

Comparative analysis of education curricula between germany and indonesia: Content approach and learning methodologies

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Abstract: The purpose of this study is to carry out a comparative analysis of the basic education curriculum between Germany and Indonesia. Considering that Germany and Indonesia have different education systems, this curriculum analysis will be able to add reference sources that can be used as a basis for future curriculum studies. The method in this study uses literature studies from journals, books, and articles related to differences in the basic education curriculum in Germany and Indonesia. The steps in this study include topic identification, literature search, literature selection, literature evaluation, literature analysis, interpretation of analysis results and article writing. The results of this study are that the basic educational curriculum in Germany has a distinctive feature that emphasizes the development of practical and professional skills that are relevant to the world of work. Meanwhile in Indonesia, the basic education curriculum focuses more on mastering academic knowledge and general skills, with an emphasis on developing character and moral values. Learning Methodology in Germany applies a learning approach that is oriented towards practical and interactive experiences, such as project-based learning, simulations and group discussions. Meanwhile in Indonesia, the learning methods used include group discussions, case studies, cooperative learning, and problem-based learning.

Keywords: Comparison of Curriculum, German and Indonesian, Content and Methodology

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INTRODUCTION

The educational curriculum is a core element of any education system. It reflects the goals and objectives of education and serves as a guide for teachers to teach lessons and for students to learn and acquire skills and knowledge. The educational curriculum also plays an important role in shaping the nation's future by developing the competencies and skills of citizens needed to meet the ever-changing demands of the global market. This is in accordance with Aslan's opinion, which states that the curriculum is a number of subjects that must be mastered by students (Aslan, 2016).

Educational curricula are defined in different ways, but the point where they all converge has to do with a definition that includes the permanent and beneficial use of a child's experience (Erbay, Filiz, 2021). The Education Curriculum is a comprehensive and multidimensional concept that encompasses all of a child's experiences inside and outside of school including culture, social perspectives, paradigms and topics and perhaps even hidden pedagogical strategies (Babadogan and Olkun, 2005).

Each country has different educational policies, which can be realized through the school curriculum as the basis for educational reforms aimed at achieving quality learning outcomes. The meaning of curriculum can vary and be conceptualized from different viewpoints. There are many definitions for the term curriculum, ranging from the dictionary's 'program of study' to the knowledge, understanding, skills and attitudes students acquire as a result of the learning process (Muhtadi & Junaedi, 2021).

Along with the rapid exchange of information about various education systems in various regions, even today up to a global level, a new discipline has also developed which is seen to have played a real role since 1960, which is called *comparative education* (Syah Nur 2003:1). The purpose of comparative education is mainly to find out the various kinds of differences that impact on different education systems in the world, in other words, it aims to find out the various principles that underlie the regulation of the development of the national education system (Nur 2003:4). In turn, efforts to understand various education systems in various parts of the world have contributed significantly to the development and improvement of education in many countries. Comparative study has opened one's heart's eyes not to become a "frog in a shell" who feels good enough without ever knowing that there has been a very significant change around him (Suyadi, 2020).

Currently, communities that focus on comparative education performance have been formed in many countries. The organization engaged in the early rise of this discipline is "*Comparative Education Society*" in US and "*Comparative and International Education Society*" In Canada. In Indonesia, a place for activists *comparative education* is "*Conference Comparative Education Society of Indonesia* (CESSIA).

In this context, it is interesting to examine the differences in the education curricula between Germany and Indonesia, two countries with different education systems. Germany, known for its high-quality vocational education and training, focuses on hands-on, practical learning, while Indonesia's education curriculum emphasizes academic and theoretical learning. In addition, the two countries have different historical, cultural and socio-economic backgrounds that influence their educational curricula.

Germany was chosen because of the advantages it has in its education system. Currently, Germany is one of the countries with the best education system in the world. Germany's various advantages in the fields of medicine, technology, literature, and art are the success of the German education system which has brilliantly been able to answer various problems that existed after the defeat of World War II. It's not surprising that Germany is currently the destination country for many international students, including the United States, who want to get one of the best educations in the world (Isri, 2015).

While the curricula that are developing in Indonesia have developed from year to year such as the Competency-Based Curriculum (KBK), the Education Unit Level

Curriculum or KTSP, the 2013 curriculum or Kurtilas, and the Merdeka Curriculum. Each curriculum has its own advantages and disadvantages which are interesting to study. This article will focus more on discussing the current independent curriculum.

This article aims to compare the educational curricula in Germany and Indonesia by examining the content approaches and learning methodologies used in the education systems of each country. This article will highlight the similarities and differences in each country's curricula and provide an in-depth analysis of the strengths and weaknesses of each education system.

