Using Books in Early Childhood to Prevent the Assumption of Traditional Gender Roles

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Abstract. Recently, the question of gender has become a popular topic of discussion. Gender issues are also found in early childhood education, where male students are considered to be more active, and to dominate the class, and female students are considered to be more passive and to tend to be shy. Teachers and administrators are mostly female, and non-text materials – children's activity books – that are used in early childhood education contain material that reflects gender bias. As a result, this study aimed to produce a textbook that reflects gender equality. The study aimed to 1) develop and design early childhood education textbooks that promote the notion of gender equality, and 2) examine the suitability of early childhood education book designs that promote gender equality. The ADDIE model was used in this study, and the output was a children's activity book comprising eight themes that emphasize gender equality, and which was subjected to a feasibility test. The research participants were children of 5–6 years old who attended kindergarten in Indonesia, media experts, content experts, and other stakeholders. We collected data through interview, observations, and surveys. We analyzed data both qualitatively and quantitatively. The research instrument was an observation sheet. The results of data analysis show that textbooks with content that promotes gender equality are suitable for early childhood education learning processes. This finding is based on material and learning tool validation, as well as on implementing the textbook with kindergarten students. Thus, a children's activity book that has a clear, direct, and explicit theme of gender equality was developed for use in early childhood education. The developed activity book is expected to become an early childhood

education reference book that does not emphasize gender roles, and promotes gender equality.

1. Introduction

Gender discourse has recently become a popular topic of discussion, not just in Indonesia, but around the world. Though the word gender has been in use for some time, there are still misconceptions about the differences between gender and sex. Gender refers to characteristics of women, men, girls and boys that are socially constructed (WHO, 2002). Social scientists use gender discourse to examine, construct, and disseminate information about issues relating to inequalities between men and women. Discussions of gender have exposed inequalities in roles, functions, responsibilities, and even human activity areas (Hasnah, 2017). Gender is not the same as sex, as sex refers to the biological differences between men and women, whereas gender refers to "socially constructed roles, behaviors, expressions and identities of girls, women, boys, men, and gender-diverse people" (Congly & Brownfield, 2020). The concept of gender is defined as social sex, which means that there are differences in roles, functions and responsibilities of men and women as a result of social construction (Adriana, 2009). Gender refers to psychological, cultural and social differences between men and women, which are not based on their biological characteristics (Lindsey, 2016). Gender refers to the self-identity and/or social representation of an individual, and is often aligned with being feminine, masculine, elements of both, or neither (Rushton et al., 2019; Torgrimson & Minson, 2005). In turn, sex is an objective category, or an objective biological phenomenon (Van Anders et al., 2014). Gender is a social rather than a biological construct, and varies with the roles, norms and values of a given society or era (Phillips, 2005). Being able to bear a child is, fundamentally, a function of biology, while expectations about the imperative to bear children, the nature of parenting, or the status associated with being a mother, are more closely linked to gender roles and expectations. Consequently, according to Khusen (2017), the responsibilities traditionally allocated to women (especially in Indonesia) are generally related to working at home, caring for children, and anticipating their husbands' requirements. Men, on the other hand, are required to work outside the house to meet society's needs.

In many ways, women's status is generally lower than that of men; women may even be considered inferior to men (Putra, 2014). In some societies, among which Indonesia, women's career opportunities have remained limited, their workloads extreme, and their educational attainment poor. It is this unequal situation that stimulated us to develop a children activity book that avoids gender bias and which investigates the relationships between men and women in society.

At the Millennium Summit that was held in New York in September 2000, United Nations members agreed on eight Millennium Development Goals (MDGs), of which the second relates to achieving universal primary education.

The summit followed the Dakar Framework for Action, on Education for All, which had, in April 2000, proposed (1) achieving universal primary education and ensuring that all boys and girls complete primary education; and (2) promoting gender equality and empowerment, and eliminating gender differences at the primary, secondary, and higher education levels (Wahyuningsih, 2018).

In the coastal regions of Indonesia, accessibility to schooling and the gender gap – disparities between genders – are two examples of education inequity. The failure to create meaningful and equitable learning opportunities has an impact on the relevance of education in this region (Masri, 2017). Gender also has an unmistakable influence on early childhood education. One of the gender issues in early childhood education identified by Sukesi et al. (2020) in a study in East Java is that male students tended to be more active and to dominate the class, while female students tended to be more passive and shy.

In early childhood education, educators and administrators are mainly female; there are few men. This is one example of the way occupation can be 'filtered' by gender. The societal assumption is that young children are the responsibility of women, so it is uncommon to find male educators and administrators in early childhood education. At school, gender values and norms are taught both explicitly and implicitly: through the content, through the teachers' questions, through information supplied directly, and in behaviors that reflect the values and norms that apply to a particular society's culture. According to Khusen (2017), many textbooks used at elementary and high school levels in Indonesia distort the image of women. Some of these textbooks, which are issued by the Ministry of National Education or independent publishers, contain themes that illustrate gender bias. Children's activity books that are commonly used in early childhood education also contain gender bias.

