



# THE ROLE OF ACADEMIC CURRICULUM DESIGN AS PREDICTORS OF TEACHING INSTRUCTIONAL APPROACHES FOR PRIMARY SCHOOL TEACHERS WITHIN KLANG VALLEY

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## ABSTRACT

**Background:** As a result, the development of a professionally knowledgeable, competent, multiscale, and quickly adaptive to change teacher is aided by the teacher education curriculum objectives. Teaching continues to employ teacher-centred instructional approaches for curriculum implementation, even though the core teacher education curriculum promotes the use of learner-centred instructional approaches. Even though numerous research has been conducted on teacher education, the curricular orientation of academics concerning instructional method selection has been mostly disregarded in the Malaysian context. Furthermore, problem-based curriculum design in learning is a technique in which students learn by solving complex and open-ended issues. These are real-world situations that are used to encourage pupils to learn through the application of principles and concepts. PBL is a teaching style as well as a curriculum approach. It can help students develop critical thinking skills, problem-solving ability, communication skills, and a desire to learn for the rest of their lives (Ali, 2019).

**Purpose:** The study will propose new knowledge gaps in Malaysian curriculum design and teaching among primary schools. To also look into the role of current curriculum design for primary teachers in a few Klang Valley schools.

**Methodology:** Qualitative research approach will be used, web analysis, and interviews will be conducted.

**Conclusion:** This study will investigate the existing study that investigated and related academic curriculum orientations to the choice of instructional approaches used by the academic curriculum in primary teachers in Malaysia.

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## 1.1 INTRODUCTION

Learner-centred instructional approaches have been found to lead to the development of creative abilities, values, attitudes, and engagement, according to research. As a result, the development of a professionally knowledgeable, competent, multiscale, and

quickly adaptive to change teacher is aided by the teacher education curriculum objectives. Teaching continues to employ teacher-centred instructional approaches for curriculum implementation, even though the core teacher education curriculum promotes the use of learner-centred instructional



approaches. Because the curricular objectives are arguably not met, the continued use of teacher-centred instructional methodologies in primary teacher education has an impact on the quality of teacher education. In addition, instructors' problems and tasks must be solved independently (Divrik et al., 2020).

### **1.2 PROBLEM STATEMENT**

Even though numerous research has been conducted on teacher education, the curricular orientation of academics concerning instructional method selection has been mostly disregarded in the Malaysian context. Whether academics at teacher primary schools are oriented toward teaching topic mastery and/or the process of teaching and learning, and hence the choice of instructional methodologies, are some of the important problems that need to be answered. What about social knowledge, skills, values, and attitudes that affect all aspects of life in modern society, including teacher education? If the goals of teacher education are to be met, this is a critical concern. In this context, the current study sought to determine the impact of curricular design and teaching on an academic choice of instructional methodologies in primary schools in Klang Valley.

Furthermore, problem-based curriculum design in learning is a technique in which students learn by solving complex and open-ended issues. These are real-world situations that are used to encourage pupils to learn through the application of principles and concepts. PBL is a teaching style as well as a curriculum approach. It can help students develop critical thinking skills, problem-solving ability, communication skills, and a

desire to learn for the rest of their lives (Ali, 2019).

### **1.3 RESEARCH OBJECTIVES**

The goal of this research is to uncover new knowledge gaps in Malaysian curriculum design and teaching among primary schools. To also look into the role of current curriculum design for primary teachers in a few Klang Valley schools.

1. To investigate the influence of academic rationalism and teaching orientation of instructional approaches used by teachers among selected primary schools in Klang Valley.
2. To evaluate the current academic technological orientation influence on instructional approaches used by primary teachers among selected primary schools in Klang Valley.
3. To establish an academic influence of social reconstruction orientation for selecting instructional approaches to use among primary teachers in selected primary schools within Klang Valley.
4. To investigate the related studies of curriculum design and teaching among primary schools in Malaysia.

### **1.4 RESEARCH QUESTIONS**

1. What is the influence of academic rationalism and teaching orientation on instructional approaches used by teachers among selected primary schools in Klang Valley?
2. What is the current academic technological orientation influence on instructional approaches used by primary teachers among selected primary schools in Klang Valley?
3. What is the academic influence of social reconstruction orientation for selecting

instructional approaches used among primary teachers in selected primary schools within Klang Valley?

