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Enchanting Math Audiobook: Insights from Teachers, University Students, and Young Learners

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ABSTRACT

Reading is an essential activity of learning. In this study, the researchers investigated the opinions of elementary school teachers, university students majoring in elementary school teacher education, and elementary school students on the mathematics audible book "Asyiknya Bermain Setatak". The researchers distributed questionnaires to collect the data. Data collection was carried out randomly using the random sample method. The respondents comprised 75 people (9 elementary school teachers, 53 university students majoring in elementary school teacher education, and 13 elementary school students) in Pekanbaru, Riau. The data were analyzed using Rasch Model with item response theory (IRT). Based on the data analysis, all statements are valid and reliable, and it means that the items can be used to judge the design of the audible book "Asyiknya Bermain Setatak". Based on the results of the study, it was found that the audible book math media was in accordance with the learning of elementary school students. The use of math audible book is also easy to do by students, teachers, and prospective teachers. Math audible books also provide positive benefits in learning mathematics. Based on this, it can be concluded that teachers should consider using audible books as a media for mathematics learning.

Membaca adalah kegiatan belajar yang penting. Dalam penelitian ini, peneliti menyelidiki pendapat guru sekolah dasar, mahasiswa jurusan pendidikan guru sekolah dasar, dan siswa sekolah dasar tentang audible book "Asyiknya Bermain Setatak". Para peneliti membagikan kuesioner untuk mengumpulkan data. Pengumpulan data dilakukan secara acak dengan menggunakan metode random sample. Responden terdiri dari 75 orang (9 guru SD, 53 mahasiswa jurusan pendidikan guru SD, dan 13 siswa SD) di Pekanbaru, Riau. Data dianalisis menggunakan Model Rasch dengan item response theory (IRT). Berdasarkan analisis data, semua pernyataan valid dan dapat diandalkan, dan itu berarti bahwa item dapat digunakan untuk menilai desain audible book "Asyiknya Bermain Setatak". Berdasarkan hasil penelitian didapatkan bahwa media audible book sudah sesuai dengan pembelajaran siswa sekolah dasar. Penggunaan audible book matematika juga mudah digunakan oleh siswa, guru, dan calon guru. Buku yang dapat didengar matematika juga memberikan manfaat positif dalam belajar matematika. Berdasarkan hal tersebut, dapat disimpulkan bahwa guru harus mempertimbangkan untuk menggunakan audible book sebagai media pembelajaran matematika.

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INTRODUCTION

Education is a continuous process and an effort of informing one's basic abilities. Education will make a person learn something new. A learning process is a process that can improve people's personalities, abilities, and skills so that they are able to face problems in life (Alim et al., 2021; Jatisunda et al., 2020). A learning process is a form of learning that has educational value (Putra et al., 2021; Wijaya et al., 2021).

One of the subjects that plays a crucial role at every educational stage is Mathematics (Ariyanto et al., 2020), from elementary to university levels. However, it cannot be disregarded that mathematics also poses a daunting challenge for some children. Therefore, it may be a wise step to introduce mathematical concepts from the elementary school level. Nevertheless, it is important to note that teaching mathematics to elementary school children entails significant differences compared to teaching adults, particularly in terms of the method, contents, and, most importantly, learning media. At the kindergarten level, the introduction of mathematical concepts is still limited to numbers, counting, and simple arithmetic, even though activities of these kinds are often not fully grasped by young children.

One of school subjects that students find difficult to learn is mathematics. Based on the Program for International Student Assessment (PISA) 2016 results, Indonesia ranked 64th out of 72 countries in mathematical knowledge. Then, Indonesian students ranked 74th out of 79 countries in mathematical knowledge in PISA 2018. The low mathematical knowledge of Indonesian students may be caused by various aspects such as economy, infrastructure, and learning methods (Putra et al., 2021). In this relation, learning will be more effective if teachers can present learning by utilizing aspects that can support the learning process. The use of media, for example, strongly supports the learning process, especially in mathematics (Alim et al., 2019; Alim et al., 2020).