METHODS

Research Design

The research method used in this article is a literature study or literature review. Literature study is a research method that involves critical analysis of literature and reliable sources that are relevant to the topic being studied. In a literature study, the researcher collects, reviews, and synthesizes existing knowledge to understand the issue or research question to be answered. According to (J. W. Creswell, 2012), Literature study is a research method that is carried out by collecting and analyzing literature or written sources such as books, journals, articles, and documents that describe theories and information, both past and present, and organizes the literature into the topics and documents needed (All Habsy, 2017).

The method of presentation is descriptive, meaning that the author describes in a sequential, factual, actual, and systematic way the comparison between the German and Indonesian curricula, (Dwijendra & Ganesha, 2022). This study uses qualitative data analysis techniques, which begin with data collection, data grouping, presentation and analysis of data linkages to draw conclusions.

Participant

Participants in the research using the literature review method with the title "Comparative Analysis of Education Curricula Between Germany and Indonesia: Content Approach and Learning Methodologies" are not typically individuals but rather the documents, studies, and materials that the researcher will review and analyze. The participants in this type of research are the literature and data sources themselves, which include academic papers, books, articles, and other relevant materials related to the topic of education curricula in Germany and Indonesia.

Material

Analysis of Education Curricula Between Germany and Indonesia: Content Approach and Learning Methodologies" include various types of sources relevant to the topic. Some types of materials that may be used include: 1) Academic Journals: Scientific articles published in educational journals that discuss the education curricula in Germany and Indonesia, 2) Books: Textbooks, monographs, or literature that reviews the education curricula in both countries, 3) Articles: Articles from various sources, including news articles, seminar papers, and writings from education experts, 4) Official Documents: Official documents from the government or educational institutions in Germany and Indonesia related to education curricula, 5) Statistical Data: Data and statistics related to education, such as exam results, student statistics, and other education-related data, 6) Previous Research: Previous studies conducted by other researchers on the comparison of education curricula in both countries, 7) Curriculum Materials: Official documents that explain the content of education curricula in Germany and Indonesia, 8) Other Sources: Additional relevant sources such as interviews with education experts or education

commission reports. All of these materials will be used to support the analysis of the comparison of education curricula in Germany and Indonesia in the research.

Procedure

In this study, the author will conduct a literature search from various sources such as journals, books, and articles related to the differences in educational curricula between Germany and Indonesia.

The steps that will be taken in this research are as follows: 1) Identification of topics: The author will determine the topics to be studied, namely the differences in the educational curricula in Germany and Indonesia, 2) Literature search: The author conducted a literature search from various sources such as journals, books, and articles related to differences in the education curricula in Germany and Indonesia. Literature search will be carried out systematically and structured using keywords that are relevant to the research topic, 3) Literature selection: After conducting a literature search, the author will select literature that is relevant to the research topic. Literature that is irrelevant and does not match the research criteria will be eliminated, 4) Literature evaluation: After conducting literature selection, the writer will evaluate the quality of the literature that is relevant to the research topic. Literature quality will be assessed based on credibility and relevance to the research topic, 5) Literature analysis: After evaluating the quality of the literature, the author will conduct a literature analysis by collecting data and information related to the differences in the education curricula in Germany and Indonesia. The data and information will be analyzed and presented in a systematic and structured manner, 6) Interpretation of the results of the analysis: After conducting an analysis of the literature, the authors will interpret the results of the analysis to draw conclusions and findings regarding the differences in the education curricula in Germany and Indonesia, 7) Article writing: After obtaining conclusions and findings, the author will write articles using a structure and format that conforms to scientific article writing standards.

Data Analysis

In qualitative research typically you gather a text database, so the data analysis of text consists of dividing it into groups of sentences, called text segments, and determining the meaning of each group of sentences. Rather than using statistics, you analyze words or pictures to describe the central phenomenon under study (W. J. Creswell & Creswell, 2018). Data analysis in research using literature review methods such as "Comparative Analysis of Education Curricula Between Germany and Indonesia: Content Approach and Learning Methodologies" namely: Identifying data sources relevant to the research topic including journals, books, articles, official documents and other sources. After collecting data, the next step is to classify and group it based on relevant themes or topics. While reading data sources, it is necessary to note down important information related to the comparison of educational curricula in Germany and Indonesia. These can be statistical data, important concepts, research findings, or the main arguments expressed in those sources. Next, compare the information that has been collected from data sources and identify similarities, differences, trends and patterns that emerge in the education curricula of the two countries.