This paper reports on a preliminary study that involved 20 teachers from East Java province, Nusa Tenggara Barat province, Jambi city, Bengkulu city, and Demak city, who were participating in teacher professional education presented by Universitas Negeri Surabaya. The study found that the content of children's activity books and information offered by teachers often have themes related to the family. Thus, early childhood education emphasizes that the mother's function in the family is to cook, clean, and care for the children, while the father's responsibility is to earn a livelihood by working in an office. When the subject of occupations is raised, content is often illustrated with pictures of men, and not women, in any career. These materials have an effect on the behavior of boys at home, who do not want to do housework, such as cleaning their own dishes, putting their clothing away, or putting their shoes on, because they see it as women's work.

The results of this preliminary study show that early childhood learning media emphasize gender roles. Books that emphasize the role of gender will help children to internalize gender-based values, and children will maintain male and female social roles into adulthood. In fact, if children truly fulfil their social roles as advocated by educational content, they will believe that one gender is superior to the other. Superiority means that men will tend to have more

opportunities than women, which means men have a greater impact and salaries. Boys do not feel obligated to help with housework, because they believe they do not have to; women will not feel the need to do physical labor, as this is considered to be the responsibility of men.

Based on this explanation, we believe that teaching material should reflect gender equality, so that children understand gender and social relations. With the aid of teaching material, teachers can guide children's conceptions of gender equality. Therefore, this study aimed to (1) develop a design for a children's activity book based on gender equality, and (2) test the feasibility of a children's activity book that promotes gender equality.

2. Literature Review
2.1 Textbooks and Other Books Used for Teaching and Learning
Textbooks are important in the teaching and learning process. Textbooks are books that provide descriptions of subjects or specific fields of study. Content is organized systematically, and selected according to specific objectives and learning orientations, and aim to achieve student development (Westbury, 1999). Furthermore, textbooks are books created by experts in their fields to achieve instructional purposes and objectives, consist of the materials needed for the teaching–learning process, are provided with sufficient teaching facilities, and are easily understood by the intended users (Tomlinson, 2012). Teaching facilities that we intended to provide in the activity book were clear pictures and instructions – the pictures would represent gender equality. Textbooks that are organized in a systematic manner will make it easier for students to comprehend the information and will promote the achievement of learning objectives. Therefore, textbooks must be arranged in a systematic and attractive way, possess high readability, be easy to understand, and comply with applicable writing conventions.

Textbooks do not only influence what and how students learn, but also what and how teachers teach (Mahmood, 2011). The textbook is important in the learning process, because the information included in a textbook has the potential to improve the quality of learning. Books may be studied at any time and from any location, and they do not need any specific equipment to be used.

According to a Regulation of the Minister of Education and Culture of the Republic of Indonesia No. 8 of 2016, article 1, there are two types of books that may be used in the learning process: textbooks and non-textbooks (Kebudayaan, 2016). The regulation explains that non-textbooks are enrichment books that enhance the learning implementation process and are not intended to be the main reference book. Non-textbooks could be (1) Textbooks used in schools or educational institutions, but which are not mandatory reference textbooks for learning activities; 2) Texts that provide content that supplements content contained in textbooks; (3) Books that are not published in a series based on grade level or education level; (4) Publications of which the presentation is loose, creative, and innovative, so that the content is not bound by a learning process or system determined by the science of education and teaching standards; (5) Books not equipped with an evaluation instrument; or (6) Books that can be used

as enrichment tools and teacher guidebooks (Widayanti & Abidin, 2020; Widyaningrum et al., 2015).

The non-textbooks used in early childhood education are children's activity books, which are conventional teaching materials that contribute to teaching and learning and help teachers to achieve learning goals.

2.2 Developing Textbooks

Textbooks are important in teaching and learning, as they influence much of the learning process in the classroom. Textbooks have to fit in with the curriculum, a school's syllabus and also the aim and goals of teaching (Cahyani & Perdana, 2019). Furthermore, if textbooks are to contribute to achieving the learning objectives, they must align with the needs of students.

Numerous aspects must be considered when designing a textbook, including ensuring that a textbook (1) is aligned with students' needs (there should be a fit between material, the curriculum, students, and the teacher), (2) facilitates meeting students' needs and the goals of the learning process, and (3) has a clear role as a support for learning (Suryani et al., 2018).

Textbooks must have a clear point of view, particularly in terms of the concepts, approach, methodology, and teaching strategies to be employed. A textbook must be interesting for students, in addition to being arranged in an orderly, methodical, diversified, and information-rich way, because these traits will influence students' interest in the textbook. A textbook should assess, stimulate, and encourage students' motivation and creativity. A good textbook considers content, value-forming aspects, motivational elements, accessibility, illustrations, and study guides. In short, textbooks must stimulate a thirst for knowledge (Okeeffe, 2013).