Learning media play an important role in enhancing students' learning activities and motivation (Hermita et al., 2021a). The utilization of appropriate teaching media during the learning process can stimulate interest, motivate, and foster innovative learning patterns. One form of media implemented in the context of Mathematics education is the use of culturally-grounded storybooks, containing material relevant to children's lives. Creative and innovative thinking is essential to package local cultural heritage in a way that is both accepted and recognized on a global scale. Efforts to preserve cultural values, such as showcasing traditional regional games through storytelling, can equip the younger generation with a sense of appreciation for their own culture.

Now, life goes on in an era in which Information Communication and Technology (ICT) is inseparable with human life; this is often called the 4.0. revolution era (Kustandi & Situmorang, 2013). In this relation, learning media must be adapted to technological advances (Alim et al., 2019; Alim et al., 2020; Wijaya et al., 2021). One of the most common learning media is the book format. Books play an important role in the teaching and learning process (Cai & Ni, 2011; Fan, 2013; Napitupulu et al., 2021; Reys et al., 2010). All learning processes are based on reading activities. For elementary school students, they will be more interested in reading books that contain colorful pictures (Gogahu & Prasetyo, 2020).

One of the books that has this characteristic is "Asyiknya Bermain Setatak" [The Fun in Playing *Setatak*], an audible book created by university students majoring in elementary school teacher education. An audible book is one that comes with sounds and images. Math reading books are no longer limited to texts, but are integrated with attractive color illustrations and digitally accessible sounds. Text, image, and sound loading will allow students to understand the material being delivered better. As stated by Richard E. Mayer, an expert in the field of educational psychology from the United States of America, is is understood that efficient learning tends to occur when the material is presented in multimedia forms, which combine elements of texts, images, and sounds (Halim et al., 2012).

Then, this audible book is associated with regional culture, namely the traditional game of the Riau people, namely *setatak*, or, in Java, *engklek*. This game is usually played by children in the field, house yard, garden, or other such open space.. The loading of traditional games in mathematics learning can be used as an innovation in students' mathematics books. As in the opinion of Prahmana et al. (2021), media will be more interesting if it is based on ethnomathematics; students can get to know the culture and environment that provide contexts for mathematical materials, because mathematics is always blended in with everyday life. In learning that integrates real-world experience, students have the opportunity to explore mathematical concepts with the help of concrete objects, after which they then apply it in solving everyday problems. The learning resources used are the environment around the students, which allows them to experience mathematical concepts in contexts relevant to their lives (Mirnawati et al., 2020). The pattern of the *setatak* game in the form of a flat wake is then associated with the material types of flat wakes in this book "Asyiknya bermain Setatak".

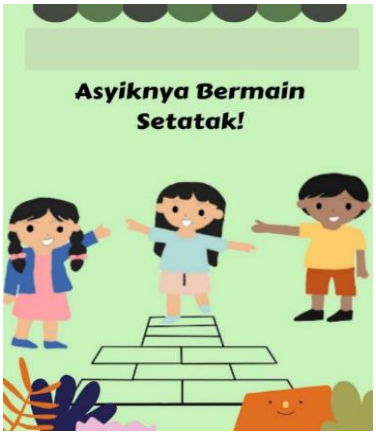

Figure 1. The audible book "Asyiknya Bermain Setatak"

This audible book (Figure 1) is a digital book that contains mathematics instructional materials, can be accessed online, and has colorful pictures and sounds. The use of audiobooks in learning has previously been done in the study by Oktaviani, for example (Oktaviani et al., 2022). In this study, media development and trials were carried out to students in mathematics classes and it was found that students were very interested and liked the use of audible books in. Another study was conducted by Kim (2021) who used an experimental research design to see students' learning outcomes using regular books and audiobooks. The results showed that students' understanding was better by using the audio books than the ordinary books.