After conducting a comparative analysis, the next step is to synthesize the findings by answering these questions. What can be concluded from this comparison? How might differences in content approaches and learning methodologies affect the two countries' education systems? The results of data analysis are presented clearly and systematically in the research report.

During the data analysis process, follow the research methodology that has been designed and remain consistent in the analysis approach. Additionally, ensure to avoid bias in data interpretation and present findings objectively

RESULTS

In the international standardized education classification, making comparisons about a system between one country and another can be accepted as one possible way to improve the quality of education, because comparing the two systems helps teachers realize what are the differences and similarities as a suggestion for education authorities in rearranging or revise existing systems to achieve goals successfully. In addition, comparisons can also mean making an analysis between one system and another in terms of security, differences, paradigms, processes, etc., to the effects that occur in the educational and social environment (Muhtadi & Junaedi, 2021).

Based on the results of a literature review on comparative education curricula in Germany and Indonesia studied through content and methodological approaches, the following is a discussion of the comparative education systems in Germany and Indonesia including: curriculum, level of education, duration of education, educational structure and educational methodology.

The educational approach in Germany and Indonesia shows significant differences in several key aspects. Firstly, the education system in Germany is shorter for primary school, lasting only 4 years, while in Indonesia, students undergo primary education for 6 years. After compulsory education, German students often opt for a 3-year apprenticeship, whereas in Indonesia, most students proceed to higher levels such as high school (SMA) and vocational school (SMK).

The second difference pertains to the cost of education. In Germany, education is free from primary school to college, whereas in Indonesia, free education is limited to primary school, with government subsidies provided for public schools. Teaching methods constitute the third point of comparison. Germany emphasizes the development of critical thinking and independent solutions, while in Indonesia, the learning approach is more focused on memorization and strict adherence to the curriculum.

Fourthly, school hours in Germany are generally shorter compared to Indonesia, with durations of around 4-6 hours per day in Germany, while in Indonesia, students may spend up to 8 hours in school. The next difference is related to foreign language learning. In Germany, the learning of foreign languages begins early, while in Indonesia, it usually starts at the secondary school level.

Lastly, there is a difference in terms of work practices. In Germany, students are often given the opportunity to experience the working world through internship programs, whereas in Indonesia, such opportunities are usually only provided at the higher education level. From this comparison, it can be concluded that education in Germany and Indonesia exhibits notable differences in terms of the educational system, costs, teaching methods, school hours, foreign language learning, and work practices.

The differences in the curriculum structure between Germany and Indonesia encompass several key aspects, including the duration of education, the subjects taught, and the structure of educational levels. In Germany, the education system is divided into three main levels: Grundschule (elementary school) for 4 years, Sekundarschule (secondary school) for 6 years, and Gymnasium (high school) for 9 years. After that, students can proceed to higher education or university. In Indonesia, education covers Elementary School (SD) for 6 years, Junior High School (SMP) for 3 years, and Senior High School (SMA) or Vocational High School (SMK) for 3 years. Afterward, students can continue to higher education or university.

TABLE 1. *Education system*

Education system		
Indicator	German	Indonesian
Curriculum	<ul style="list-style-type: none"> - Bildungsplan or Lehrplan (In Public School) - Kernlehrplan (core curriculum) for general subject - Rahmenlehrplan (curriculum framework) for specific subject 	<ul style="list-style-type: none"> - Competency Based Curriculum (KBK) (2004) - Education Unit Level Curriculum (KTSP) (2006) - Kurtilas (2013) - Merdeka Curriculum (2022 – present)
Educational level	<ul style="list-style-type: none"> - Kindergarten - Basic education (Grundschule) - Middle education (Hauptschule, Realschule, Gesamtschule, Gymnasium) - High Education (Hochschule) 	<ul style="list-style-type: none"> - Kindergarten (TK) - Elementary education (SD) - Secondary education (junior high school) - Upper Education (SMA) - Higher education or University
Education Duration	<ul style="list-style-type: none"> - Kindergarten (3 – 6 years) - Basic education (7-10 years) - Secondary education (11-13 years) - Higher education (starting at grade 13 and above) 	<ul style="list-style-type: none"> - Kindergarten / Kindergarten (4-6 years) - Elementary/Elementary Education (7-12 years) - Secondary education/junior high school (13-15 years) - Upper/High School Education (16-18 years) - Higher education or University (18-21 years)
Curriculum structure	<ul style="list-style-type: none"> - At primary education the content are: German; mathematics; social studies; history; geography; biology; physics; chemistry; art; music; sport; religion; and modern foreign languages. - Middle education: German; mathematics; one foreign language (usually English); natural and social sciences; music; art; and sport 	<ul style="list-style-type: none"> - PAUD: intracurricular learning activities and projects to strengthen Pancasila student profiles. - SD/MI Curriculum Structure: Islamic Religious and Moral Education, Christian Religious and Moral Education, Catholic Religious and Moral Education, Buddhist and Moral Education, Hindu Religious and Moral Education, Confucianism and Moral Education, Education Pancasila, Indonesian Language, Mathematics, Physical Education Sports and Health, Arts and Culture: Music, Fine Arts, Theatre, Dance, English, Local Content, Natural and Social Sciences - The structure of the Middle and Higher Education Curriculum is more or less the same, except that there are additional Science and Social Studies lessons
Learning Methodology	<ul style="list-style-type: none"> - Competency Based Education (Kompetenzorientierter Unterricht) - Integrated Education (Integrierte Gesamtschule) - Project Based Learning (Projektunterricht) - Cooperative Learning (Kooperatives Lernen) - Problem Based Learning (Problemorientierter Unterricht) - Inclusive Education (Inklusive Bildung) 	<ul style="list-style-type: none"> - Project-Based Learning - Cooperative Learning - Problem-Based Learning - Active and Engaged Learning - Technology-Enhanced Learning - Inquiry-Based Learning - Integrated Learning

