

Analysis of Needs for E-Book Development for MPASI Training

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Article History

accepted 31/7/2023

approved 31/8/2023

published 30/9/2023

Abstract

E-books are effective and responsive learning media to the demands of trainees in obtaining accurate, structured and easily accessible information about complementary foods. This study aims to identify needs in the context of developing a digital media product in e-book format. This research method is a qualitative descriptive method. The research subjects consisted of trainers or training instructors. The data collection techniques consisted of interviews and observations followed by the instruments, namely interview sheets and observation sheets. Data analysis techniques used descriptive by providing an overview of research findings. The results of this research indicate that during the training activities, no media or materials were provided for the trainees to study independently other than posters containing a summary of the material, so they tended to have difficulty understanding material about making complementary foods. Even though the residents were very enthusiastic about participating in the training activities. Therefore, an innovation is needed in providing knowledge to training participants, one of which can be done by developing an e-book containing training materials that can be accessed at any time by training participants. It is hoped that through this research innovation will emerge that can make it easier for trainees to better understand material about making complementary foods.

Keywords: e-books, MPASI, Training, training material

Social, Humanities, and Education Studies (SHEs): Conference Series
<https://jurnal.uns.ac.id/shes>

p-ISSN 2620-9284
e-ISSN 2620-9292



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INTRODUCTION

Children are one of the nation's most valuable assets, they are the determinants of a nation's future, therefore, from a nutritional content and fulfillment of nutrition received, it must be sufficient to create quality and competitive human resources (Kusumastuti & Darsono, 2019). The central government always provides regulations and policies to prevent Malnutrition and stunting, considering that there are still many children who are in this problem. The results of the Ministry of Health's Indonesian Toddler Nutrition Status survey (SSGBI) show that there has been a decrease in the stunting rate from 37.8 percent to 27.67 percent in 2019 (Hasrul et al., 2020). Nevertheless, this figure is still considered high, considering that WHO targets a country's stunting rate to be no more than 20 percent. In early 2021, the Government of Indonesia is targeting the stunting rate to drop to 14 percent by 2024 (Indrawati & Kuncoro, 2021). President Joko Widodo appointed the Head of the National Population and Family Planning Agency (BKKBN) Hasto Wardoyo to be the Chief Executive for the Acceleration of Stunting Reduction. Hasto said the stunting rate was caused by various factors of malnutrition in infants. It is said, out of 5 million babies born each year, as many as 1.2 million babies are born with stunting. Malnourished pregnant women have the potential to give birth to stunted babies (Pirunika et al., 2022).

According to various sources, the key to avoiding stunting is maximizing a healthy lifestyle in the first 1,000 days of a child's life so that they receive proper nutrition and manage their growth and development (Azijah & Adawiyah, 2021),(Indriawati & Darmawati, 2021). Therefore, the government appealed to the whole community to prevent the birth of stunted babies in the family by properly preparing young women who are going to marry to be healthy.

Based on data from village midwives from 2022 to April 2023, there are still many children who are undernourished and lead to stunting in Mayanggeneng village, namely 20 out of 100 toddlers and 1 toddler who has been declared stunted. This condition is caused by several factors, one of which is the mother's education and parenting style towards giving food which is still lacking and seems random (Hasrul et al., 2020). They don't know how to make a creative and varied MPASI menu. The level of education of the mother also determines the ease with which the mother absorbs and understands the nutritional knowledge she gets. Mothers with low levels of education have more chances for their children to experience malnutrition and stunting than mothers with higher education. This means that if the mother's education is high, it will be followed by a decrease in the incidence of stunting. However, the reality found in Mayanggeneng Village is that not all highly educated mothers have good knowledge of nutrition and parenting patterns, or vice versa. Most of them admit that it is difficult to deal with children who have difficulty eating and they do not know how to make creative and varied food. foster feeding and health care for children.

