
Stakeholders' Perspectives on the Philosophy of English Learning Curriculum Development

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Abstract

The fundamental of human development, including the advancement of science, is philosophy. It is impossible to divorce the philosophical underpinnings of science's advancement from their integration into curricula. The purpose of this study is to look into how the philosophy of science is used in the curriculum development of English language instruction at Bengkulu City's Sint Carolus High School. This study used instruments of questionnaires and interviews, and a qualitative-descriptive methodology was employed, with Four internal school stakeholders serving as research subjects. The study's findings demonstrated the importance of a philosophical basis for curriculum building by fusing the Tarakanita Character Education formulation, the Pancasila philosophy, and the national curriculum. This curriculum's philosophical underpinnings have beneficial effects on educational institutions, particularly for those involved in creating and developing their curricula and making sure that the materials used are grounded in scientific theory.

INTRODUCTION

Science is an aspect of knowledge that influences human civilization. Science has experienced various developments, starting from ancient Greek civilization to the present. The development of science occurs due to a process of inquiry, discovery, and a continuous research process. The period of development of science is better known as the period of philosophy which is the benchmark for changes in the mindset of human civilization from mythocentric to logocentric. Philosophy is aimed at seeking something wise and true in science. In modern times, philosophical thinking places humans with an anthropocentric style of thinking, namely philosophical thinking that is based on reason and experience. The development of philosophical thought leads to the philosophy of science which is filled with human efforts to search for truth and reality. The fundamental issue with science, which is rife with attempts by people to discover reality and the truth that can be verified and tested, is how scientific information can be made to be legitimate or recognized by all people. Debates on various characteristics of certainty and uncertainty about objectivity, universality, and methodology are common in science (Firman in Indonesian Philosophy Journal, 2019). This science crisis occurs with a view of reality which can be multiple and single, seen from the perspective of placing that reality. Regarding this contentious topic, the framework that serves as a guide for molding an individual's

knowledge and character is in line with criteria derived from the government-developed and published Dikti (2012) Indonesian National Framework Qualifications and is listed in the document, namely (a) science; (b) knowledge; (c) know-how; (d) skills; (e) affection; and (f) competency.

The field of education is founded on the idea that philosophy serves as the foundation for how human mental processes and behavior evolve in search of the ultimate truth. A set of behavioral norms founded on the philosophical tenets defended by educational institutions and educators in a community is instilled and passed on through education as an institution. In the process of implementation, philosophy also plays an important role in developing the curriculum that will be used in the educational process. Certain philosophical schools are followed during curriculum design, which has an impact on the concept and implementation of the curriculum being established (Indriani and Atiaturrahmaniah, 2019). Philosophical schools and cognitive aspects can be benchmarks in curriculum preparation and development. With the increasing demand for English proficiency in today's world, teachers have a crucial role to play in maximizing students' learning achievements. Learning in a curriculum can be successfully implemented if the application of the learning model is by cognitive characteristics and development. The curriculum contains a knowledge structure that contains ideas, concepts, and relationships between concepts that are considered important (Sundari & Fauziati, 2021).

Several earlier research has demonstrated the importance of philosophy in the formation of the curriculum for educational institutions. The first is a study conducted by Alemdar and Aytac (2022) entitled "The Impact of Teachers' Educational Philosophy Tendencies on Their Curriculum Autonomy". Based on the findings, instructors seem to adopt progressive educational philosophy more frequently than essentialist educational philosophy, with the former being chosen by teachers the least frequently. Teachers exhibit the highest degree of procedural autonomy, which is followed by autonomy in professional growth, evaluation, and planning. Procedural and professional development autonomy is strongly predicted by the propensity toward progressive educational philosophy. The second is a research conducted by Pardede (2023) entitled "An Overview of the Study of Language in the History of Philosophy (Renaissance to Postmodern)". The results showed that, in contrast to studies done in Ancient Greece and the Middle Ages, which focused on various paradigms pertaining to the nature of language and microlinguistic notions, studies of language in the modern era of philosophy concentrate on the interaction between language and users and the outside world. The third is a study conducted by Filipi, Nguyen, Berry (2023) entitled "Science and EAL Teachers' Perspectives and Practices in Building Word Knowledge in Implementing the New Victorian EAL Curriculum". The results were founded on the ideas of linguistically responsive instruction (LRI), a term that describes strategies for addressing students' needs in classrooms with a variety of cultural and linguistic backgrounds. A variety of LRI practices for word knowledge development were revealed by an analysis of interviews and classroom data from two science teachers and an EAL teacher. These practices were based on an understanding of the differences between academic and conversational language, language learning principles, responsive teaching, plurilingual awareness, and the value of social interaction for learners.