Regarding subjects and specialization, in Germany, students can choose more specific study paths at the Sekundarschule level, and Gymnasium offers deeper specialization in certain subjects. In Indonesia, students choose study programs such as Natural Sciences (IPA) or Social Sciences (IPS) at the SMA level, and SMK offers specific skill-based programs. Another difference lies in the opportunities for internships and practical work. In Germany, the education system often provides opportunities for students to experience the working world through internships or practical work during their education. In Indonesia, such opportunities tend to occur at the higher education level. Foreign language learning starts early in Germany, with a focus on English, and at higher levels, students can choose other languages such as French or Spanish. In Indonesia, foreign language learning usually begins at the secondary school level. Lastly, after completing upper secondary education, students in Germany can choose to continue to colleges or universities. In Indonesia, after SMA or SMK, students can also continue to colleges or universities. These differences reflect variations in the approach and structure of the education systems between the two countries, influenced by cultural factors, education policies, and educational goals in each context.

DISCUSSION

Education System in Germany

In Germany, the educational curriculum emphasizes hands-on, practical learning, with a strong focus on vocational education and training. In Germany, the curriculum implemented in public schools is called Bildungsplan or Lehrplan. Each state in Germany has educational autonomy and has its own curriculum adapted to local needs and priorities. Therefore, the names of these curricula may vary from state to state. For example, in the state of Bavaria, the school curriculum is commonly known as the Bildungsplan or Lehrplan. In the state of North Rhine-Westphalia, the curriculum is known as Kernlehrplan (core curriculum) for general subjects and Rahmenlehrplan (framework curriculum) for specific subjects.

In addition, there is also a curriculum that regulates higher education in Germany, such as the Studiengänge (study program) regulated by the university and the Modulhandbuch (module guide) which describes the structure and content of a particular study program. It is important to note that due to the autonomy of state education, the curriculum in Germany may vary slightly from state to state, but still shares common educational principles and standards that apply throughout Germany.

The education system is divided into three levels namely: basic education, secondary education, and higher education. At the elementary level, students learn the basics of reading, writing and mathematics. At the secondary level, students choose between academic or vocational education, depending on their interests and career goals. The German vocational education and training system is highly regarded and provides students with the practical skills and knowledge needed for a wide range of professions.

This is in accordance with the opinion (Suyadi, 2020) which states that the order of education in Germany starts from the age of 3 to 6 years which is called Kindergarten (Kanak-Kanak Park), Grundschule, namely basic education which starts from the age of 7 to 10 years, in Indonesia it is usually called SD (Elementary School), after Through this stage, students are given the opportunity to continue to the next level through 4 choices of school types, namely: Hauptschule, Realschule, Gesamtschule, Gymnasium. Hauptschule and Realschule are prioritized for students who want to work immediately after finishing school. The Gymnasium is intended for students who wish to continue their studies to the next level (university) through another path, besides that there is another way, namely through work practice for a certain number of years for those who are not in a hurry to enter the world of lectures.