In the present study, the researchers investigated the opinions of elementary school teachers, university students majoring in elementary school teacher education, and elementary school students about the use of the audible book "Asyiknya Bermain Setatak" as an instructional medium in mathematics learning. Perceptions of students and teacher on the use of media in the learning processes become an important factor in instruction and, later, later be used as evaluation material in the use of media in schools (Maryati & Brataningrum, 2022). Then, elementary school teacher education students as prospective teachers are also required to provide innovation to their mathematics classes. Through the perception of students, teachers, and prospective teachers of the use of this audble book as a learning medium, it can be used as a consideration and evaluation for innovation in the use of more diverse mathematics books.

METHOD

The researchers applied the quantitative approach to research as the method of the study with a survey model. The study took place in Pekanbaru, Riau. To collect the data, the researchers distributed questionnaires related to the use of the audible Book "Asyiknya Bermain Setatak" math media. This instructional medium has been validated and declared feasible by media experts, linguists, and material experts. There were 75 respondents consisting of 9 elementary school teachers from 4 schools in Pekanbaru, 53 elementary school teacher education students from Riau University, and 13 students from 4 elementary schools in Pekanbaru with a grade range of 4 to 6. The number and origins of the research respondents are shown in Table 1.

Table 1. The Number and Origins of Respondents

No	Origin	Total
1	Elementary school teachers	9
2	University students majoring in elementary school teacher education	53
3	Elementary school students	13
Total		75

The respondents were asked to specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. The higher the score, the more agreeable the statement is by the respondents. To analyze the data, the researchers used the Rasch statistical Model because this statistics can do fit statistics. The data processing process begins by inputting the data obtained from the respondents and then converted them into an interval scale. The researchers analyzed the data by using the Ministep application. By using the application, the

researchers got several output tables: summary statistics, item measure, person-map-item, item fit order, and different item functionals. In accordance with the aspects of media, the researchers used the criteria developed by Pratiwi & Meilani (2018) which had been adjusted for this study and consisted of relevance, ease of use, and usability. This instrument was adapted from the study of Hermita et al. (2022) about the perception of media use in learning (Table 2).

Table 2. Aspects and Statement Items of the Perception Instrument

Aspect	Indicator	No.	Statement
Relevance	Suitability of media with learning	P1	The audible book "Asyiknya Bermain Setatak" is very interesting.
		P2	The math audible book "Asyiknya Bermain Setatak" makes the activities of reading and listening more fun.
		P3	The math books with sounds are more attractive like the audible book "Asyiknya Bermain Setatak".
Ease of Use	Ease of use of media in the learning process	P4	The buttons of the audible book "Asyiknya Bermain Setatak" are easy to use.
		P5	The audible book "Asyiknya Bermain Setatak" can be used as the material for an independent reading activity at home.
		P6	I understand contents from an audible book more easily than from an ordinary book.
Usefulness	Benefits of media in learning	P7	Reading using audible books is more attention-grabbing than reading using ordinary books.
		P8	The math audible book has a better impact for learning than an ordinary book does.
		P9	The audible book "Asyiknya Bermain Setatak" is a form of positive use of technology.
		P10	The math audible book " Asyiknya Bermain Setatak" provides a clearer explanation of the material.

The data analysis was conducted using a quantitative descriptive approach with rasch model, which is a method in data processing and interpretation that emphasizes the general overview and fundamental characteristics of the collected data. This method aims to provide detailed descriptions and portrayals of data in the form of numbers or statistics, without involving inference or more complex conclusions.

RESULTS

The audible book "Asyiknya Bermain Setatak" is a digital math book with pictures and sounds. This audible book can be accessed online from various devices such as smartphones, laptops, and computers. Anyone can access this audible book as long as there is internet connection. The audible book "Asyiknya Bermain Setatak" be can also be used at home by students.