Based on the results of previous research, shows that there is a positive role of philosophy in education both for teacher pedagogy and paradigms for science. Regarding the view of philosophy role, this research will focus on investigating the view of stakeholders on the philosophy of science in Curriculum Development for English Language Learning at Sint Carolus High School. The Nature of Science hypothesis serves as the theoretical foundation for the school of philosophy and is divided into five periods: the New Philosophy of Science, Post-Kuhnian Philosophy of Science, Critical Rationalism, Logical Positivism, and Recent and Contemporary Accounts (Amador-Rodriguez, 2018). Next, the theory of Ornstein and Hunkins (2014), which consists of the schools of perennialism, essentialism, progressivism, and reconstructionism, will be used as the foundation for

creating and refining the curriculum. The research questions in this study are: (1) What are the stakeholders' perspectives on the philosophy of science? (2) How do stakeholders at the Carolus school view the philosophy of science as a basis for preparing and developing the curriculum applied in English Language Learning?

METHOD

In general, this section describes how the study was conducted. The subject matters of this research used qualitative-descriptive method. Creswell (2014), qualitative research delves into the significance of many persons or a group of individuals who are the source of a societal problem. This method is used to explain how the application of philosophical schools is used in the preparation and development of the curriculum in English Language Learning at Sint Carolus High School. The instruments used in this research were questionnaires and interview with 5 research subjects, consisting of the principal and teachers. In this research, the questionnaire used a Likert Scale with a technique adopted from the Perspectives Primary Teachers' View on the Nature of Science (2021) based on the Nature of Science theory (Amador-Rodriguez, 2018). The questionnaire was distributed using Google Form and included 37 statements on a 5-point scale (1 being strongly disagree, 2 disagree, 3 being neutral or uncertain, 4 being agree, and 5 being strongly agree). Using Michael Manyange's (2015) interpretation technique, the data was examined in relation to the Likert scale's range. With five possible answers, the Likert scale gives respondents the ability to indicate how much they agree or disagree with a statement or question on a positive-to-negative scale (Hutchinson, 2021).

Table 1. The mean range of the Likert Scale

No.	Description	Mean Range	Scale	Interpretation
1	Strongly Agree	4.20-5.00	5	Very High
2	Agree	3.40-4.19	4	High
3	Undetermined	2.60-3.39	3	Moderate
4	Disagree	1.80-2.59	2	Low
5	Strongly Disagree	1.00-1.9	1	Very Low

Source: Michael Manyange (2015)

Then, for the interview instrument, the technique used is to create the question guidelines which are developed by the researchers and adapted to research needs. Expert opinions were also used to modify the interview rules. Four educational philosophies such as perennialism, essentialism, progressivism, and reconstructionism that have an impact on curriculum creation were the basis for the development of interview questions by Ornstein and Hunkins (2014). The interview guide covered 5 aspects with a total of 18 questions, namely the philosophical view, the role of philosophy in the curriculum, the philosophical flow, the curriculum implementation, and the challenges. This study employed the data reduction, data presentation, and conclusion theories from B. Milles and Huberman (2014) to analyze the research data. To make the study easier for readers to understand, the data was searched, organized, and presented more methodically and conclusively.

FINDINGS

Research data is explained in the form of a data table. The data table is explained about the research question. The data results explain the views of Sint Carolus High School stakeholders

regarding the philosophical basis in developing and implementing curriculum in English language learning. The data was then analyzed using Microsoft Excel for the questionnaire instrument and coded the data for the interview instrument.

Stakeholders' Perspective on the Philosophy of Science

Stakeholder views regarding the philosophy of science can be seen from the percentage of results from the Nature of Science questionnaire (Amador-Rodriguez, 2018).

