchers

Student Achievement Results

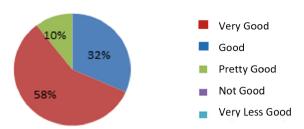


Fig. 1. Student pre-test Results

Table 2. Pre-Test Result

Score Scale	The Number of Students	Percentage	Criteria
85–100	9	32	Very good
75–84	17	58	Good
60–74	3	10	Pretty good
46–59	-	-	Not good
0–45	-	-	Very Less Good
Amount	29	100	Good
Average Yield		80	

Source; Results of processing researchers

Protest Results

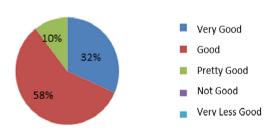


Fig. 2. Diagram of student protest results

So this shows that student learning outcomes have an effect on student learning outcomes through the pre-test and protest tests which have increased by 80%. This shows that the Entrepreneurship E-Pocket Book has a valid value and has the effect of increasing student learning outcomes. The display of images results from the development of an entrepreneurial e-pocket book to improve student learning outcomes at SMK Muhammadiyah 3 Palembang (Fig. 2).

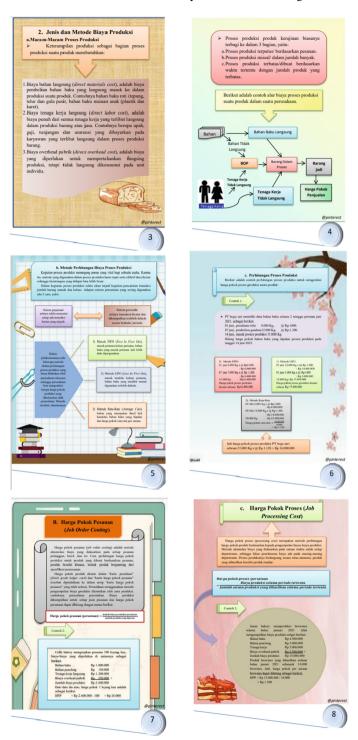


Fig. 3. Material display

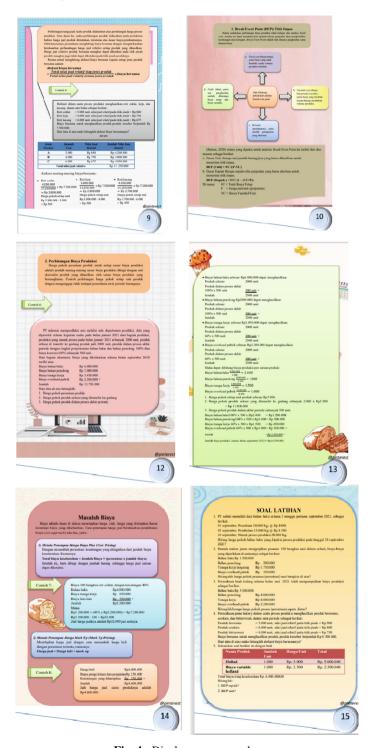


Fig. 4. Display case examples

This is in line with the results of research from [23] about the Application of Pocket Books with a Scientific Approach to Increase Motivation and Learning Outcomes of Post-Earthquake Students, Analysis of Needs for Development of Mind Map-Based Biology Pocket Books (Biomaps). According to [24] about Provision of Reading Materials in the Form of Pocket Books to Improve Student Learning Outcomes at SMP Negeri 5 Monterado, [25] about The Effect of the Reverse Learning Model (Reciprocal Teaching) Using Pocket Books on Biology Learning Outcomes of Class VII Mts Usb Sagulung Batam, [26] about Needs Analysis for the Development of a Mind Map-Based Mathematics Pocket Book, [27] about the Effect of the NHT Model Accompanied by the Pocket Book on the Results of the Plant Tissue Structure Sub Material.

Further research [28] about the Effect of the NHT Model Accompanied by the Pocket Book on the Results of the Plant Tissue Structure Sub Material, [29] about the influence of pocket book media on student learning outcomes on the Protista concept, [30] about the Effect of Using Student Pocket Books with Cheerful Puzzle Media Evaluation Techniques on Learning Activities and Outcomes, [31] about the Development of a Pocket Book on Momentum and Impulse Material to Increase Interest and Cognitive Learning Outcomes of Class X Students, [32] about "The Effect of the Pocket Book Assisted Articulation Learning Model on Accounting Learning Outcomes of Class X Accounting in Bandung Private Vocational High School 1 Year 2017–2018". Based on the results of the relevant researchers, it was found that with the pocket book learning media (e-pocket book) the learning outcomes increased after using it because it had an increasing effect on student learning outcomes.