The textbook for kindergarten teachers that was developed by this study is a textbook that has no gender bias in any of its material. The material in the textbook does not allocate tasks to a particular gender – all tasks are performed by both genders – and the material provided is universal. Even though the textbook was developed for early childhood learning and is able to stand on its own, this textbook is not a main reference source in the learning process. Thus, teachers may continue to use a variety of other sources of information during the teaching and learning process.

2.3 Gender Equality

Gender discourse and the concept of the equality of men and women continue to be topics of discussion and interest. The notion that a certain gender is superior is the primary cause of gender prejudice. In some countries, including Indonesia, men are seen as superior to women by society. Occasionally, this worldview is also ingrained in youngsters (Trianton, 2017). Gender-based disparities in the treatment of students continue throughout the educational process, and, in social life in Indonesia, little progress has been made to achieve equality for women (Larasati, 2021).

The term bias is defined as prejudice in favor of or against one thing, person, or group compared with another, usually in a way considered to be unfair. Additionally, according to an Indonesian dictionary, bias is a kind of prejudice, essentially an opinion formed without justification; bias may creep into scientific study during the observation or interpretation of experimental results (Suharnanik & Mahayani, 2017).

According to Hasnah (2017), gender is often confused with sex, while it is different from sex. Nasarudin Umar (1999) argues that gender is a cultural term that is used to describe the differences in roles, behavior, and other matters relating to men and women that evolve in society as a result of social engineering. Thus, gender relations, such as differential status, rights, responsibilities, and tasks in society, are traditionally determined by biological differences between men and women. According to this concept, gender bias refers to difference and prejudice created even before children can be 'functioning' as social creatures in society.

The quality of schools in Indonesia vary. Differences continue to exist at the level of popular or favorite, and marginal schools, and there is unequal access to education for particular social classes; there are also differences between boys and girls based on teacher assumptions (Sudarso et al., 2019). The assumption is that boys are more active and dominating in class compared to girls. Studies of gender equality in education have found that an education system could grow despite its lack of gender equality (Subrahmanian, 2005), because society, especially in Indonesia, has not considered that gender equality is important in education. Gender equality in education may be taken to mean, simply, that boys and girls attend school in equal numbers (Unterhalter, 2005), whereas gender equality actually encompasses not only the numbers of students, but also roles and social interactions. Men and women should have equal access to job roles and opportunities. Furthermore, good social interactions must be developed regardless of gender. Boys and girls must have equal rights to be socially active.

2.4 The Gender Bias Phenomenon in Early Childhood Education
Gender bias, that is, preference for one gender over another in social life or public policy, is widespread (Warliah, 2017). Individuals adopt social roles based on their gender – men are seen as manly and powerful beings, and women are viewed as frail and in need of men's assistance. Several analyses have interpreted gender from a variety of social, economic, political, and even religious viewpoints (Tifferet, 2020; Utomo, 2020; Van der Pas & Aaldering, 2020).

Gender prejudice can be fostered in children by their immediate environment, and gender bias can be reinforced in children through parental influence. Parenting refers to the overall interaction between parents and children, through which parents stimulate their children by instilling the behavior, knowledge and values parents consider to be the most appropriate, so that children can be independent, and can grow and develop in a healthy and optimal manner (Hidayati, 2014).

Sofiani et al. (2020) claim that gender bias in parenting could have the following effects on children's growth and development: (1) There can be jealousy between children, who compare themselves with their siblings; (2) Children can lack confidence; (3) Children can experience emotional disturbances (bad moods); (4) Children can be rebellious (difficult to manage); and (5) Children can exhibit behavioral disorders (be aggressive, hyperactive).

On a conscious level, gender influences childhood education. Gender equality as an educational basis means that girls and boys are considered equal intellectually and emotionally, and that co-education is a well-established principle (Heikkilä, 2020).

Education is a systematic effort that has a greater purpose than just teaching. Education may be defined as the transmission of information, the change of values, and the creation of individuals in all of their aspects. The global Sustainable Development Goals (SDGs) of the UN aim to achieve ten targets with regard to education. Of the ten targets, the government of Indonesia found seven that are in line with the Rencana Pembangunan Jangka Menengah Nasional (RPJMN, or National Mid-Term Development Plan) 2015–2019. The targets involve ensuring that all girls and boys have equal opportunities. SDG 4 (inclusive and equitable quality education for all) goes beyond access to education. It urges education policymakers to forgo gender differences relating to school enrollment, and to prioritize gender equality in education through gender-responsive strategies and policies (Global Partnership for Education & UN Girls' Education Initiative, 2019). Gender-responsive education sector planning and policy is critical for promoting educational equality.