Actually there are several alternative learning media solutions that can be considered, such as learning videos, videos that can show food preparation steps, examples of solid food menus, and proper feeding techniques. Videos can also show real-life experiences involving parents or nutritionists to provide explanations and practical tips. Furthermore, Infographics, Infographics are an effective way to convey complex information in an attractive and easy-to-understand display. In complementary feeding training, infographics can be used to present information about the types of food introduced, the right time to feed them, and food preparation procedures. Infographics can also display visual images that make it easier to understand, and then there is the Mobile Application. Building a mobile application specifically for complementary feeding training can be an attractive alternative solution. The application can provide step-by-step guides, complementary food recipes, feeding recording features, as well as useful advice and tips from nutritionists (Elfeky & Yakoub Masadeh, 2016),(Verdiana & Pangestieka, 2018). In order to be able to overcome the

problems above, of course, media innovation is needed in the delivery of material when the training takes place. One of the media that can be used as a reference is an electronic book or e-book which contains material on solids, in the hope of minimizing the problem of malnutrition and confusion for mothers in concocting food for their children.

In essence, both training and learning cannot be separated from the tools commonly used to encourage the attainment of goals, such as training device plans, teaching materials, learning media, and evaluation tools (Kusuma et al., 2022), (Ambarsari et al., 2021). E-books are a type of learning media that can be used by instructors in conveying material during training activities (Hadaya & Hanif, 2019). With the presence of e-books in training activities, it is expected to have an influence on changes in behavior and changes in the achievement of cognitive abilities in accordance with predetermined goals (Sun & Pan, 2021), (Sung et al., 2016). What's more, e-books can be accessed via digital devices which of course the trainees already have, so that it will make it easier for them to access the material and study it (Alhammad & Ku, 2019). In addition, the inherent characteristics of e-books are also a consideration why e-books can be used as a solution to address these various problems, because in e-books not only MPASI material is presented in text form, but will contain information in other formats. such as videos, audio, pictures and exercises, all of which are accommodated in the e-book (Ran & Jinglu, 2020), (Tang et al., 2021). Conceptually, an electronic book or e-book consists of an arrangement of text, images, video and sound that is integrated in a program or application and can be operated via a digital device, be it a computer or smartphone (Almekhlafi, 2021). In addition, e-books also have many advantages when compared to printed books, such as being easy to access at any time, e-books do not require storage space that takes up space like printed books, and e-book designs that are more dynamic and interactive (Lawson-Body et al., 2020).

There are several studies related to e-books that have been examined by several researchers, and are proven to be able to have a positive impact on improving skills, academic results, and changing attitudes. As research conducted by Prihantoro (Prihantoro, 2018) who concluded that in addition to implementing digital-based curriculum and learning models, it turns out that e-books as a means of conveying material to students also make a positive contribution to increasing their academic achievement. Accordingly, research conducted by Rusli & Antonius (Rusli & Antonius, 2019) succeeded in revealing that the use of e-books succeeded in increasing the abilities or cognitive learning outcomes of students. This certainly makes it an opportunity that a lot of research shows that through e-books it can help students achieve competency and change behavior according to training objectives to be more optimal, and make answers to the challenges of training and learning activities in the digital era (Scheiter, 2021), (Setiawan, 2019). E-books for training in making MPASI are still limited in research that comprehensively explores the effectiveness, effectiveness, and user acceptance of using E-books as learning media in the context of training for making MPASI. Although several studies have been conducted to develop E-books for MPASI training, not much research has involved in-depth evaluation of how the E-book affects the understanding and skills of the trainees, and to what extent the E-book is an effective tool and meets their needs. user. Therefore, it is necessary to carry out more in-depth research to fill this knowledge gap and provide a more comprehensive understanding of the potential and effectiveness of e-books as learning media in MPASI making training.

Referring to various findings from field facts and findings from various research results, this study aims to identify and explore the need for e-books as an innovative learning media for the implementation of education and training.

METHODS

This study uses qualitative research methods using a descriptive approach (Aini et al., 2020). Meanwhile, data collection techniques were carried out by observation and interviews with informants or research subjects, with a focus on tracing data for aspects of understanding about making complementary foods, and using learning resources when participating in training activities for making complementary foods (Indriawati & Darmawati, 2021), (Sun & Pan, 2021). Meanwhile, the instruments used were observation sheets and interview lists where the instruments referred to similar research on exploration and needs analysis that had been carried out by (Citrawathi et al., 2016), (Roemintoyo & Budiarto, 2021).