Figure 2. Cover of the audible book "Asyiknya Bermain Setatak"

The audible book "Asyiknya Bermain Setatak" (Figure 2) is a digital storybook based on ethnomathematics. This book is digital and equipped with images and audio. The audible book "Asyiknya Bermain Setatak" contains flat building materials for grade IV of the elementary school. This audible book contains mathematical materials (Figure 3) related to Riau Malay culture. The audible book shows the story of children playing a traditional game called *Setatak*. Before playing, the children draw the ground several two-dimensional shapes as the game area. Therefore, by playing *setatak* the children are learning several kinds of two-dimensional figures. The children get to know the local culture while learning mathematics.

Figure 3. The mathematical materials in the audible book

How to use the audible book "Asyiknya Bermain Setatak"

1. Open the media file, and it will display as shown below (Figure 4). To read the book, click the button "Tekan Disini" [Press here]

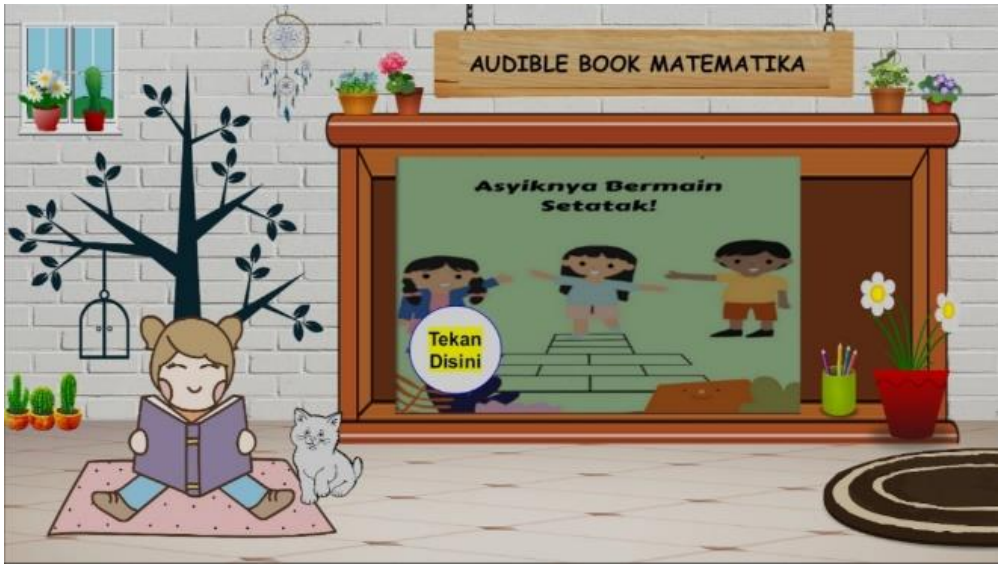

Figure 4. The first display of the book

2. You will find the following display (Figure 5). The book is ready to use.

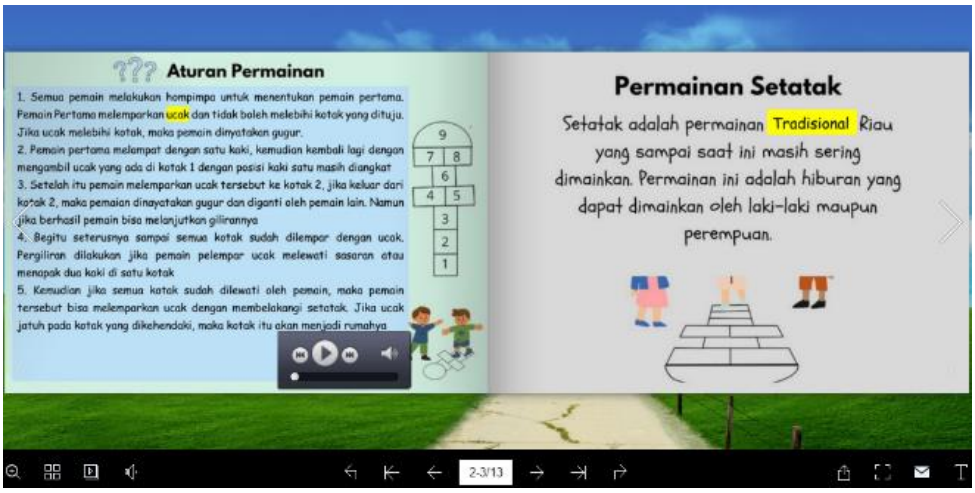

Figure 5. The content of the book

The respondents, who were elementary school teachers, university students majoring in elementary school teacher education, and elementary school students, were asked to give their opinion on the book by filling out a questionnaire. Their responses on each statement then were analyzed by using the Rasch model in the Ministep application. Figure 6 is the summary statistics whose function is to summarize and provide information about the sample data. It tells something about the values in the data set. The person measure is 2.37, which means that most respondents agree with the statements. If the person measure value exceeds 0.0, the respondents tend to choose agree. The person reliability is 0.77, which means that consistency of the respondents' responses is quite good because the value is between 0.67 and 0.80. The Cronbach's alpha value is 0.87, which means that the interaction between the respondent and the statement item is very good because it is more than 0.80. The item reliability is 0.80, which means that the consistency between statement items was quite good because the value is between 0.67 and 0.80.