In grades 5 to 10, curriculum content varies according to the type of school attended. Starting in grade 11, students can choose a specialization in a rather complex array. After successfully completing exams in grade 13 students are entitled to enter college. *Gesamtschule* is a school that emphasizes a comprehensive program for all children in a field, and children will receive different certificates according to the field they choose. However, because there was a lot of controversy about this type of school program, not all regions opened these schools (only opened in areas below the lander with a social democratic wing). Furthermore, higher education institutions in Germany consist of two types, namely: First, academy/polytechnic/*Fachhochschulen* which is taken for 12 years of complete education; Second, University.

There are no specific program requirements for university entry, and there is no clear distinction between undergraduate and graduate programs. The First Certificate can be obtained after 4 or six years of study. In addition to formal education, non-formal education is also developing in Germany in the form of vocational, technical and business education which is mandatory for children who graduate with a general education diploma at the *Hauptschule* or *Realschule* level and also who cannot obtain a diploma after completing 9 years of study. This education is a prerequisite for getting a job, and its implementation can be followed on a part-time or full-time basis. Another non-formal education is in the form of adult education which aims to improve the quality of people's lives, in accordance with the demands of the times and very fast economic, social and political changes. Adult education programs can be grouped into three, namely general, vocational (including engineering and finance) and politics.

Student year-end assessment is based on the results of an analysis of student performance. From Grade 2 (primary, age seven) onwards, there are only semi-annual reports including comments on progress and grades obtained by comparing their performance with those of others in a teaching group. There is a trend towards reporting on learning processes and performance, and towards class participation and social behavior in schools. Children whose grades and other things are not enough must (can choose) to repeat at the beginning of the new year. There are no grades or certificates in primary school, only a student's performance report at the end of the year. National exams are held in grades 10 and 12.

Education System in Indonesia

The education system in Indonesia, in addition to running an education system in accordance with the principles of the state and having the spirit of Pancasila, the 1945 Constitution is also the foundation used in this curriculum. Characteristics such as the direction of activities towards increasing skills and intelligence, as well as the development of a strong and healthy body. The curriculum has an important role in the form of learning tools that contain planning of learning activities in the form of a process of acquiring knowledge and experience gained through a series of learning activities (Ardianti & Amalia, 2022). The current Indonesian education curriculum places more emphasis on essential knowledge and developing students' abilities according to their phase (Dwijendra & Ganesha, 2022).

The education system is divided into six levels, namely early childhood education, basic education, secondary education, senior secondary education, undergraduate education, and postgraduate education. At the elementary level, students learn the basics of reading, writing, mathematics and social studies. At secondary level, students choose between academic or vocational education, but vocational education is not emphasized as much as in Germany.

The curriculum currently used in Indonesia is the independent curriculum and there are also those who use the 2013 curriculum. This discussion focuses more on the independent curriculum. The independent curriculum is interpreted as a learning design that provides opportunities for students to study in a calm, relaxed, enjoyable, stress-free

and pressure-free way, to show their natural talents. Merdeka learning focuses on freedom and creative thinking (Rahayu, Rosita, Rahayuningsih, Hernawan, & Prihantini, 2022).

The Independent Curriculum has several advantages. Some of these advantages according to (Dwijendra & Ganesha, 2022) namely first, the independent curriculum is simpler and more in-depth. In the Independent Curriculum, learning focuses on essential knowledge and the development of students' abilities according to their phase. Deeper, meaningful, unhurried and enjoyable learning. The second advantage is that it is more independent. As at the high school level there are no specialization programs, students determine the subjects of interest, according to their talents and aspirations. For teachers in teaching activities, they can carry out teaching according to an assessment of the level of achievement and development of students. For schools in implementing the independent curriculum, they are given authority in the development and management of curriculum and teaching and learning processes that are adapted to the character of the education unit and students. The third advantage is that it is more relevant and interactive. In this case learning is mostly done through project work and students are given the freedom to actively explore, explore and describe actual issues such as environmental issues, circular economy, sanitation and so on to foster critical thinking, careness and complex problem solving abilities as form of character development and competence of the Pancasila Student Profile.

In its implementation, the Independent Curriculum must be supported by the provision of training, the provision of teacher learning materials and innovative teaching tools, supported by the school principal and the local office. The Education Unit in the Provision of teaching devices in question is in the form of textbooks, supporting teaching materials, for example the design and scheme of learning objectives, school operational curricula, teaching modules and projects to strengthen the Pancasila Student Profile which are available on a digital platform for teachers. Schools can provide and procure teaching materials and learning tools independently with School Operational Costs (BOS), or regularly with the support of the local government and/or foundations.

