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A systematic review of concepts in understanding null curriculum

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Abstract

Amidst the effort to extend its knowledge base, however, there is still a difficulty in understanding the null curriculum. Thus, the general purpose of this paper is to synthesize the concepts in understanding the null curriculum. Following the research method of the systematic review, relevant materials were searched, gathered, and analyzed. Based on the results, it can be concluded that the null curriculum takes multiple dimensions, occurs at hierarchical levels, and can be identified using different frames of reference. When placed in a broader analytical perspective, the overlaps in the intellectual processes dimension, the inconsistencies of the implemented and experiential levels, and the unknown scope of universal curriculum draw challenges in fully understanding the null curriculum. It is recommended that the ground where the concepts intersect should be consistently used, the boundaries of the null curriculum as regards the different levels should be established, and the scope of the universal curriculum as a frame of reference should be explored in research.

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1. Introduction

The term "null curriculum" was pioneered by curriculum scholar Eisner (1979). Based on his seminal text on the sociology of curriculum, there are three types of curriculum that all schools offer: the overt curriculum which is taught and learned; the hidden curriculum which is not taught but learned; and the null curriculum which is not taught and not learned. He argued that there is an irony null curriculum, but if educators are concerned about the consequences of teaching something on one hand and not teaching something on the other, then the null curriculum should be given attention. It was his

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argument that gained widespread citation in several discussions revolving around the null curriculum that ignorance is not a neutral void; it has powerful consequences.

Since its inception in the formal discourse of curriculum studies, different concepts in understanding the null curriculum have been attempted and presented by scholars (e.g. Provenzo et al., 2009; Assemi et al., 2014). These concepts, in trying to describe the features of the null curriculum, revolve around the dimensions that consist of the null curriculum, levels where the null curriculum occurs, and frames from which the null curriculum can be identified.

However, rather than contribute towards the establishment of a common knowledge base, it is observed that these different concepts have otherwise made the null curriculum a muddy juncture. As a consequence, in research, different scholars mean the null curriculum differently. For example, a critical review of several related studies (Watson et al., 2005; Borek, 2012; Adib et al., 2014; Rezapour et al., 2014; Wilkinson, 2014; Asghar et al., 2015; Yang, 2016) show different concepts as regards the application of the locus or levels where null curriculum occur. As Flinders et al. (1986) would describe, the null curriculum is an ambiguous concept in a field in a field that is, by its very nature, full of ambiguities.

This problem is exacerbated by the paucity of scholarly efforts that attempt to enlighten the nature of the null curriculum amid these different concepts. Some recent studies (e.g. Gholami et al., 2016; Marzooghi et al., 2017) have discussed the nature of the null curriculum at some points but others have fallen short at synthesizing the different concepts towards a better understanding of the null curriculum. As far as this present work is concerned, there has been no research to date that aimed at systematically gathering all the relevant writings about the null curriculum and reaching a common ground.

Given the above problems, one of the fundamental functions of curriculum studies is to address the need for illuminating the range of competing concepts that are to be associated with the scope of events that belong to the field of curriculum studies (Beauchamp, 1961/1972/1981). If such an event of the null curriculum is claimed by some scholars to paradoxically function in some influential ways through its absence, then such different concepts should be brought under the lens of curriculum inquiry towards a better understanding of the null curriculum. This point is where the present study takes the opportunity to contribute.

Thus, this article generally intended to synthesize the concepts in understanding the null curriculum. Specifically, it sought answers to the following questions:

- 1. What themes can be identified from the different concepts of the null curriculum?
- 2. Which concepts draw challenge when placed in a broader analytical perspective?

2. Method

The method used for this study is the systematic review. Green and Higgins (2008) adopted a definition of a systematic review as an attempt to gather all empirical evidence that answers a particular eligibility criterion to answer a research question. It uses explicit, organized methods selected to reduce biases, thus providing reliable data from which conclusions can be drawn and recommendations offered.

A model of the systematic review is offered by Moher (2009) called Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). This systematic review model originally offers four phases: Search, Screening, Eligibility, and Included. These phases were followed in gathering the relevant materials for this study. It is discussed and graphically presented.

2.1. Search

The researcher used Google search engine and online research databases facilitated by the University of the Philippines. These databases are Google Scholar, Springer Nature, Science Direct, Taylor Francis, Elsevier, and Wiley. The searches were restricted to English, accessible resources in full text, and written from the year of inception of the concept of the null curriculum in 1979 to present. The materials included were not restricted to articles only but also to include books, essays, and theses.

Since the topic of interest of this study is identified, a search was conducted using the keyword "null curriculum". The keyword "fundamental concepts" was discarded because it was assumed that any relevant writing on the null curriculum would discuss its fundamental concept itself. The combined search generated a total of 43 materials in the pool.