Table 2. Results of Questionnaires

No	Statements	Degree of Agreement					AV	P
		(SA) 5	(A) 4	(UND) 3	(DIS) 2	(SD) 1		
1	By using language to explain and describe reality as it is, scientific knowledge can be produced.		2 (50%)		1 (25%)	1 (25%)	2.75	Moderate
2	Differentiating between theory and observation is absurd in science because theory permeates everything.			1 (25%)	3 (75%)		2.25	Moderate
3	In science, we first establish hypotheses, from which we derive observational consequences, and we then experimentally compare and contrast those observational consequences.		2 (50%)	1 (25%)		1 (25%)	3	Moderate
4	The selection of one model over another is contingent upon the interests of scientists as much as the model's resemblance to the actual system.		2 (50%)		1 (25%)	1 (25%)	2.75	Moderate
5	If a theory or research tradition offers a superior way to address conceptual and empirical issues, scientists will accept it.		2 (50%)		2 (50%)		3	Moderate
6	When theories are refuted and new ones emerge, science progresses.		1 (25%)		3 (75%)		2.5	Low
7	There are four established contexts in the scientific activity: a) Education: pertains to imparting knowledge and disseminating scientific endeavors.	1 (25%)	1 (25%)		1 (25%)	1 (25%)	3	Moderate

	<p>b) Innovation: concerns inventions and inventiveness in scientific pursuits.</p> <p>c) Assessment: concerned with advancing and enhancing scientific endeavors.</p> <p>d) Application: linked to modifications in scientific output and artifacts with the aim of altering the milieu in which science is conducted.</p>						
8	<p>When conducting research, scientists first observe occurrences, then move on to develop hypotheses, plan and carry out experiments, and ultimately come to findings that go beyond their initial theories. The use of inductive reasoning characterizes this approach.</p>	2 (50%)		2 (50%)		3.5	High
9	<p>Scientists' proposed observations and experimental designs are mediated by their scientific models, which also serve as a decision-making tool.</p>	2 (50%)	1 (25%)	1 (25%)		3	Moderate
10	<p>Scientists utilize scientific theories, which are generally narrow collections of connected doctrines, rules, hypotheses, or principles, to explain natural events and make predictions based on observation or experimentation.</p>	1 (25%)	2 (50%)	1 (25%)		3	Moderate
11	<p>Scientists choose the theory that best describes and resolves an issue by drawing on their theoretical and methodological frameworks.</p>	1 (25%)	1 (25%)	1 (25%)	1 (25%)	3.5	High
12	<p>Scientific models are non-linguistic, abstract representations of the universe that have their own internal logic, relate occurrences in meaningful ways, and are expressed using specific symbolic languages.</p>	1 (25%)	1 (25%)	2 (50%)		2.75	Moderate

13	If the results drawn from a scientific theory are consistent with statements that describe the empirical situation, then the theory solves the problem.	2 (50%)	2 (50%)	3	Moderate
14	A theoretical framework is used to formulate hypotheses, which are then empirically verified by experiments and/or observation.	1 (25%)	1 (25%)	2 (50%)	3.25 Moderate
15	Since no method can ensure success in a scientific endeavor, scientists are free to do and progress in whatever way they see fit. There is no exclusive scientific method that they must adhere to or respect.	2 (50%)	1 (25%)	1 (25%)	3.25 Moderate
16	Truth is defined as the dominant epistemic value in scientific endeavors.	2 (50%)	2 (50%)	3	Moderate
17	The choices scientists make during their study have an impact on how scientific models and experimental designs relate to one another in scientific activities.	1 (25%)	1 (25%)	2 (50%)	3 Moderate
18	In science, a paradigm creates an interpretation of the world and so becomes a possible truth; yet, paradigms are subject to change or be replaced by new ideas that offer superior answers to scientific quandaries.	2 (50%)	1 (25%)	1 (25%)	3.25 Moderate
19	Scientific theories are structurally complicated entities made up of a set of experimentally verified assumptions drawn from general principles that support research and innovation, as well as general principles themselves.	2 (50%)	1 (25%)	1 (25%)	3.25 Moderate
20	Theoretical frameworks, experimental designs, methodological protocols, and other assumptions are shared by scientists working in different fields of science.	2 (50%)	1 (25%)	1 (25%)	3.25 Moderate