From the results of research conducted at SMK Muhammadiyah 3 Palembang in class XI Culinary with a total of 29 students, it can be concluded that showing that the use of e-pocket books can improve learning outcomes, which has an effect on student learning outcomes through pretest and protest tests which experienced an increase of 47.4%. This shows that the entrepreneurial e-pocket book has the effect of increasing student learning outcomes. Suggestions given by researchers to students so that they can be used as learning media to be able to increase students' desire to learn and can improve the ability of learning outcomes then for teachers to use as an alternative learning media that can improve students' understanding while studying. For developers, it is given to teachers and students so that the entrepreneurship e-pocket book that is being developed can become a learning and learning medium and for further researchers, it can become a research reference in order to improve and further develop it so as to create an optimal entrepreneurship e-pocket book (Fig. 4), (Fig. 3).

Strategy used to raise students' Mathematical Problem Posing Ability (MPPA) did not interact [44]. A student's prior math ability had nothing to do with a teacher's self-regulated learning teaching methods [45]. In more detail, the development of pupils' mathematical self-concepts was not significantly impacted by either of these two aspects. Therefore, it could be concluded that the application of both a scientific and a reciprocal teaching style to education have an impact on students to the achievement of students' mathematical self-concepts. The similarity of the results obtained in the achievement of mathematical self-concept between learning using a scientific method and learning using a mutually beneficial teaching method was because the learning carried out in the research was only for eight meetings and it was not enough to measure students'

mathematical self-concept. Therefore, students' mathematical self-concept had not been able to develop as desired. This was in line with Aristotle stating that the formation of a person's attitude or knowledge cannot develop spontaneously but would continue through a long process both individually and in groups [46]. Students' self-concept developed through certain stages due to interactions with other people in the surrounding environment [47].

The next causal factor was related to the strong desire of the individual himself, because self-concept was very dependent on the strong desire of each individual and how the individual perceives the quality of his abilities [48]. The relationship with mathematical self-concept could be concluded that mathematical self-concept was a habit/culture that takes a long time to clearly seen the influence of a learning, both scientific methods of instruction and methods of reciprocal teaching, so that mathematical self-concept could well developed in students.

4 Conclusion

This study found that the reciprocal teaching strategy based on student PMK and a scientific approach did not vary in terms of self-concept mathematical achievement (high and low). Despite the fact that the average achievement of the group with the scientific method is smaller than the group with both the reciprocal teaching methods, the class's performance under the scientific approach is comparable to the class's performance under the reciprocal teaching approach. In addition, it was also concluded that there was no interaction between scientific and reciprocal teaching learning and students' PMK (high and low) on the academic achievement of students' mathematical self-concepts'. Therefore, there was no mutual interaction between the learning variables and the PMK grouping factors on the development of the students' mathematical self-concepts. This occurred because the students' PAM grouping factor and learning component had no appreciable impact on the students' attainment of their mathematical self-concepts.

Acknowledgments. This research could not have been carried out without the help and cooperation of many parties. The author would like to thank the big family of Palembang PGRI University and Muhammadiyah 3 Vocational High School for their invaluable cooperation in carrying out this research.

References

- M. Yusuf, *Introduction to Education*. Palopo: Palopo: Lembaga Penerbit Kampus IAIN Palopo, 2018.
- J. Chen and W. Guo, "Emotional intelligence can make a difference: The impact of principalsfg emotional intelligence on teaching strategy mediated by instructional leadership," Educ. Manag. Adm. Leadersh., vol. 48, no. 1, pp. 82–105, 2020.
- 3. A. Hilton, G. Hilton, S. Dole, and M. Goos, "School leaders as participants in teachers' professional development: The impact on teachers' and school leaders' professional growth," *Aust. J. Teach. Educ.*, vol. 40, no. 12, p. 8, 2015.