3. Method
3.1 Research Design
This developmental research used the Analyze Design Development Implementation Evaluation (ADDIE) model. Branch (2010) explains the ADDIE model as follows:

> *ADDIE is a product development concept. The ADDIE concept is being applied here for constructing performance-based learning. The educational philosophy for this application of ADDIE is that intentional learning should be student centered, innovative, authentic, and inspirational.*

The development team of this study worked to develop a design for and test the feasibility of a gender-equality-based children's activity book for early childhood education. The ADDIE model was chosen because it involves simple and systematic development steps, and because it is suitable for the development of media products or textbooks. Furthermore, by using the ADDIE model, the effectiveness of the book's contents and advantages were ensured.
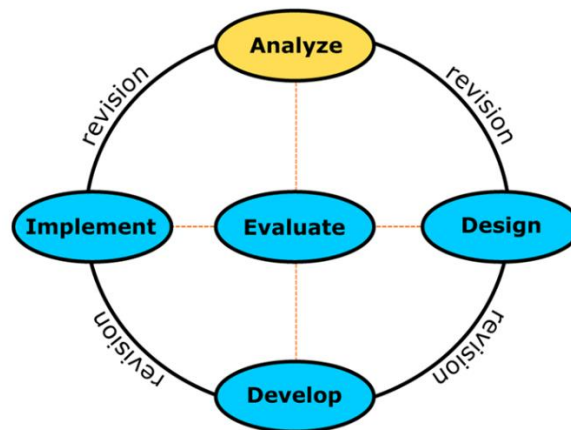
Figure 1: ADDIE Model (Branch, 2010)

The analysis phase consisted of two activities, namely doing a needs analysis and determining the components of the children's activity book by conducting focus group discussions for the development team and colleagues, and education practitioners and stakeholders of early childhood education. Discussions were conducted to determine what early childhood education practitioners and stakeholders needed in relation to themes that would be included in the activity book. Furthermore, we also identified the needs of education practitioners and stakeholders in relation to content to promote gender equality.

The design phase started by determining the selected core/basic competences, determining learning objectives, determining themes, planning material that supported gender equality in accordance with the themes, and determining evaluation plans, and culminated in designing a children's activity book that is suitable and interesting for children.

At the develop stage, the material was compiled according to the basic competencies/core competencies, learning objectives, and the chosen themes, by inserting images/animated designs relating to the material, and doing the layout of the non-textbook. In addition, material validation was carried out to determine whether the selected material could achieve the learning objectives, and whether the material supported gender equality. The material included in the textbook was evaluated to determine whether it was in accordance with the characteristics of early childhood and gender equality. The next stage was implementation. At this stage, the books were tested through trials in small groups and in one-on-one trials with children. The evaluation was carried out at each level of ADDIE, to identify the problems and to correct them based on expert and user feedback.
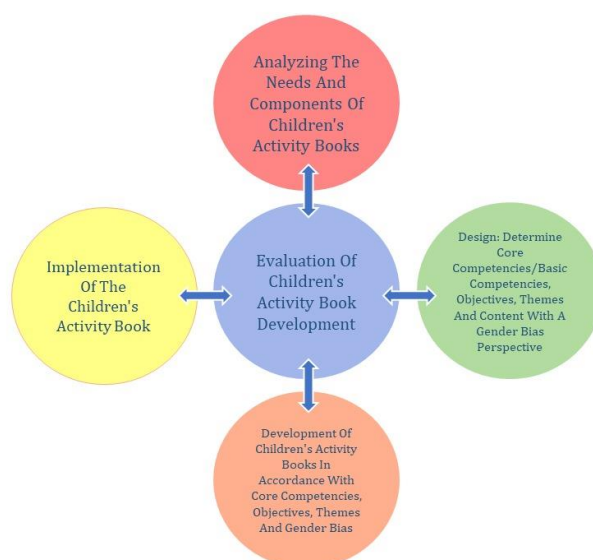
Figure 2: Research Flowchart of Data Collection

To obtain the required data, three methods of data collection were used.

3.1.2 Interviews

Interviews were used to collect data for the needs and content analysis. Discussions and interviews took place in the context of focus group discussions. The focus group discussions were conducted once, and involved 20 participants, including members of the development team, teachers who participated in Program Profesi Guru (Teacher Competence Development Program), teachers from partner institutions, and early childhood education academics.

3.1.3 Survey

A survey was used to test the validity of the children's activity book that had been developed. The survey was conducted with seven experts (five teachers and two lecturers). The two lecturers served as material and media experts, while the five teachers assessed whether the book was appropriate for early childhood education. The survey used Google forms to disseminate questions to the respondents.

3.1.4 Observations

Observations were used to collect data during the trial implementation of the children's activity book that had been developed. The subjects were five teachers and 30 students, and the instrument used was an observation sheet that was used to report on activities while teachers and students used the children's activity books.

3.2 Data Analysis

Several data analysis techniques were used in this study, depending on the assessment process and research equipment employed. The following data analysis techniques were used in this study.

3.2.1 Qualitative analysis
Preliminary study: A preliminary study was conducted to produce a field needs analysis. Data were collected through open interviews during a focus group discussion process. The qualitative data that had been collected from the interviews were analysed with qualitative analysis techniques.