21	In a developed scientific field, a new theory improves, expands upon, and preserves the truths of the old one while also replacing it.	1 (25%)	1 (25%)	1 (25%)	1 (25%)	3.5	Moderate
22	When it is possible to conduct empirical experiments and/or observations that support a theory or hypothesis, it is said to have been proved or verified.	2 (50%)		1 (25%)	1 (25%)	3.75	High
23	An experiment cannot verify any proposition that is based on natural phenomena.		1 (25%)	2 (50%)	1 (25%)	3	Moderate
24	Scientists seek to interpret, describe, and explain the world by selecting theoretical suggestions that best match their models. This decision is made based on social, scientific, and other considerations.	1 (25%)	1 (25%)	1 (25%)	1 (25%)	3.5	High
25	Statements that describe the world and are supported or contradicted by actual data make up theories.	2 (50%)		1 (25%)	1 (25%)	3.75	High
26	Following a scientific revolution, scientists have a new perspective on the world, which means that while the world does not change, they do things in it differently.	1 (25%)	1 (25%)	2 (50%)		3.75	High
27	Theories and realities are mediated by scientific models. Scientists can investigate nature and provide explanations for it by using models.	1 (25%)	2 (50%)		1 (25%)	3.75	High
28	A strong basis for scientific investigation is provided by observation and experimentation.	2 (50%)		2 (50%)		4	High
29	In the lack of "proofs," the acceptance of a new paradigm depends on persuasive	1 (25%)	1 (25%)		2 (50%)	3.25	Moderate

	strategies, arguments, and counterarguments.					
30	The accumulation of theories underpins scientific progress, with new theories theoretically and methodologically incorporating earlier ones.	2 (50%)	2 (50%)		4	High
31	When a theory's conclusions conflict with the assertions that scientists agree upon, it is considered refuted in science and the hypothesis is deemed to be incorrect.	3 (75%)	1 (25%)		3.5	High
32	The choice of a scientific model is influenced by human interests (professional, societal, etc.); it is not solely driven by the desire to comprehend nature.	2 (50%)	2 (50%)		3.5	High
33	It does not matter how theories are discovered because that is dependent on a variety of factors that defy reason. Rather, it is crucial to assess the methods through which scientists support their theories a process in which logic is crucial.	2 (50%)	2 (50%)		3	Moderate
34	Theories are useful for explaining, describing, and comprehending the world; scientists view theories as being almost true to the natural world.	1 (25%)	2 (50%)	1 (25%)	3	Moderate
35	Scientists must follow a single epistemic value: truth.	2 (50%)	1 (25%)	1 (25%)	3.25	Moderate
36	A theory is constructed as a set of claims that can be interpreted by investigation and/or observation.	1 (25%)	2 (50%)	1 (25%)	4	High
37	By using various symbolic representations, models enable us to act, think, and communicate about the world of phenomena.	2 (50%)	1 (25%)	1 (25%)	3.25	Moderate

Three percentage groups are identified, namely high (3.41-4.20), moderate (2.61-3.40), and low (1.81-2.60), as can be seen from the analysis results above. There are twelve statements for the people listed in the high category. Next, there are twenty-four statements for the moderate group. Additionally, there is only one sentence for the low category. The analysis's findings support the conclusion that, overall, stakeholder opinions toward science research and scientific activities are positively reflected in Science questionnaire results. This is also consistent with the findings of a study on the Nature of Science Conceptions by Phillips et al. (2022), which demonstrates that teacher educators must set development goals for NOS identification as their primary duty is to instill an NOS identity, particularly in upcoming educators. Personal factors, environmental influences, conflicting identities, and perseverance in overcoming obstacles to the development of an NOS identity are all components of the NOS identity. Therefore, the results of research conducted by Borekci and Uyangor (2021), also show that there is a tendency and positive perspective relationship in educational philosophies and curriculum design orientation for educators.

Implementation of Philosophy in Curriculum Development

To answer research question number 2, which is related to how school stakeholders view and apply the philosophy of science in preparing and developing the curriculum implemented in the school, especially in learning English. This research used an interview instrument by interviewing the Principal, where the questions are based on aspects of educational philosophy theory (Ornstein and Hunkins, 2014) and adapted to research needs. Here are the responses related to the matter.