- 4. D. R. Afrika, N. D. Lestari, and R. Aradea, "The Relationship Between Craft and Entrepreneurship Subjects and Students' Interest in Entrepreneurship at SMA Pgri 2 Palembang," vol. 8, no. 2, pp. 48–54, 2020.
- N. D. Lestari and M. Toyib, "Financial Report Analysis of Entrepreneurship Bazaar for Creative Products K5PBB Waste Students of the Accounting Education Study Program, PGRI University Palembang," *J. Promosi Pendidik. Ekon.*, vol. 5, no. 2, pp. 50–59, 2017.
- 6. L. Loures, R. A. Castanho, J. M. N. Gómez, J. Cabezas, and L. Fernández-Pozo, "The Influence of Cross-Border Cooperation (CBC) in the Fostering of Entrepreneurship and Regional Development: A Step Closer to Achieve Major Structural Changes and Sustainable Cities Within European Territory," in *New paths of entrepreneurship development*, Springer, 2019, pp. 371–385.
- I. Lestari, "The Effect of Study Time and Study Interest on Mathematics Learning Outcomes," J. Form., vol. 3, no. 2, pp. 115–125, 2015.
- 8. N. D. Lestari, "Differences in Student Accounting Learning Outcomes in the Application of the Psychological Concepts of Intellectual Capital and Social Capital at SMK Muhammadiyah 2 Palembang in the 2014/2015 Academic Year," *J. Neraca J. Pendidik. dan Ilmu Ekon. Akunt.*, vol. 1, no. 1, 2017, doi: https://doi.org/10.31851/neraca.v1i1.1168.
- D. Pramika and N. P. Sari, "Booklet Development with Video Tutorial Assistance as Learning Media for Research Statistics," *Econ. Educ. Anal. J.*, vol. 9, no. 3, pp. 959–971, 2020, doi: https://doi.org/10.15294/eeaj.v9i3.42353.
- A. N. Aini and S. Sunarti, "Development of Javanese Script Pocket Books as Learning Media for Class IV Javanese at SD 1 Kadipiro Kasihan, Bantul," *J. PGSD Indones.*, vol. 3, no. 2, p. 2, 2017.
- 11. F. Yuliani and L. Herlina, "Development of a Global Warming Material Pocket Book for Junior High Schools," *Unnes J. Biol. Educ.*, vol. 4, no. 1, pp. 104–110, 2015.
- 12. A. E. Damayanti 1, I. Syafei, H. Komikesari, and R. Rahayu, "Feasibility of Physics Learning Media in the Form of an Android Pocket Book on Static Fluid Material," *Indones. J. Sci. Mat. Educ.*, vol. 1, no. 1, pp. 63–70, 2018.
- 13. D. A. Prasetio, U. Sumarmo, and A. I. Sugandi, "Improving Student'S Mathematical Reasoning and Self Concept By Using Reciprocal Teaching," *J. Innov. Math. Learn.*, vol. 1, no. 3, p. 283, 2018, doi: https://doi.org/10.22460/jiml.v1i3.p283-294.
- I. Yuniar, E. E. Rohaeti, and R. B. A. Soekisno, "Improving Understanding and Mathematical Communication Level and Study Learning With Reciprocal Teaching Approach," *J. Innov. Math. Learn.*, vol. 1, no. 2, p. 136, 2018, doi: https://doi.org/10.22460/jiml.v1i2.p136-142.
- 15. A. Y. T and C. Lanteri, "Implementation of Reciprocal Teaching Models to Increase The Capability of Writing Definition and Theorem in Simbolic Form," *JETL (Journal Educ. Teach. Learn.*, vol. 2, no. 1, p. 81, 2017, doi: https://doi.org/10.26737/jetl.v2i1.155.
- D. Apryani, R. N. Sasongko, M. Kristiawan, N. A. Yensy B., and H. Hidayatulloh, "A comparison of reciprocal teaching and scientific approaches for improving pupils' mathematical understanding," *J. Elem.*, vol. 8, no. 2, pp. 510–524, 2022, doi: https://doi.org/10.29408/jel. v8i2.5461.
- 17. Rasmuin, E. Jais, and Sardin, "The Effect of Mathematics Learning with using Reciprocal Teaching Model on Mathematics Creative Thinking Ability," *J. Phys. Conf. Ser.*, vol. 1477, no. 4, pp. 1–5, 2020, doi: https://doi.org/10.1088/1742-6596/1477/4/042041.
- N. Indriani and H. Julie, "Developing learning trajectory on the circumference of a cycle with realistic mathematics education (RME)," *AIP Conf. Proc.*, vol. 1868, no. August 2017, 2017, doi: https://doi.org/10.1063/1.4995149.