The INFIT MNSQ value and OUTFIT MNSQ value are 0.97 and 0.95, which mean that the observations are too predictable (redundancy, data overfit the model) because they are close to 1.00. The INFIT ZSTD value and OUTFIT ZSTD value are -0.01 and -0.04, which mean that the data actually did fit the model because they are close to 0.

```
     SUMMARY OF 61 MEASURED (NON-EXTREME) PERSON
-------------------------------------------------------------------------------
|          TOTAL                        MODEL        INFIT        OUTFIT     |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      34.3      10.0        2.37     .78       .97   -.01    .95   -.04 |
|  SEM        .4        .0         .21     .02       .07    .15    .08    .15 |
| P.SD       3.1        .0        1.64     .12       .51   1.17    .59   1.20 |
| S.SD       3.1        .0        1.65     .12       .52   1.18    .59   1.21 |
| MAX.      39.0      10.0        5.09    1.09      2.47   3.20   2.67   4.04 |
| MIN.      28.0      10.0       -1.31     .66       .07  -2.18    .05  -2.18 |
|-----------------------------------------------------------------------------|
| REAL RMSE    .85 TRUE SD    1.40  SEPARATION  1.65  PERSON RELIABILITY  .73 |
|MODEL RMSE    .79 TRUE SD    1.44  SEPARATION  1.83  PERSON RELIABILITY  .77 |
| S.E. OF PERSON MEAN = .21                                                   |


PERSON RAW SCORE-TO-MEASURE CORRELATION = .99 (approximate due to missing data)
CRONBACH ALPHA (KR-20) PERSON RAW SCORE "TEST" RELIABILITY = .87  SEM = 1.27 (a
STANDARDIZED (50 ITEM) RELIABILITY = .94

     SUMMARY OF 10 MEASURED (NON-EXTREME) ITEM
-------------------------------------------------------------------------------
|          TOTAL                        MODEL        INFIT        OUTFIT     |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN     265.3      75.0         .00     .31      1.00    .01    .95   -.18 |
|  SEM        2.5        .0         .23     .00       .06    .35    .07    .29 |
| P.SD       7.6        .0         .69     .01       .19   1.04    .21    .88 |
| S.SD       8.0        .0         .73     .01       .20   1.10    .22    .93 |
| MAX.     276.0      75.0        1.56     .32      1.41   2.12   1.34   1.44 |
| MIN.     248.0      75.0       -1.02     .30       .75  -1.51    .72  -1.23 |
|-----------------------------------------------------------------------------|
| REAL RMSE    .32 TRUE SD     .62  SEPARATION  1.94  ITEM   RELIABILITY  .79 |
|MODEL RMSE    .31 TRUE SD     .62  SEPARATION  2.03  ITEM   RELIABILITY  .80 |
| S.E. OF ITEM MEAN = .23                                                     |
-------------------------------------------------------------------------------
```