The implementation of this curriculum is supported by training and the provision of learning media for teachers and school principals. This can be supported by various activities including developing the potential for teachers and principals through micro learning using digital platforms. For the success of all that required the role of a teacher. Where in line with opinion (Ainia, 2020) "The teacher as the main subject whose role is expected to be able to be a driving force to take action that gives positive things to students. The existence of an independent curriculum is a rearrangement in the national education system in Indonesia (Vhalery, Setyastanto, & Leksono, 2022) "stated that the statement was in the framework of welcoming the change and progress of the nation in order to be able to adapt to changing times". Likewise what was conveyed by the Minister of Education Nadiem Makarim that "educational reform cannot be carried out solely using an administrative approach, but must carry out a culture transformation" (Satriawan et al., 2021).

Content Learning Materials in German

Learning material content refers to the content or substance of what is taught in the learning process. This includes topics, concepts, information, facts, theories, principles, skills, or values that students want to convey during learning activities. The content of learning materials is the essence of the curriculum that determines what students must learn. This content is usually developed taking into account the educational standards and goals set by educational institutions or educational authorities. In the context of education, the content of learning materials plays an important role in shaping students' understanding and knowledge. The content must be relevant, accurate, current, and appropriate to the developmental level and needs of students (Smith, 2020).

Learning material content must also be designed in a systematic and structured manner, considering a logical and progressive learning sequence. Typically, learning content is grouped into related subtopics or learning units to ensure thorough understanding. The selection and preparation of learning material content also needs to take into account the diversity of students, taking into account the different learning styles, skill levels, and special needs that may exist in the class. Learning content can also involve the use of various sources of information, such as textbooks, audiovisual materials, online materials, experimental materials, and practical experience, to enrich the learning process and facilitate deeper understanding (Morrison, 2020).

The content approach refers to the subjects and topics included in the educational curriculum. The curriculum in Germany is formulated by the Ministry of Education according to the respective states under the control of the Lander (local government). Most Landers require subjects in primary education as follows: German; mathematics; social studies (usually taught as Sachunterricht); history (usually taught as Sachunterricht) geography (usually taught as Sachunterricht); biology (aspects of biology are taught within science, which is usually taught as Sachunterricht); physics (aspects of physics are taught within science, which is usually taught as Sachunterricht); chemistry (aspects of chemistry are taught within science, which is usually taught as Sachunterricht); art; music; sport; religion; and modern foreign languages.

Meanwhile for secondary schools, the curriculum has a different emphasis, according to the type of school as explained above. However, at least each type of secondary school contains the following subject matter: German; mathematics; one foreign language (usually English); natural and social sciences; music; art; and sport (Yusuf, Syamsu, 2020).

Learning Material Content in Indonesia

The Independent Curriculum is a learning approach that emphasizes the freedom of schools and teachers in determining the content of learning materials according to local needs and conditions. The independent curriculum is designed to catch up on literacy and numeracy. An independent curriculum that will provide solutions for improving the curriculum, this can be implemented in stages according to the readiness of each school (Dwijendra & Ganesha, 2022).

Therefore, the content of learning materials in the Independent Curriculum can vary between schools, regions, and levels of education. However, some general principles that can serve as guidelines in designing learning material content in the Independent Curriculum are Basic Competence, Context Relevance, Multidisciplinary, Actual Content, Critical and Creative Thinking, 21st Century Skills, Inclusivity and Justice. the details are as follows: 1) Basic Competence: The content of learning materials in the Independent Curriculum must be based on the basic competencies set by the government, as stated in the Content Standards or Core Competencies. These basic competencies include the knowledge, skills, and attitudes that students are expected to have in a particular field of study, 2) Relevance of Local Context: Learning materials should relate concepts and theories to situations, problems, and the daily lives of students in their environment. This allows students to relate learning to their own experiences, making learning more relevant and meaningful, 3) Multidisciplinary: The content of learning materials in the Independent Curriculum can integrate various subjects or disciplines. Through this approach, students can see the relationships and interrelationships between the various concepts and knowledge being taught, and develop a more holistic understanding, 3) Current Content: Learning materials should reflect the latest developments in the relevant field of study. This allows students to acquire knowledge that is up-to-date and relevant to an ever-evolving world, 4) Critical Thinking and Creativity: Learning materials should encourage students to think critically, analyze and develop their creativity. Material content can involve problem-based learning, projects, and authentic situations that require reflective

thinking, problem solving, and innovation, 5) 21st Century Skills: Learning materials in the Merdeka Curriculum must cover the development of 21st century skills, such as critical thinking skills, communication, collaboration, creativity, and digital literacy. Material content should support the development of these skills through relevant assignments and activities, 6) Inclusivity and Equity: The content of learning materials should reflect the values of inclusivity and fairness, respect student diversity, and promote equal access to education. Learning materials must include multiple perspectives and avoid stereotypes.