4. What are the related studies of curriculum design and teaching among primary schools in Malaysia?

### **1.5 SIGNIFICANCE OF THE STUDY**

There's an existing study that investigated and related academic curriculum orientations to the choice of instructional approaches used by the academic curriculum in primary teachers in Malaysia. Where most obtain and provide information to policymakers in teacher education and teacher education institutional leadership in the hope of improving primary teacher education in the country.

### **1.6 SCOPE OF THE STUDY**

The scope of the study will limit to some selected primary school within Klang Valley, Malaysia.

## **2.0 LITERATURE REVIEW**

### **2.1 CURRICULUM DESIGN AND DEVELOPMENT**

How we position the curriculum components are referred to as curriculum design. All curriculum Regardless of the supporting curriculum model, designs strive to cover four curriculum components. Why do we begin to instruct or set goals? What should we teach in order to meet our goals and objectives? How can we connect specific learning experiences? What have we learned, and what are the next steps for the educational programme, students, and teachers as a result? Although most, if not all, curriculum designs incorporate these four characteristics, how these factors are approached varies significantly depending on the curriculum

philosophy and model on which the design is based. Subject-matter-based designs, which emphasise logical content structure, and learner-centred designs, which focus on the learners and their needs, for example, necessitate different approaches to the four curriculum components (Mohanasundaram, 2018).

There are several key components to the concept of "curriculum design." A curriculum and its design frequently refer to established curricula standards that are related to specific areas of knowledge for many teachers and students. Some experts believe that in this situation, the curriculum can be viewed as a response to administrative demands or quality assurances (Druzhinina et al., 2018).

### **2.2. TEACHERS AS CURRICULUM DESIGNERS**

The academic curriculum is a contentious issue that has been explored and revised repeatedly throughout the history of American education. The curriculum reflects the knowledge that is considered important for children to learn in school, and it evolves to reflect society's ideals. "Curriculum inquiry in educational inquiry; both appropriately address the what and how questions together," according to some researchers, and "curriculum inquiry in educational inquiry; both properly address the what and how questions together" according to others (Trinter & Hughes, 2021).

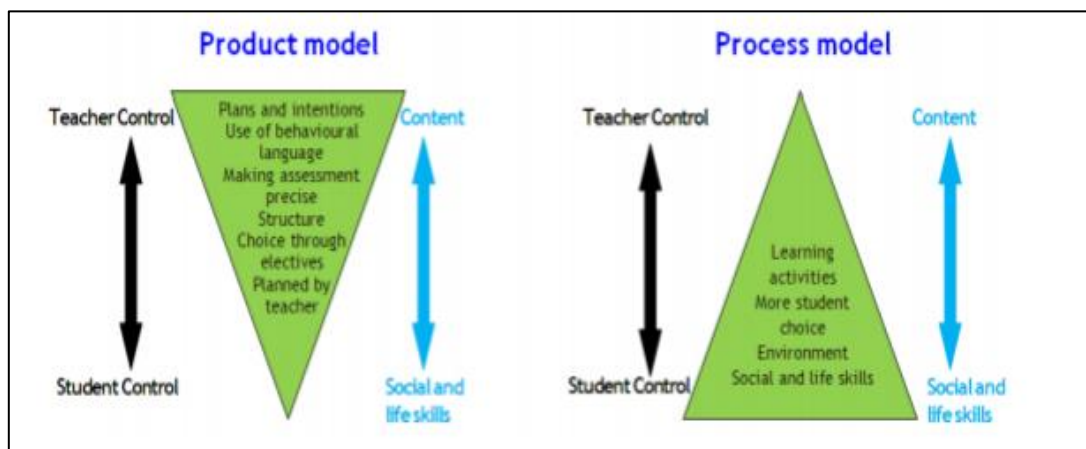
### **2.3 EVALUATION OF CURRICULUM MODELS, DESIGN AND DEVELOPMENT**

Neagley and Evans (1967) defined curriculum as "all the planned experiences provided by schools to students in order for them to achieve all predetermined learning outcomes using their best abilities. Inlow (1966)

describes the curriculum as a coordinated effort by schools and institutions to assist students in achieving predetermined learning outcomes. However, Johnson (1967) argued that a curriculum is nothing more than a planned series of learning outcomes from which the results of instruction can be predicted (Macalister & Nation, 2019).

In this regard, curricular models aid curriculum designers in laying out the reasons for specific teaching, learning, and evaluation approaches transparently and systematically

(Antony-Newman, 2020). Although there is some technical usage of curriculum models, human components such as personal attitudes, values, and sentiments are, to some extent, overlooked in the curriculum models, according to the study. Therefore, Professional and personal judgement in curriculum design and development, taking into account the interests and power of many stakeholders to improve student learning (Sayed Munna & Kalam, 2021).