Figure 6. Summary statistics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	JMLE MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTMEASUR-AL CORR.	PTMEASUR-AL EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	ITEM
4	248	75	1.56	.30	1.21	1.14	1.30	1.33	.72	.73	65.6	74.3	P4
10	259	75	.59	.30	.84	-.89	.80	-.90	.72	.70	75.4	74.5	P10
5	260	75	.50	.30	.98	-.06	.86	-.57	.68	.70	78.7	74.4	P5
6	264	75	.13	.30	1.41	2.12	1.34	1.44	.62	.68	65.6	75.4	P6
1	268	75	-.24	.31	.79	-1.20	.72	-1.23	.71	.67	80.3	76.0	P1
3	268	75	-.24	.31	.92	-.40	.83	-.69	.68	.67	77.0	76.0	P3
9	268	75	-.24	.31	1.00	.05	.93	-.24	.65	.67	73.8	76.0	P9
2	271	75	-.52	.31	1.10	.61	1.04	.24	.64	.65	73.8	76.3	P2
8	271	75	-.52	.31	.75	-1.51	.76	-.95	.71	.65	86.9	76.3	P8
7	276	75	-1.02	.32	1.02	.18	.90	-.26	.63	.62	86.9	77.5	P7
MEAN	265.3	75.0	.00	.31	1.00	.01	.95	-.18			76.4	75.7	
P.SD	7.6	.0	.69	.01	.19	1.04	.21	.88			7.0	1.0	

Figure 7. Item measure

Figure 7 is the item measure output table, which provides information on the difficulty level of each item. The column of the entry number contains information on the items' numbers, and the numbers are sorted based on the difficulty level. The most difficult item is item 4, and the least difficult item is item 7.

Item fit explains whether or not an item functions normally to take measurements. The outfit means-square (MNSQ) and the infit z-standard (ZSTD) are the criteria used to see the item fit level. An item will be said to be fit if the MNSQ score is 0.5 < MNSQ < 1.5, the ZSTD score is -2.0 < ZSTD < +2.0, and the PTMEAS CORR score is 0.4 < PTMEAS CORR < 85 (Sumintono & Widhiarso, 2014). Based on Figure 8, all items are fit or valid because they are in the range between 0.5 < MNSQ < 1.5, -2 <ZSTD < +2, and 0.4 < PTMEAS CORR < 85.

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	JMLE MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTMEASUR-AL CORR.	PTMEASUR-AL EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	ITEM
6	264	75	.13	.30	1.41	2.12	1.34	1.44	A .62	.68	65.6	75.4	P6
4	248	75	1.56	.30	1.21	1.14	1.30	1.33	B .72	.73	65.6	74.3	P4
2	271	75	-.52	.31	1.10	.61	1.04	.24	C .64	.65	73.8	76.3	P2
7	276	75	-1.02	.32	1.02	.18	.90	-.26	D .63	.62	86.9	77.5	P7
9	268	75	-.24	.31	1.00	.05	.93	-.24	E .65	.67	73.8	76.0	P9
5	260	75	.50	.30	.98	-.06	.86	-.57	e .68	.70	78.7	74.4	P5
3	268	75	-.24	.31	.92	-.40	.83	-.69	d .68	.67	77.0	76.0	P3
10	259	75	.59	.30	.84	-.89	.80	-.90	c .72	.70	75.4	74.5	P10
1	268	75	-.24	.31	.79	-1.20	.72	-1.23	b .71	.67	80.3	76.0	P1
8	271	75	-.52	.31	.75	-1.51	.76	-.95	a .71	.65	86.9	76.3	P8
MEAN	265.3	75.0	.00	.31	1.00	.01	.95	-.18			76.4	75.7	
P.SD	7.6	.0	.69	.01	.19	1.04	.21	.88			7.0	1.0	

Figure 8. Item (column): fit order

Different Item functional (DIF) is one group succeeding more or less on an item than the overall ability of the group and the overall difficulty of the item predicts. There were three groups of respondents: elementary school teachers, university students majoring in elementary school teacher education, and elementary school students. If the *p* value < 0.05, DIF is accepted. Based on Figure 9, no group succeeds more or less on an item than the overall ability of the group and the overall difficulty of the item predicts because *p* > 0.05.