The Independent Curriculum gives freedom to schools and teachers to determine learning materials that suit local needs and conditions. Therefore, learning materials in the Merdeka Curriculum may vary from one school to another. However, there are several fields of study or subjects that are generally in the Merdeka Curriculum, (Menteri Pendidikan, Kebudayaan, 2022) among others: 1) Indonesian: Learning materials in Indonesian include learning to read, write, listen, and speak. This includes mastering language rules, understanding texts, developing writing skills, appreciating literature, and using language effectively in communication, 2) Mathematics: Learning materials in Mathematics include learning mathematical concepts, problem solving, reasoning, measurement, statistics, and geometry. The aim is to develop students' understanding of mathematical concepts and their ability to apply mathematics in everyday life, 3) Natural Sciences (IPA): Learning materials in natural sciences include an understanding of the universe, things around us, science, and technology. This involves learning scientific concepts, scientific processes, experiments, research, and the application of science to everyday life, 4) Social Sciences (IPS): Learning materials in IPS include an understanding of history, geography, economics, and society. This includes learning about historical changes, understanding geographical conditions, economic systems, and societal structures in local, national, and global contexts, 5) Arts and Culture: Learning materials in arts and culture cover visual arts, music, dance, drama, and other creative skills. This involves an understanding of artistic and cultural expression, development of creative skills, appreciation of the arts, and active participation in artistic activities, 6) Physical and Health Education: Learning materials in physical and health education include the development of physical fitness, sports skills, knowledge about health, healthy lifestyles, and the importance of physical activity in maintaining the balance of body and mind.

Apart from these fields of study, the Merdeka Curriculum may also include other learning materials such as foreign languages, information and communication technology, entrepreneurship, and fields of study that are relevant to the local context or the special needs of students. It is important to note that specific learning materials in the Independent Curriculum will be determined by schools and teachers based on the basic competencies set by the government and the needs of students in their local context.

Learning Methodology

Learning methodology refers to the approach or strategy used in designing and implementing the learning process. The intended learning method is a variety of techniques and approaches used to facilitate an effective learning process. The learning methodology adopted in Germany includes a variety of approaches and practices that are based on their educational system. Here are some learning methodologies that are commonly used in Germany: 1) Competency Based Education (Kompetenzorientierter Unterricht): This method emphasizes the development of student competencies, namely practical skills and knowledge that can be applied in everyday life. Student-centered learning with a focus on problem solving, critical thinking skills, and the ability to work independently, 2) Integrated Education (Integrierte Gesamtschule): Integrated education is an approach that combines different levels of education, such as primary, secondary, and high school, in one institution. This approach aims to provide continuity and continuity in student education, as well as promote equal access to educational opportunities, 3) Project Based Learning (Projektunterricht): This method engages

students in real projects involving research, problem solving, and collaboration in groups. Students learn through hands-on experience, independent exploration, and reflection on the projects they are working on, 4) Cooperative Learning (Kooperatives Lernen): This approach encourages students to work together in small groups to achieve shared learning goals. Students help each other, discuss, and share knowledge in order to achieve a better understanding, 5) Problem-Based Learning (Problemorientierter Unterricht): This method involves students in solving real problems or scenarios that are relevant to their lives. Students are challenged to find solutions through exploration, research, and analysis independently or in groups, 6) Inclusive Education (Inklusive Bildung): Inclusive education emphasizes the acceptance and participation of students with special needs in an inclusive school environment. This methodology aims to create a common learning experience for all students and encourage collaboration, understanding, and respect for differences.

It should be borne in mind that the learning approach adopted may vary between schools and teachers in Germany. In addition, along with the development of education and educational innovation, learning methodologies in Germany may also experience changes and adjustments from time to time.

Learning methods that can be used in implementing learning, as explained in paragraph (2) of the Minister of Education and Culture Regulation Number 3 of 2020 concerning Education Standards, include group discussions, simulations, case studies, collaborative learning, cooperative learning, project-based learning, problem-based learning, or methods other effective learning to achieve graduate learning goals. Each course can choose one method or combine several learning methods, as mentioned in paragraph (3), which will be integrated into a form of learning. This form of learning can be in the form of lectures, responses and tutorials, seminars, practicum (studio practice, workshop practice, field practice, work practice), research, design, development, military training, student exchange, apprenticeship, entrepreneurship, and/or forms of service to other societies (Suryaman, 2020).