3.2.2 Quantitative analysis
Product development: The validity results obtained from media and content experts were used to conduct a feasibility analysis of the children's activity book.

3.2.3 Subject and data analysis
Research subject: (1) Validation: A validation process by experts was required before the resulting product could be considered suitable for use in teaching and learning. Material experts and media professionals validated the children's activity book this study developed. (2) Implementation trial: Students at three kindergartens that had an agreement with the researcher participated in the study. Five children of Idhata Kindergarten UNESA Surabaya, aged 5–6 years, participated in one-on-one trials of the children's activity book that had been developed. A small-group test involved 30 children from the three kindergartens in Surabaya, Indonesia.

4. Results
4.1 Analysis Stage
The results of this stage are based on interviews and conversations that took place in focus group discussions with educators and academics, which provided data for the analysis of the components of the children's activity book that was being planned. The participants also identified the fundamental skills and learning objectives that had to form the foundation of the gender-equality-based children's activity book that was to be developed. The content included in the children's activity book is based on HOTS activities: high-order thinking skills, the ability to apply knowledge, skills and values related to making sense and reflecting on ways to solve problems, decision-making, and innovating and creating something (Nachiappan et al., 2018). Table 1 lists the components suggested for inclusion in the anticipated book.

Table 1: Components of Children's Activity Book to Promote Gender Equality

Display	Component	Description
Front and back covers	1. Paper 2. Text 3. Pictures 4. Color	1. The cover is produced on folio-sized art paper with a glossy finish. 2. The cover text is formatted in Comic Sans, font size 12–14. 3. The front cover has an animated graphic design (schools, toys and boys and girls). 4. On the cover, primary, secondary, and tertiary colors are used in conjunction with solid coloring methods.
Contents	1. Core/basic competencies 2. Learning objectives 3. Use of books	1. Core/basic competencies selected according to the characteristics of children aged 5–6 years in each development area. 2. General description to be achieved in each development scope.

Display	Component	Description
	(year/semester) 4. Theme 5. Material 6. Language 7. Evaluation plan	3. Children's activity books are prepared for learning activities for one year or two semesters. 4. Four themes chosen for each semester. 5. The material is adapted to the learning objectives and is based on gender equality. 6. The language used must be easy to understand, communicative and appropriate for the age of the child. 7. An evaluation plan must be provided to help teachers evaluate children's work.

The analysis step included soliciting recommendations for the visual appearance and formatting of the book. Core or basic competencies for inclusion were modified to involve six factors of child development, which are cognitive, language, physical, norms and religious values, art, and social emotional development. The book that was developed includes a short explanation of the objectives of the book, materials and pictures that suitable for gender-equality-themed activity books, and instructions for working on questions, all in child-friendly language.

These findings are consistent with Mintowati's (2003) advice that textbooks must be organized in a methodical and appealing way and should be highly readable, with the language employed being simple to understand and compliant with relevant writing principles.

4.2 Design Stage
After collecting the data at the analysis stage, a prototype children's activity book was designed according to the needs that had been identified. Figures 3 and 4 show prototype pages of the children's activity book.
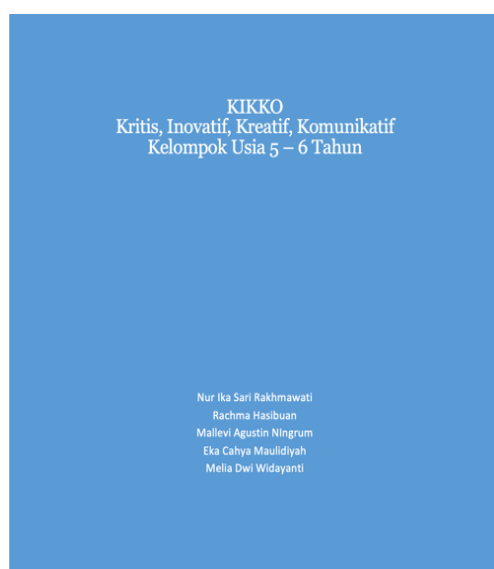

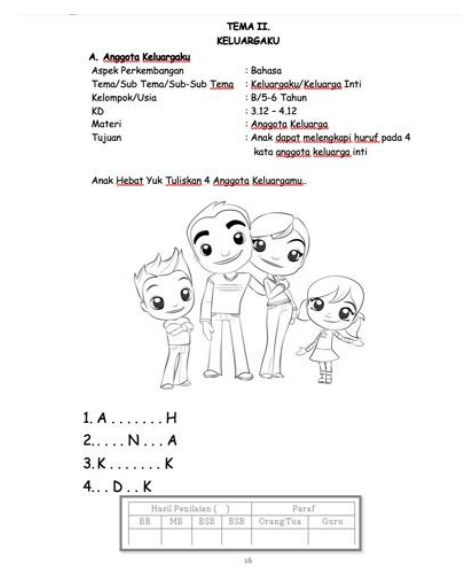**Figure 3: Prototype of Front Cover of Activity Book**

Figure 4. Prototype of Activity Book Content Page

The initial design or prototype of the children's activity book was developed using a MS Word application that incorporated the results of the needs analysis. Each semester of the prototype activity book for children aged 5–6 years covered four topics: Semester 1 themes are Me, My family, My environment, and Animals; Semester 2 comprises four themes: Plants, Cars, My country and The universe. Content is intended to develop social emotional, verbal, physical motor, cognitive, and creative aspects of growth. The content of the activity book is adapted to the research purpose, namely the development of a textbook that reflects gender equality. This initial design step was then taken forward to the development stage, when product validity tests were conducted using material experts and learning tools, as well as one-on-one and small-group user testing.