**Figure 1: The product and process models of curriculum development**

**Sources: (Sayed Munna & Kalam, 2021)**

The product model is comparable to Tyler's core principles of curriculum, which aid teachers in creating curriculum and developing precise assessment techniques, through the use of proper planning and intent. By shifting the emphasis away from lists of materials and toward social and learning skills, the product model can be extremely useful for designing and communicating observable student learning outcomes. Recent research in this field indicates that the product model helps the

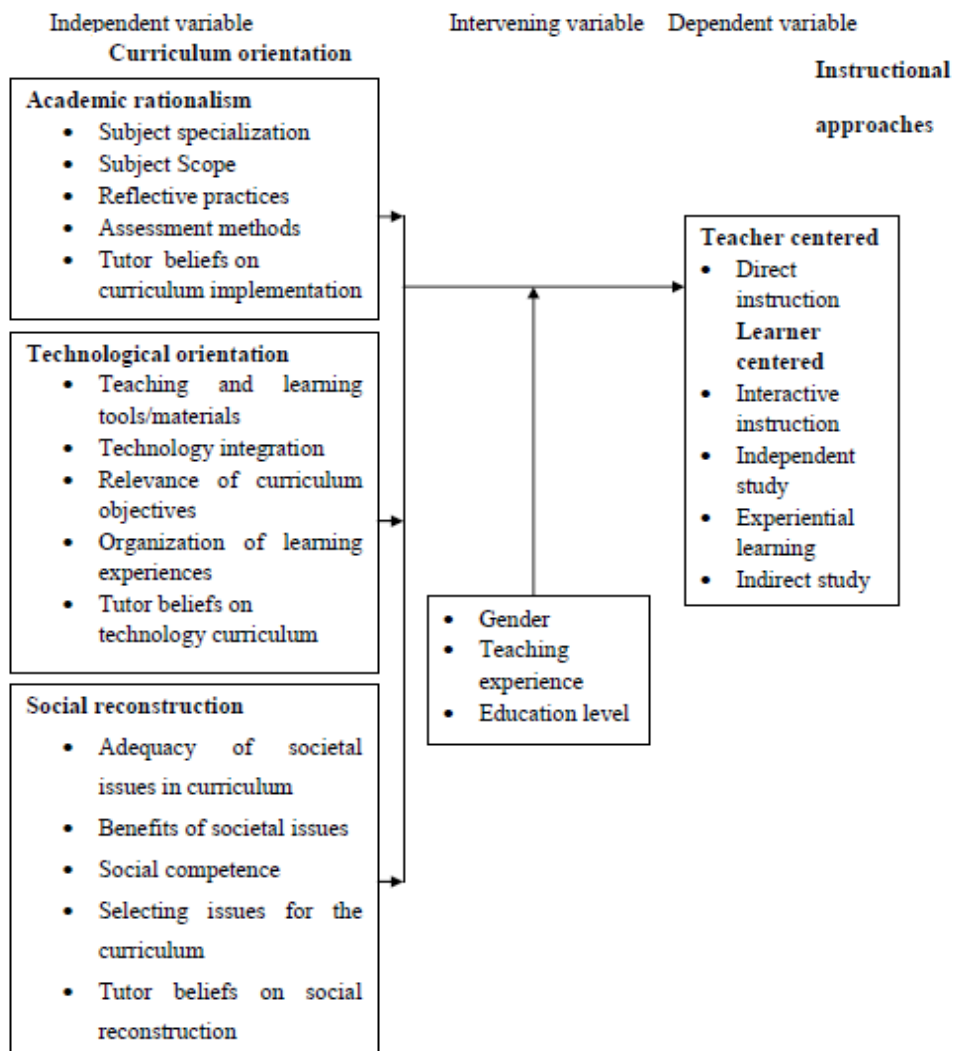
curriculum designer define learning outcomes that are not overly prescriptive. After considering the challenges of the Product model, it is suggested that student motivation be regarded as a significant factor in the learning process. In other words, learning objectives should not be overly prescriptive; rather, they should be broad and flexible, allowing students to demonstrate and express appreciation, satisfaction, and happiness in their assessments, thereby illustrating the benefits of the process model. To achieve effective results, the process model

encourages more intuitive curricular preparation (processes, messages, and conditions) (Sayed Munna & Kalam, 2021).