The learning methodology applied in Indonesia, especially in the context of the Merdeka Curriculum, is an approach that aims to provide greater space for students to develop creativity, independence, and critical thinking skills. Following are some learning methodologies that can be applied in the Independent Curriculum: 1) Project-Based Learning: This method encourages students to engage in real projects that allow them to gain a deeper understanding of a particular topic. Students will learn through research, exploration, and collaboration in solving problems or achieving set project goals, 2) Cooperative Learning (Cooperative Learning): This approach involves students in group work to achieve shared learning goals. Students help each other, share knowledge, and collaborate in achieving better understanding, 3) Problem-Based Learning: This method invites students to learn through solving real problems that are relevant to the context of their lives. Students are invited to identify problems, analyze the causal factors, and seek solutions by using critical thinking and problem solving skills, 4) Active and Engaged Learning: This approach prioritizes the active role of students in the learning process. Students are given the opportunity to be involved in discussions, presentations, simulations, experiments, and other activities that involve them directly in building understanding, 5) Technology-Enhanced Learning: This method utilizes technology, such as computers, the internet, and other digital devices, as tools in the learning process. Students can access online resources, conduct research, communicate with fellow students or teachers, and use applications or other supporting software, 6) Inquiry-Based Learning: This approach encourages students to ask questions, collect data, investigate phenomena, and seek answers or solutions through independent exploration and discovery. Students will construct their own understanding through a process of directed inquiry, 7) Integrated Learning: This method integrates various subjects or areas of knowledge in a more holistic learning context. Students will see the interrelationships between various concepts and the application of knowledge in real-life situations.

The application of the learning methodology in the Independent Curriculum may vary depending on the school, the teacher, and the specific educational context. The main goal is to give students more opportunities to be active in learning, develop 21st century skills, and prepare them to become independent, creative and critical thinking individuals.

CONCLUSION

In this article, a comparative analysis is carried out between the educational curricula in Germany and Indonesia, with a focus on the content approach and learning methodology. From this analysis, several important conclusions can be drawn, namely that the educational curriculum in Germany has a distinctive feature that emphasizes the development of practical and professional skills that are relevant to the world of work. Meanwhile in Indonesia, the education curriculum focuses more on mastering academic knowledge and general skills, with an emphasis on developing character and moral values. Learning Methodology in Germany applies a learning approach that is oriented towards practical and interactive experiences, such as project-based learning, simulations and group discussions. Meanwhile in Indonesia, the learning methods used include group discussions, case studies, cooperative learning, and problem-based.

The difference in the education system between Germany and Indonesia is that Germany has a more centralized and structured education system, with concrete vocational education pathways leading to certain industries and professions. Meanwhile, Indonesia has a more decentralized education system, with flexibility in choosing educational paths and choices of subjects.

Even though there are differences in the content approach and learning methodology between the two countries, both countries have the same goal, namely to produce graduates who are competent and ready to face future challenges. It is important for both countries to continue to develop their educational curricula taking into account social changes, technology and societal needs.

This comparative analysis provides valuable insights for education policy makers and practitioners in both countries, and can be the basis for knowledge and experience exchange between the German and Indonesian education systems to improve the quality of education in the future.

Based on these conclusions, the suggestions that can be recommended are Increasing Skills Development in both Indonesia and Germany. Indonesia could consider integrating more elements of practical skills development into the education curriculum, in line with the evolving needs of the job market. Meanwhile, Germany can enrich its curriculum by strengthening aspects of general skills, such as character development and moral values, to complement the practical skills being taught.

Knowledge Exchange and Best Practices: The two countries can share experiences and best practices in implementing effective learning methods. For example, Indonesia can learn and apply the practical and interactive approach that has proven successful in Germany. Germans can learn from the contextual and problem-based learning approaches adopted in Indonesia, to increase relevance and practical application in their curricula.

It is important for both countries to provide comprehensive teacher training, which includes a good understanding of the content approaches and learning methodologies applied in the curriculum. Teacher training should also cover the use of technology in education, so that teachers can utilize digital tools and resources to increase learning effectiveness.

Both countries need to consider a degree of flexibility in their educational curricula, to allow adaptation to changing needs and demands of the times. Encouraging innovation in content approaches and learning methodologies, such as the use of project-based learning and technology, can help develop relevant and adaptive skills for learners.

By implementing these suggestions, the two countries can continue to improve the quality of their education, prepare competent graduates, and better face future challenges.

Knowledge exchange and collaboration between Germany and Indonesia can also enrich the experience

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