PERSON CLASSES	SUMMARY DIF CHI-SQUARED	D.F.	PROB.	BETWEEN-CLASS/GROUP ITEM UNWTD MNSQ	ZSTD	Number	Name
3	.9101	2	.6323	.4902	-.30	1	P1
3	.3517	2	.8395	.1908	-.94	2	P2
3	2.6080	2	.2680	1.5797	.83	3	P3
3	.1811	2	.9152	.0960	-1.29	4	P4
3	2.1385	2	.3396	1.2515	.57	5	P5
3	2.6397	2	.2638	1.4457	.73	6	P6
3	.5704	2	.7513	.3004	-.66	7	P7
3	.0941	2	.9559	.0511	-1.55	8	P8
3	1.7643	2	.4103	1.1026	.43	9	P9
3	.3179	2	.8540	.1657	-1.02	10	P10

Figure 9. Different item functional (DIF)

Based on results of the analysis using the Rasch Model that has been carried out. It can be stated that teachers, University student majoring in elementary school teacher education, and elementary school students agree that the Audible Book "Asyiknya Bermain Setatak" can be used for elementary school students.

DISCUSSION

The studdy has focused on the evaluation of the audible book "Asyiknya Bermain Setatak" as a digital math book designed to enhance mathematics learning for elementary school students. The book incorporates pictures and sounds, offering an interactive and engaging learning experience. The discussion below highlights the key findings and implications of the study. The study emphasizes the accessibility and convenience of the audible book. It has highlighted that the book can be accessed online through various devices, including smartphones, laptops, and computers. This accessibility allows learners to engage with the content from anywhere with an internet connection. This makes it easy to access books anywhere and anytime (Makdis, 2020). The book is positioned as a valuable learning resource that can be effectively used at home by students. Digital books can become an effort in developing students' literacy (Haslinda et al., 2022). Audible books, which are equipped with texts, images, and audio, will be an effort in order that students will better understand the material taught. Math reading books are no longer limited to texts, but they are integrated with attractive color illustrations and digitally-accessible sounds. Text, image, and sound loading will allow students to understand the material being delivered better. As stated by Richard E. Mayer, an expert in the field of educational psychology from the United States of America, revealed that efficient learning tends to occur when the material is presented in multimedia forms, which combine elements of texts, images, and sounds (Halim et al., 2012). Students' grades are also improved more when using digital audiobooks compared to when using regular digital books (Kim, 2021).

Incorporation of Ethnomathematics and Local Culture

The audible book "Asyiknya Bermain Setatak" has been described as a digital storybook rooted in ethnomathematics. It features mathematical contents related to the Riau Malay culture. The book showcases the traditional game of *Setatak*, where children draw two-dimensional figures on the ground as part of the game's setup. This unique approach connects mathematics education with local culture, enabling students to learn about geometric concepts while immersing themselves in the cultural narratives. The contents of cultural values in mathematics learning can be used as an innovation in learning to increase students' understanding (Sarwoedi et al., 2018). Containing cultural values in mathematics learning will also support students' literacy (Fajriyah, 2018). Through the mathematical media integrated with ethnomathematics, the learning process will also be able to develop students' mathematical literacy skills (Auliya et al., 2020).