### 3.4 CONCEPTUAL FRAMEWORK

The relationships between the independent and dependent variables are depicted in figure 2 conceptual framework. Academic

rationalism, as depicted by subject specialization, subject scope, reflective practices, assessment methods, and tutor beliefs on curriculum implementation, all of which depict the intellectual growth of teacher trainees, influences the choice of instructional approaches, as shown in figure 2.



**Figure 2: Conceptual Framework for Curriculum Orientation on Instructional Approaches**

Similarly, technological orientation influences the choice of instructional approaches through the use of the most appropriate teaching and learning methods and resources

(T/L materials/or tools), technology integration into teaching, use of relevant curriculum objectives, use of well-organized learning experiences, and tutors' beliefs on a

technology curriculum. The goal of technological orientation is to improve the acquisition of higher-order thinking skills such as critical thinking, creativity, and problem-solving by communicating knowledge and procedurally facilitating learning.

Social reconstruction, as defined by the social concerns and substance of social issues in teacher education curricula, as well as the benefits and acquisition of social competence, as well as tutor beliefs on social reconstruction curricula, all affect instructional approaches. Societal reconstruction is based on the idea that a teacher's education programme should prepare them to adapt to social changes and new situations while maintaining their professional knowledge and skills. Appropriate instructional procedures for achieving teacher education curriculum objectives are thus contingent on how well the academic curricular orientation aligns with those objectives.

### **2.5 ACADEMIC RATIONALISM AND INSTRUCTIONAL APPROACHES**

Academic rationalism is based on the belief that man has progressed socially, economically, intellectually, and physically as a result of mastery of the most valuable knowledge. Academic rationalism is based on content arranged within recognised academic disciplines that shape learning. Similarly, instructional methods should be designed to improve mastery of the subject matter (VanTassel-Baska, 2021). Academic rationalism is based on the notion that a subject's curriculum should be organised around conceptions of knowledge because they are an intrinsic element of the curriculum. Academic subjects that are largely focused on intellectual development are the principal subject matter of instruction.

Understanding tutors' academic rationalism is critical to meeting teacher education curriculum goals. Academic rationalism's guiding principle is knowledge acquisition, which is important in accomplishing the goal of generating knowledgeable and competent teachers in the twenty-first century (VanTassel-Baska, 2021).

### **2.6 TECHNOLOGICAL ORIENTATION AND INSTRUCTIONAL APPROACHES**

Educational reforms like the proposed competency-based teacher education (CBTE) in main teacher education primary schools call for a shift away from teacher-centred instructional techniques and toward learner-centred instructional approaches. The focus is on keeping pupils engaged in long-term, meaningful learning (KICD, 2019). As a result, a technologically oriented curriculum can provide significant support for long-term learning by emphasising a systematic process of strengthening the acquisition of basic and high-order abilities through the use of appropriate instructional methodologies. The purpose of this study was to see how academic technological orientation influenced their choice of instructional approaches, as these are important factors in the successful implementation of teacher educational curriculum (Chen & Tsai, 2021).

### **2.6 SOCIAL RECONSTRUCTION AND INSTRUCTIONAL APPROACHES**

The social reconstruction viewpoint focuses on societal issues (Hunkins & Ornstein 2016). A social reconstruction curriculum, according to Sukri, Rizka, Sakti, Maududy, and Hadiprayitno (2018), should provide opportunities for collaborative interaction between learners and their peers, learners and teachers, learners and their environment, and learners and other learning resources to develop socially adaptive behaviours and

competencies that allow them to solve social problems. Such a curriculum is based on an understanding of current and relevant concerns in society, as well as social and cultural standards (Wekerle et al., 2022).

### 3.0 METHODOLOGY

### 3.1 SUBJECTS

#### 3.1.1 POPULATION AND SAMPLE

The Krejcie & Morgan table will be used to determine the population sample for the study. A total Number = 100 and Sample = 80 will be involved in the survey which includes principals, teachers and parents.

Table 3.1  
 Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size  
 Source: Krejcie & Morgan, 1970

Figure 3: Krejcie & Morgan

While the participants of a population is a collection of people, events, or things that share observable characteristics. Three populations were studied in this study: teachers, principals and parents from a variety of Malaysian primary schools in Klang Valley. A sample frame is a list of all potential sampling subjects that are representative of the population (Mugenda and Mugenda, 2003). A sample frame could comprise records from the building business, for example. A formal list may not exist in some cases;

nonetheless, literature advises that if no sampling frame exists that fulfils the research's criteria, the researcher can develop one with the required features or attributes (Mugenda and Mugenda, 2003).