- 19. S. D. Crosby, A. G. Day, C. L. Somers, and B. A. Baroni, "Avoiding school suspension: Assessment of a trauma-informed intervention with court-involved, female students," *Prev. Sch. Fail. Altern. Educ. Child. Youth*, vol. 62, no. 3, pp. 229–237, 2018.
- D. Apryani and Hadiwinarto, "Improving Mathematical Connection Ability through the Approach of Scientific and Reciprocal Teaching," *Int. J. Progress. Sci. Technol. (IJPSAT*, vol. 30, no. 1, pp. 84–94, 2021.
- 21. Sugiyono, Educational Research Methods. Bandung: Bandung: Alfabeta, 2021.
- 22. L. B. R. Accraf, Suryati, and Y. Khery, "Development of Interactive E-Modules Based on Android and Nature of Science in the Material of Chemical Bonds and Inter-molecular Forces to Grow Students' Science Literacy," *J. Kependidikan Kim.*, vol. 6, no. 2, pp. 133–141, 2018.
- 23. A. Suryanda, E. P. Azrai, and A. Julita, "Needs Analysis for the Development of a Mind Map-Based Biology Pocket Book (Biomap)," *J. Pendidik. Mat. dan IPA*, vol. 11, no. 1, pp. 86–98, 2020, doi: https://doi.org/10.26418/jpmipa.v11i1.31861.
- E. Trisianawati, T. Djudin, and T. Katihada, "Provision of Reading Materials in the Form of Pocket Books to Improve Student Learning Outcomes at SMP Negeri 5 Monterado," *J. Pendidik. Inform. dan Sains*, vol. 6, no. 2, pp. 219–229, 2017.
- 25. S. Lisa, Ramses, and Y. Efendi, "The Effect of Reverse Learning Model (Reciprocal Teaching) Using Pocket Books on Biology Learning Outcomes of Grade VII Students of Mts Usb Sagulung Batam," *Simbiosa*, vol. 4, no. 1, pp. 35–41, 2015, doi: https://doi.org/10.33373/sim-bio.v4i1.537.
- 26. N. A. Salam, Y. Diansyah, and W. Hidayat, "Needs Analysis for the Development of a Mind Map-Based Mathematics Pocket Book," *Prisma*, vol. 9, no. 2, pp. 136–145, 2020, doi: https://doi.org/10.35194/jp.v9i2.963.
- 27. S. Sinta, B. Hardigaluh, and T. Titin, "The Influence of the NHT Model Accompanied by Pocket Books on Learning Outcomes in the Sub Material of Plant Tissue Structure," *J. Pendidik. dan Pembelajaran Khatulistiwa*, vol. 8, no. 11.
- 28. P. K. Suprapto, S. Hidayat, and V. Meylani, "The effect of pocket book media on student learning outcomes on the concept of protists," vol. 11, no. 1, pp. 10–22, 2022.
- 29. I. Herawati, F. G. Putra, R. Masykur, and C. Anwar, "Pocket Book Digital Berbasis Etnomatematika Sebagai Bahan Ajar Sekolah Menengah Pertama," *J. Math. Educ. Sci.*, vol. 3, no. 1, pp. 29–37, 2020.
- 30. Mukminah, B. A. Sukroyanti, and M. Fuaddunazmi, "The Influence of Using Student's Pocket Books with Cheerful Puzzle Media Evaluation Techniques on Learning Activities and Outcomes," *J. Ilm. Pendidik. Fis.* "Lensa," vol. 3, no. 2, pp. 288–293, 2015.
- 31. C. Early, "Development of a Pocket Book on Momentum and Impulse Material to Increase Interest and Cognitive Learning Outcomes of Class X Students," 2018.
- S. Supasih, "The Effect of Pocket Book-Assisted Articulation Learning Model on Accounting Learning Outcomes of Class X Accounting in Bandung Private Vocational School 1 Year 2017–2018," 2018.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