4.3 Development Stage

At this stage, a development company developed and evaluated the product's validity. A developer created a product with the appearance and substance of a children's activity book. The finished book product has an ISBN number, and has the purpose of being used by the larger community. Figures 5 to 7 show final pages after product development.
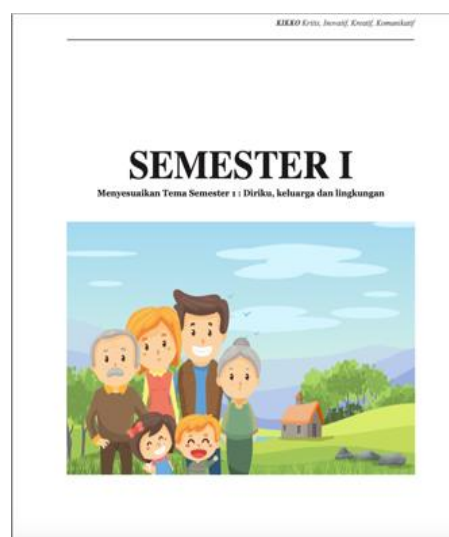

Figure 5. Front and Back Covers of Book　　**Figure 6. Books for Each Semester**
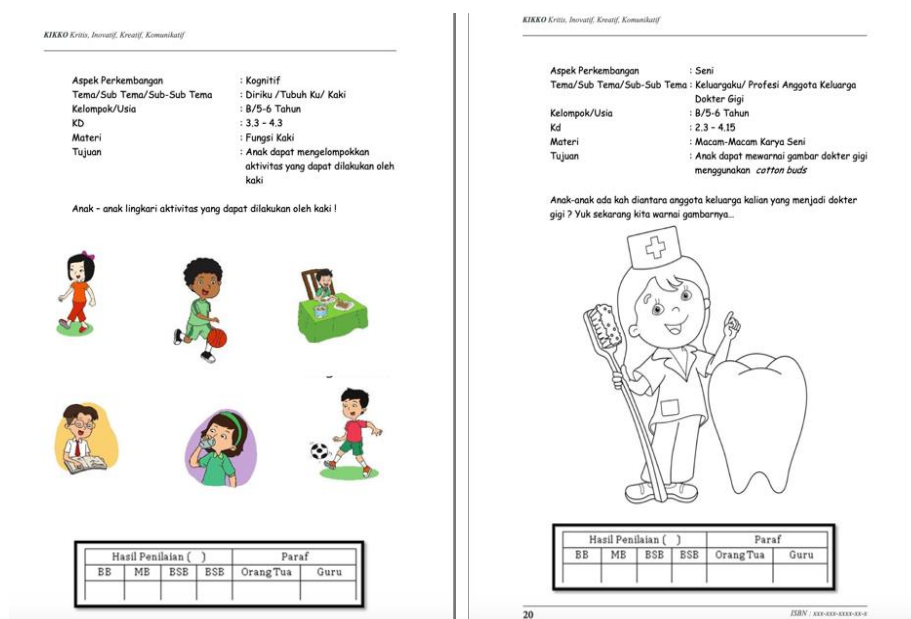
Figure 7. Example of Activity Book Contents on the Themes of Me and My Family

Based on observations at early childhood education institutions and interviews with early childhood education teachers, content that displays gender inequities often relates to the themes of Me and My family. On the activity sheets given to children to work on, the theme of Me generally shows a male person, while the theme My family explains that the role of a father is to earn a living while the mother works at home to take care of the house, husband and children. This finding is aligned with the opinion of Khusen (2017), that the duties allocated to women are more suitable for working at home, caring for children, and meeting their husbands' needs. Meanwhile, the duties allocated to men involve working outside the home to provide for the family's needs. To counteract this bias, the children's activity book this study developed provides a balanced picture of women and men, and, in the My family theme, the sub-theme of family members' occupations integrates an image of a woman working as a doctor.

At this stage, the product validity test was also carried out, by conducting validation with two lecturers who served as material experts. The results obtained at the expert validation stage are given in Table 2.