The research subjects were 2 presenters or training instructors in Ma-yanggeneng Village, Bojonegoro Regency in April – May 2023. The entire sample was selected using the Purposive Sampling Technique (Miles et al., 2016). Re-searchers determine the sample criteria in collecting data. Based on the type of data to be collected, researchers determine the objects used as data sources in research in the form of humans, documents, objects and so on. Meanwhile, the data analysis technique used is data triangulation. This stage will be completed when saturated data has been found from the two data collection techniques that are being carried out (Miles et al., 2016)

RESULTS AND DISCUSSIONS

The results of this research will contain the results of conducting observations or observations of several complementary food training and socialization for residents and interviews with informants, namely instructors or trainers. The results of the observations have been analyzed based on the facts obtained from the field, the results of these observations are summarized in table 1 below.

Table 1. Observation Results of Training Implementation

No.	Analysis of Observational Findings
1.	Residents who took part in the training activities did not focus on delivering the material by the instructors. Most of them focused on digital devices or smartphones
2.	A few minutes during the process of delivering material by the instructor, it was seen that residents tended to get bored and started not to focus on the material
3.	The instructor and slide show became the main source of materials and information sources
4.	Neither the instructors nor the organizing team have digital books
5.	Residents as training participants were only given a few posters containing information about making complementary foods and a summary of the training materials

Furthermore, other information was also obtained from the results of interviews with informants. The results of the analysis of the findings of the interview activities are as follows.

1. The strategy for delivering training material is quite varied, starting from participatory discussions and lectures
2. The media for conveying the material consists of powerpoint slides and posters that will be given to residents (trainees)
3. The main information sources are still not integrated, information websites are still separated from each other
4. The interest and enthusiasm of residents to participate in training and outreach activities is quite high

From the results of these interviews, it can be concluded that the residents are actually very enthusiastic about the training activities on making MPASI, as well as the strategy for delivering material by the trainers has also been varied. It's just that, they don't have a learning media that can be a guide for the trainees either to study independently, or to study or follow the practical steps of making MPASI according to the material. Because of this, it is not uncommon for residents to forget the material presented, and sometimes do not focus on following the training material from start to finish.

The team and instructors feel the need to provide media that suits the needs of the training participants, as well as media that encourages them to be able to learn independently, so that the trainees can be responsible for their duties as mothers. Not only for doing assignments, but also helping them to improve their abilities and skills in making complementary foods (Lim et al., 2020). This is indeed a challenge for instructors, but the achievement of this competency is of course to be able to improve their ability to solve various problems. In addition, this software uses an animation of alternating pages so students can read e-books like physically opening a book (Makdis, 2020). The advantage gained when using it online is that students can access the link provided during the material, so that training participants can get detailed material information (Rusli & Antonius, 2019).

From the various findings and results of the analysis above, the provision of this e-book is an option that can be used for the training process with the characteristics of being able to explain independently, this helps trainees to be able to learn independently (Susantini et al., 2021). Because in the e-book there are learning instructions and a complete description of the material addressed to the target. Educators can develop ebooks for use with limited meetings to facilitate the ongoing learning process.

Based on this, The assumption that the difficulty of making MPASI disappeared, after the e-book media was developed, was that with the existence of an e-book as a learning medium, training participants would have easy and practical access to learn the steps for making complementary foods. E-book media can provide complete and structured information about various types of food that are suitable for babies, the correct food preparation process, as well as practical tips on serving complementary foods. Thus, the assumption is that e-books can overcome difficulties in making MPASI by providing clear, easily accessible guidelines, and can be used as a reliable reference for parents or MPASI training participants.

CONCLUSION

Referring to the results of the needs analysis and data collection from the field, it was concluded that there were several obstacles during the training activities, one of which was the lack of media for the training participants to study independently. Because they were only given posters to find out the training material they were participating in. Thus, an innovation that can be developed is to create learning media products in e-book format, so that the training participants have material references and can access the appropriate material at any time. This will certainly make it easier for them to understand the material and how to make complementary foods for their sons and daughters. This research is still limited to preliminary studies and needs exploration. Therefore, there is a need for further research to be able to develop an e-book with the aim of increasing the learning outcomes of training participants about making complementary foods in several villages that apply the e-book.

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