Implications of the Findings

The study gathered insights from elementary school teachers, university students majoring in elementary school teacher education, and elementary school students as research respondents by way of questionnaires. The analysis utilized the Rasch model in the Ministep application to assess the responses and opinions of the respondents. The summary statistics table provided a snapshot of the sample data, revealing that most respondents agreed with the statements presented in the questionnaire. The person measure, person reliability, Cronbach's alpha value, and item reliability were discussed. These metrics indicated a favorable level of agreement and consistency among the respondents' answers. The study further delved into the item measure output table, assessing the difficulty level of each item. The fit of items was evaluated using means-square (MNSQ) and infit z-standard (ZSTD) criteria. The data indicated that all items fell within the acceptable range, confirming their fit and validity. Different Item Functional (DIF) analysis was conducted to determine if any of the respondent groups succeeded more or less on specific items compared to the overall group (Sumintono & Widhiarso, 2014). The results suggested that there were no significant differences among the groups in terms of their success on individual items. Moreover, several studies explained that the Rasch analysis supported the theoretical design of the instrument. Math audible book media can be used as an innovation in mathematics learning media. Future learning requires media that can improve students' critical thinking skills (Hermita et al., 2021b).

Based on the results of the analysis using the Rasch Model, it has been concluded that the audible book "Asyiknya Bermain Setatak" is considered suitable for elementary school students by teachers, university students majoring in elementary school teacher education, and elementary school students themselves. The book's

combination of visuals and audio makes it more engaging for young learners. This finding resonates with previous research indicating that incorporating picture books in learning environments increased students' interest, motivation, and imaginative development. In conclusion, the research has demonstrated the potential of the audible book "Asyiknya Bermain Setatak" as an effective learning resource for elementary school mathematics education. The incorporation of ethnomathematics and local culture adds a unique dimension to the learning experience. The positive feedback from the respondents further affirms the relevance and usability of the book in enhancing students' engagement and understanding mathematical concepts. Math audible books that contain pictures attract students' attention more and keep students motivated to learn (Yulianti et al., 2019). Based on the results of the study, it has also been understood that the math book medium that contains images, sounds, and texts is in accordance with today's learning. This audio book can be used as a learning medium for modern societies (Anwas, 2014). Digital audible book math media are also easy to use anytime and anywhere as long as there is active Internet. Digital books provide convenience to users because they can be used at any time (Makdis, 2020). Math audible books also provide benefits to teachers and students. Students are terrified in learning when using media such as audible books. Through the media, audible books also helps teachers in explaining learning materials. Digital books can be used as students' literacy development (Haslinda et al., 2022).

Audible books which look like picture books and can be voiced are also considered more interesting and fun to read for elementary school students. Students will be more interested in reading if the books contain colorful pictures. This opinion is also in accordance with the study by Adipta et al. (2016) which revealed that students will be more interested in learning if they use picture books. Therefore, the role of teachers is needed in optimizing the use of picture storybooks in learning, especially for elementary school students. The study is also in accordance with the results of the study by Kehnia & Darwis (2021) which revealed that learning media which are like picture books will attract students to read more. Picture books will make students more motivated, interest students, and develop students' imagination. So based on this, it can be concluded that a storybook that contains pictures will attract more students' interest, motivation, and attention in reading it. Especially for elementary school students who need visualization of the things they learn, with the presence of picture books, this will be able to develop students' imagination.

CONCLUSION

Based on the tests carried out using the Rasch Model, the researchers obtained several output tables: summary statistics, item measure, person-map-item, item fit order, and different item functional. The results of data analysis show that the audible book medium "Asyiknya Bermain Setatak" is relevant to the learning of the primary school students. Students, teachers, and prospective teachers also feel easy to operate the medium. The audible book "Asyiknya Bermain Setatak" also provides benefits in learning mathematics because it can attract students' attention, be an effort to use technology more positively, and convey mathematical material clearly. Moreover, there is no different opinion between respondent groups because the results of the probability test are above 0.05. When elementary school students use the audible book, they will be more interested, motivated, having fun. The audible book also can attract students' attention in reading. Audible books can be innovation books for elementary school students, especially mathematics books. So, teachers can use audible books as innovative instructional media in mathematics learning.

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