Table 2: Validation Results of Assessment by Material Experts

Aspect of assessment	Adequate	Inadequate	Suggestion
Core/basic competence selected for children's activity books	√		
Selection of themes for Semester 1	√		
Selection of materials based on gender equality	√		
Materials with learning objectives	√		
Material with characteristics of children aged 5–6 years	√		
Materials compiled at the HOTS level		√	The material of several themes needs to be

Aspect of assessment	Adequate	Inadequate	Suggestion
			improved, for example in the activity of the theme My environment, the two pictures of houses must be quite different.

Based on the results of expert validation, it was concluded that all the components contained in the children's activity book were suitable for use, though the aspects of the material compiled at the HOTS level needed to be improved. In addition to validation by experts, two lecturers and five early childhood education teachers also validated the textbook, and their feedback is given in Table 3.

Table 3. Validation Test Results of Learning Tool Experts (Non-Textbook)

Aspect of assessment	4	3	2	1	Description
Front and back covers include attractive drawings and colors	28%	42%	28%	0%	
The illustrations relate to the learning objectives	0%	56%	28%	14%	Need to improve the illustration to match learning objectives.
The language is simple and easy to comprehend	42%	42%	14%	0%	
Instructions are easily to understand	28%	42%	28%	0%	
Book can be used for self-study	28%	42%	14%	0%	
Book is suitable for children between the ages of 5 and 6 years	70%	28%	0%	0%	
Layout, typography, and graphics are all appropriate	0%	56%	42%	0%	The layout and illustration need to be adjusted. Typography needs to be fixed.
Content is structured and systematic	42%	56%	0%	0%	
There is a component of evaluation	98%	0%	0%	0%	

The data in Table 3 shows the percentage of answers on each item. The experts assessed the feasibility of the textbook at Each item gets above 50% categorized as good and very good 71% or each item, though two items related to layout, typography and illustrations need to be improved.

4.4 Implementation Stage
The implementation was carried out twice, namely in one-on-one and small-group trials. First, the participants in the one-on-one trial were five children

aged 5–6 years and their teacher. The teacher observed the activities of children, one by one, while the children used the children's activity book. The teacher's task was to complete a checklist on an observation sheet. The results of the observations during the one-on-one trial are given in Figure 8.
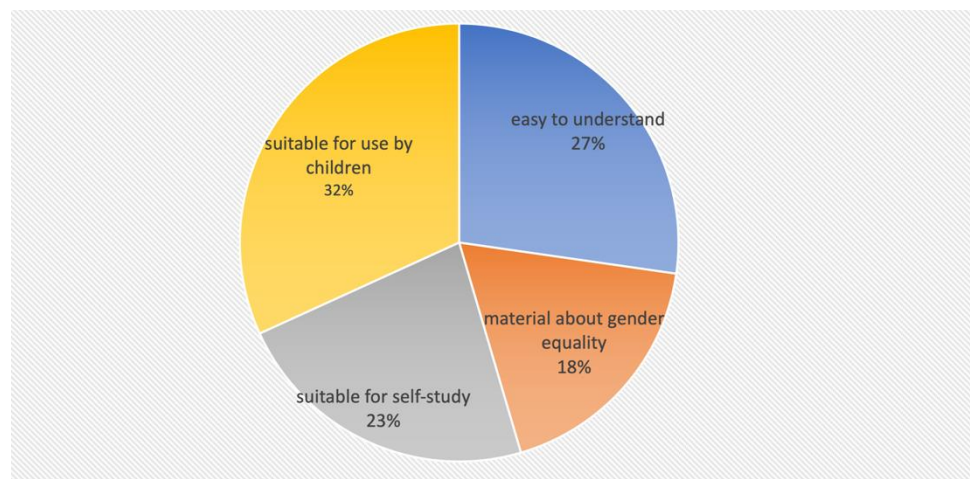

Figure 8. Chart of Findings of One-to-One Trial of of Children's Activity Book Users

The one-to-one trial found that 32% of the activity books was suitable for use by children, 27% was easy to understand, 23% was suitable for self-study and 18% of the materials were about gender equality. It is clear that some children need the teacher to guide them, and could not do the work themselves. It was found that the material about gender needed to be repeated, so that children understand the concept of role division within the concept of gender. Therefore, the researcher revised the product based on the problems identified and suggestions made by the teacher, and tested the book again in a small-group trial. The subjects in the small-group trial were 30 children at an early childhood education institution. The test results are shown in Figure 9.
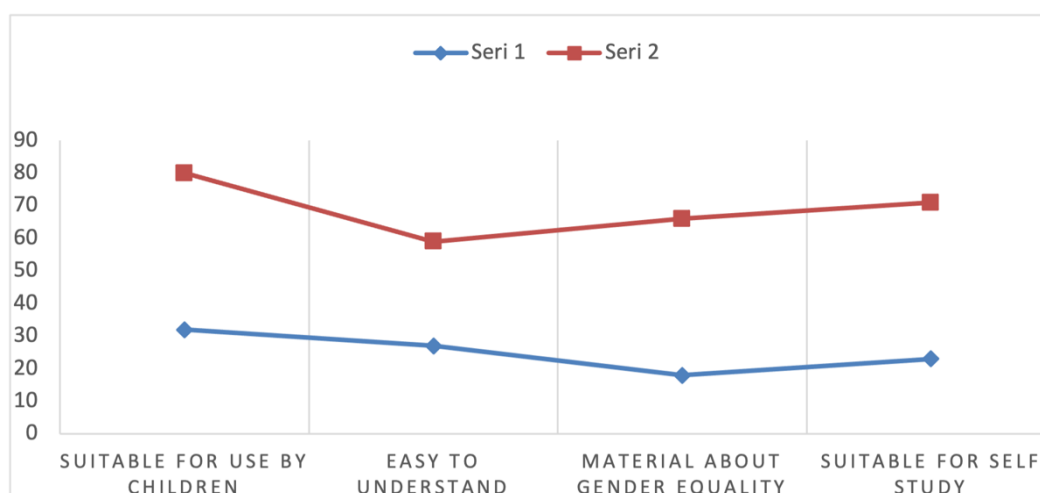