#### 3.1.2 INCLUSIONARY AND EXCLUSIONARY CRITERIA

The inclusion criteria are consistent, reliable, uniform, and objective in identifying the study population. The exclusion criteria include factors or characteristics that disqualify the recruited population from participation in the

study. These variables may act as confounding factors for the outcome parameter. Teachers, principals, and parents excluded. While none academic staff will be excluded. Furthermore, the inclusion criteria are consistent, reliable, uniform, and objective in identifying the study population. Establishing specific inclusion criteria is particularly important in qualitative research because it helps to ensure that participants can provide the necessary information to answer your research questions. Age, gender, race, and ethnicity are examples.

### **3.1.3 SAMPLING PROCEDURES (SNOWBALL SAMPLING)**

Snowball sampling sample will be used where snowball sampling, also known as "chain referral" or "networking" sampling, occurs when a researcher begins by gathering data from a small number of people and then relies on these individuals to connect them with additional which includes teachers, principals and parents.

### **3.2 RESEARCH APPROACH**

A qualitative research approaches or method will be used. The approach's goal is to combine the strengths of qualitative methodologies while minimizing the inconvenience. In addition, the instrument will be utilised through the interview that will use to collect data from the respondents for the study. Because descriptive data is typically collected by a questionnaire survey, this method of data collection was chosen.

### **3.3 TRUSTWORTHINESS**

To be considered trustworthy, qualitative researchers must demonstrate that data analysis was performed in a precise, consistent, and exhaustive manner by

documenting, systematising, and disclosing the methods of analysis in sufficient detail for the reader to determine whether the process is credible. This study includes all aspect of the trustworthiness aspect which included credibility, dependability, confirmability and transferability.

#### **3.3.1 VALIDITY AND RELIABILITY OF INSTRUMENTS**

Validity of the data: The sample was selected at random using established scientific random sampling techniques. Due to the fact that the questionnaire was not distributed on a particular day, there may have been biases introduced based on how respondents interpreted the event in relation to the questions. Prior to the interview, the subjects were not given the questionnaire. The sample was selected at random using established scientific random sampling techniques. Because the questionnaire was not distributed on a specific day, there may have been biases introduced based on how respondents felt about the situation when responding to the questions.

Reliability: Reliability research can be used to examine the features and elements of measurement scales. The reliability analysis method is used in this study to quantify a variety of commonly used scale-reliability measures and to provide information on the correlations among the different scale items. examining the measurement's validity to determine whether the metric calculates the desired result. It deals with how well an empirical measure captures the actual import of the term under consideration. Because of the way the questions are set up, participants will exhibit a high level of internal consistency



and dependability (Alston, 2018).

### 3.4 DATA COLLECTION

The data collection procedure will use interviews. However, for the review studies, the data will be gathered using Scopus rather than Google Scholar or Web of Science. Previous research employed Scopus instead of other databases to avoid the complexity of checking and replicating publications from other databases. Scopus has a far better indexing system than other databases, which

improves the opportunity to access more recent publications.

### 3.5 DATA COLLECTION PROCEDURE

A research interview involves both an interviewee and an interviewer. The interviewer manages the encounter and asks questions, while the interviewee responds. Interviews may be conducted in person or over the phone. The internet is also gaining popularity as a tool for conducting interviews.

Table 1: Respondent population of the study

S/N	Population target	Interviewer participants
1.	Sekolah Kebangsaan Desa Aman, Klang Valley	- Teachers - Principals - Parents
2.	Sekolah Jenis Kebangsaan (C) Klang Valley	- Teachers - Principals - Parents

### 3.6 ANALYSING QUALITATIVE DATA

The analysis method will be adopted from Barbara (2004) discuss several qualitative data analyses including ethnographic analysis narrative analysis, phenomenological analysis, and constant comparative method. See Table 1 for example.

Table 2: Approaches to analysis presented by Merriam (1998) and Barnard (2000)

Author	Approaches
Merriam (1998)	Ethnographic Analysis Narrative Analysis Phenomenological Analysis Constant Comparative Analysis
Barnard (2000)	Hermeneutic/Interpretive Analysis Narrative/Performance Analysis Discourse Analysis Ground Theory Analysis Content Analysis Cross-culture Analysis

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