Response 1

“Philosophy is the essence, knowledge is produced from observing reality using logic. So, logic is observation, observation of reality, processed using logic. That is knowledge, but there are two instruments, namely mathematics and language. Mathematics is logic and reality must be expressed verbally, so using language.”

Response 2

“This is a Catholic school, so of course the basic values are Catholicism. So, this school definitely adheres to Catholic values, because this school is part of the Church. If Catholicism values are through preaching. Apart from being based on Catholic values, our school is also based on the values of the founder, namely the Sisters of Charity of Saint Carolus Borromeus (CB Congregation). So, this school is also generally aimed at preaching, then specifically carrying out the vision of the founders. The specific value formulation is Cc5.”

Response 3

“The implementation of this school curriculum still refers to the National Curriculum while still containing the Pancasila philosophy. So, there are three applications, including the Catholicism value, the founder's vision, namely the Cc5 value, and the National Curriculum. The Cc5 values consist of Compassion, Celebration, Competence, Conviction, Creativity, and Community which will later be combined with the Pancasila Profile values.”

Response 4

“The Tarakanita Cc5 curriculum values have existed since the school was founded. Previously it was formulated under the name of Character Lessons. Now, it has been developed and reconceptualized under the name Tarakanita Character Education, starting in 2009. At that time, its formulation took approximately 4 years.”

Response 5

“In each subject, it will depend on the creativity of each teacher. Teachers will collaborate to implement a curriculum of Cc5 values per class of students. The implementation of Character Education Lessons runs in a conducive manner because of the diversity of students from different ethnicities and religions, so that the combination of the application of the Pancasila Profile and Cc5 are implemented well.”

Response 6

“We carry out an analysis of student needs at the beginning, namely using diagnostic tests for English and Science subjects. To overcome the academic backwardness of diverse students, we use matriculation.”

Response 7

“The obstacles faced are related to contextual learning models so that the Lesson Plan in Tarakanita Character Education is only used as a model and adjusted to be more contextual. The strategy used is a collaboration between teachers regarding creativity in developing more contextual lesson plans.”

Based on the results of interviews, school stakeholders view that the acquisition of knowledge is based on observation using logic and expressed through language. School institutions apply the applicable National Curriculum, namely the 2013 Curriculum for grades 11 and 12, while for grade 10, schools begin to implement the Merdeka curriculum concerning the implementation of the Pancasila Student Profile. However, because it is a private religious school, from its inception, this school also contained aspects of Catholicism by referring to the vision and mission of the school's founders, namely the Sisters of Charity of Saint Carolus Borromeus, to proclaim good news, through education. Then, besides academic teaching, related to character values, this school also formulated a curriculum formula known as Cc5 Tarakanita or an abbreviation for Compassion values which contains aspects of Celebration, Competence, Conviction, Creativity, and Community. These values are applied in a special subject called Tarakanita Character Education which will be combined with the Pancasila philosophy, one of which is diversity. The process of preparing and developing Cc5 started in 2009. In its implementation, teachers collaborated in creating a more contextual lesson plan model. Then, an analysis of students' learning needs is carried out at the beginning of a new lesson by carrying out diagnostic tests on special subjects, namely science and English.

DISCUSSION

This research attempts to see the application of the philosophy of science in curriculum development in English language learning in private religious schools. This research used questionnaires and interviews as instruments.

The views on the philosophy of science are closely related to the process of acquiring knowledge itself. The research results show that most items are dominated by medium answers that school stakeholders see the process of acquiring knowledge as based on theory, observation, hypothesis formulation, and the role of language in explaining knowledge produced scientifically. However, the falsification aspect is seen as irrelevant in the discovery of new theories. Then, the other items in which stakeholders view positively regarding the acquisition of knowledge through scientific logic and expressed through language, and based on a theoretical framework, and the formulation of hypotheses is proven by conducting empirical observations, and science is the mediator between

theory and reality. This shows that there is a connection with theory in the view of science, namely more emphasis on the period of logical positivism and The New Philosophy of Science (NPS). This is supported by the results of research by Rodriguez, et al (2021) which shows the tendency of teachers to correlate with the philosophical period of Logical Positivism/Received View, and the period of Recent and Contemporary Accounts. It should have a connection to the New Philosophy of Science. Then, as Bektas (2022) has shown, science evolves and changes throughout time. Because it takes into account scientists' cultures, beliefs, and prior knowledge, this is related to constructivist philosophy.