Figure 9. Findings of Small-Group Trial of Children's Activity Book

The results of the small-group trial show a slight increase in each item from the one-on-one trial of the children's activity book, and the increase is significant.

For this reason, the children's activity book that was piloted in small groups need to be revised and then retested with a larger scale field test to finalize the gender-equality-based activity book.

5. Discussion
The development of a gender-equality-based children's activity book was done according to the ADDIE model, because ADDIE is suited for developing educational products, such as media and textbooks, and the model has only a few development phases. Furthermore, the ADDIE model is useful because the stages are clearly defined, which facilitates implementation of effective training tools (Kurt, 2018). In the first step of the project, the development team focused on determining the textbook's reliability – if a product. According to the results of the initial study, gender inequality is rife in the world of education, including early childhood education.

These results are supported by Westbury (1999), who explains that textbooks are books that contain descriptions of material about a given subject or field of study; the content is organized systematically and selected according to specific objectives, learning orientations, and students' development to be assimilated. Widayanti and Abidin (2020) elaborate that textbooks must meet the following criteria: (1) The material contained in the textbook must be capable of guiding and facilitating the learning process; (2) The material must be presented in a coherent, systematic, straightforward, and easy-to-understand manner; (3) The language used must be clear, meaningful, and legible; and (4) The typography and illustrations must reflect the textbook's contents. The non-textbook must be adapted to the user; for example, if the users are children aged 5–6 years, the language used should be suitable for their age and readily understandable to them.

Gender inequality occurs in society as a result of people's prior assumptions about natural and non-natural human characteristics (gender). Gender differences are, therefore, associated with a community's perspective, as though they have become as permanent as the biological characteristics possessed by all humans. Women are traditionally assigned housework, whilst men are expected to work outside the house. This occurs as a result of the perception that women are physically weak, and possess sensitivity and patience. Men, on the other hand, are thought to be physically stronger and more resilient. On the basis of these ideas, stereotypes (negative labelling) about particular genders have developed, which has led to discrimination against women (Fakih, 2008). Furthermore, this assumption restricts women's ability to work outside the home, as they are not permitted to so.

Due to the perception that women are better suited to working at home, there is an imbalance in the distribution of duties within families or other social settings. This causes a double burden. As it is women's gender role to manage the household, many women must shoulder the domestic workload alone, and if women work outside the house, their burden will be doubled (Fakih, 2008).

The content of the children's activity book developed by this study focuses on the themes of Me, My family, My environment, Animals, Plants, Cars, My

country and The universe. The exercises in the textbook illustrate the equality of men and women, in order to instill in children the principles of gender equality. This textbook can be used by both boys and girls.

This research resulted in the development of a textbook without gender bias in its learning contents. Material experts and media experts agreed that the textbook's content is realistic. This is consistent with the opinion of Suryani et al. (2018), namely that non-textbooks must meet a number of criteria, namely, they must (1) Correspond with student needs (there should be a fit between material, the curriculum, students, and teachers), (2) Reflect the usage of the non-textbook (present or future), (3) Facilitate student needs and learning processes, and (4) Have a clear role as a support for learning.

Therefore, it is expected that the children's activity book that resulted from this study and which is based on gender equality would become one of the reference books in early childhood education that prioritizes gender equality from an early age.

6. Conclusion

Children up to 8 years old are in a golden age, so called because, at this age, children can absorb a great deal of information and stimulation from their surroundings. Consequently, they must receive the best possible stimulation for their developmental aspects. All the developmental aspects of children must be handled, including children's perceptions of gender bias and social equality. Children have to understand that, regardless of gender, they have equal opportunities. Gender bias and social inequality are issues that need to be understood by children. Problems related to gender inequality in education must be counteracted, therefore, the concept of gender must be addressed during play activities in early childhood education, and in children's activity books. We conclude that the activities in the textbook, which are presented through a number of themes (Me, My family, My surroundings, Animals, Plants, Cars, My country and The universe, are feasible for use in early childhood education.

7. References

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