In the logical positivism period, this was shown in the results of the questionnaire which saw that the valid source of knowledge was sensory experience which was strengthened by logic and mathematics to provide empirical evidence. This is in accordance with what O'Leary expressed in 2004, namely that logical positivism is related to logic, truth, laws and predictions. Then there are implications for the paradigm aspect in the period of The New Philosophy of Science (NPS) which was initiated by Thomas Kuhn who saw that paradigms were part of old theories that had been used by scientists as inspiration in scientific practice as a reference for previous research and were explained based on testing and interpretation. from scientists based on the scientific methods used. This is in line with the statement that paradigm shifts at the interface of operations and information system management (Kumar et al. 2018). Thus, it allows for the development of science.

Then, as a result of the questionnaire which looked at stakeholders' views on the philosophy of science and how knowledge is acquired and its scientific knowledge, an interview process was carried out to see the implications for the implementation of the curriculum implemented in school institutions. The curriculum that is implemented in school institutions adheres to the National Curriculum that is applicable in Indonesia, specifically the 2013 curriculum and the Merdeka curriculum with the implementation of the Pancasila Student Profile (P5), which is connected to the Pancasila philosophy, which includes diversity. This is evident from the results of the interview data. This private religious school's mission is to spread good news via education, and it is founded on the religious vision of the Sisters of Charity of the Congregation of Saint Carolus Borromeus. It is imilar to the work of Alemdar and Aytack (2022), who found that teachers' inclinations toward an educational philosophy have a significant role in curriculum design and are a strong predictor of curricular autonomy. Procedural and professional development autonomy are strongly predicted by a progressive educational philosophy trend.

Besides, there is also the idea of formulating a separate curriculum known as Cc5 which is the value of Compassion which consists of the aspects of Celebration, Competence, Conviction, Creativity, and Community. This formulation is applied in a special subject which was previously known as Character Learning, and has now been transformed into a lesson called Tarakanita Character Education which was initiated in 2009. Aspects of the Pancasila philosophy are blended with elements of the Cc5 Tarakanita principles. One such component is diversity: there is diversity within the school community, including diversity in terms of ethnicity and religion. In its implementation, teacher creativity is required in creating lesson plans that are contextual and tailored to student needs so that teachers implement a collaborative system so that the implications are more optimal. Thus, school institutions use essentialism, which holds that the values included in education should be based on obvious and clear values, in accordance with Ornstein and Hunkins' (2014) thesis of educational philosophy as a basis for planning and designing curriculum last for a long time in order for a nation's educational system to stay stable and targeted. Stated differently, education needs to be grounded in historically significant ideals. This supports the claim that essentialism is a globally recognized and enduring philosophical movement that advocates for a traditional and conservative educational system.

The study's conclusions indicate that there is a relationship between the perspectives of stakeholders on the philosophy of science and how that philosophy has been incorporated into the curriculum that has been put into place in the educational setting as consistent with the earlier studies. Thus, there are consequences for the New Philosophy of Science (NPS), which employs the notion of a scientific paradigm, and the logic of positivist philosophy, which places a strong focus on empirical data. Next, its use in the creation of the curriculum that is taught in schools is associated with essentialism, an educational ideology that follows preexisting principles.

CONCLUSION

The findings of the study support the notion that curriculum development and the philosophy of science have consequences for educational institutions. One of the private schools in Indonesia, Carolus School, adheres to Pancasila values by implementing and fusing the national curriculum with its curriculum. The findings of the study point to a theoretical relationship between the essentialism philosophy school and its implications for curriculum development, and the logical positivism school and paradigm in the new philosophy of science. However, considering the study's limited scope which only examined one private school organization, it is expected that future research will be able to enlarge the study's purview to maximize the amount of data gathered and obtain more thorough justifications from both private and state educational establishments.

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