2.2. Screening

The next step in the systematic review is the screening of the materials found. The titles, abstracts, and overviews of the materials were carefully examined. The main standard used to screen the materials were: relevance to the topic of the null curriculum. The materials that did not meet this standard were excluded in the pool. At the end of the screening process, there were 16 materials retained.

2.3. Eligibility

The materials gathered were further subjected to eligibility based on their relevance to the general interest of this review which is on the dimensions, levels, and frames of the null curriculum. This process eliminated the materials found not relevant to the final criterion set. An eligible pool of seven materials was included at this stage.

2.4. Included

The eight materials included in this study consist of three books, one essay, and four articles. When grouping them into their particular focuses concerning the features of the null curriculum, there were three on dimensions, three on levels, and two on frames.

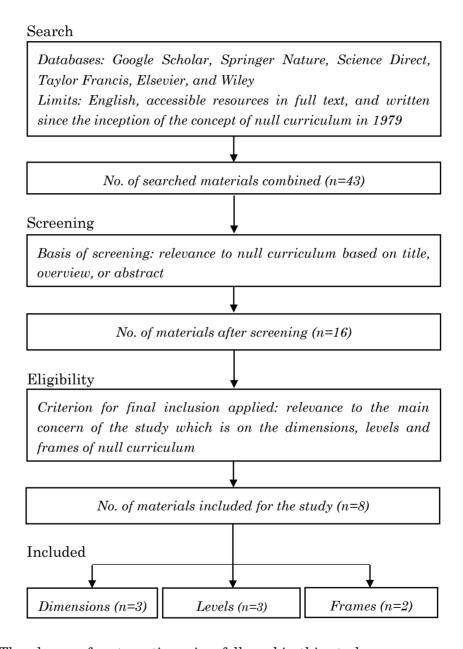


Figure 1. The phases of systematic review followed in this study.

3. Results

3.1. Themes of the concepts of null curriculum

This study sought to identify the themes that emerge when the fundamental concepts of the null curriculum are examined against each other. Table 1 shows the resulting themes. Each theme has a description discussed in the narrative that follows.

Table 1. Themes identified from the concepts of null curriculum

Sample Meaning Units	Concept	Theme
Null curriculum consists of two dimensions: intellectual processes and contents or subject areas. The intellectual processes dimension is further comprised of cognitive, psychomotor, and affective domains.	Null curriculum consists of intellectual processes dimension and contents or subject areas dimension.	Null curriculum has multiple dimensions
Null curriculum might include learning experiences, such as those to do with pleasure, and of what can be described spiritual as opposed to cognition, broadly assumed as values dimension.	Null curriculum is characterized by a broadly excluded dimension of the affect.	
Null curriculum involves two levels: the cognitive processes that are disregarded and certain contents from the curriculum for political or cultural reasons.	Null curriculum has cognitive processes and content dimensions.	
Null curriculum occurs in three levels: the intended which politicians or authors of school textbooks exclude; the implemented is that teachers ignore or exclude; and the experiential that students neglect.	Null curriculum occurs at intended, implemented, and experiential levels.	Null curriculum occurs at hierarchical levels
Null curriculum is divided into two broad categories: the intended that is affected by the government policies, dominant parties, and educational systems, and the implemented that occurs when teachers and other authorities remove certain parts of the curriculum.	Null curriculum occurs at the intended and implemented levels.	
Null curriculum can be determined if a "curriculum universe" is defined. If a curriculum universe is defined, then one may hold an overt curriculum in one hand and a null curriculum in the other.	Null curriculum can be identified through the curriculum universe.	Null curriculum can be identified using different frames of reference
Null curriculum appears twice, as gaps can emerge between the rhetorical curriculum and formal curriculum and between the formal curriculum and received curriculum.	Null curriculum can be identified based on gaps from the rhetorical curriculum and the formal curriculum.	

Theme 1: Null curriculum has multiple dimensions. The null curriculum is not a neutral void (Eisner, 1979) but is paradoxically characterized by dimensions that define its scope. Scholars who were interested in the dimensions of the null curriculum have common concepts but they essentially vary in emphasis.

Eisner (1979), in his seminal text that described the null curriculum, comprehensively conceptualized the null curriculum as consisting of two dimensions: the intellectual

processes and contents or subject. He further taxonomized the intellectual processes dimension as having three domains that exhaust the parameters of the mind: cognitive, psychomotor, and affective. This trilogy of intellectual processes dimension in modern times refer to the known concept of competencies, which by definition is a set of knowledge, skills, and values (Hayes, 1979; Houstan, 1987; Parry, 1998).

On the other hand, other scholars have proposed "new" dimensions of the null curriculum over the years. Walsh (1993) emphasized in his discussion a dimension of the null curriculum called learning experiences, such as those to do with pleasure, and of what can be described spiritual as opposed to cognition. This dimension can be broadly assumed to as the affective dimension. This is supported by White (2004) and Gottlieb (2017) by adding values, attitudes, pleasures, and emotions separately in their respective discussions about the null curriculum.

Provenzo et al. (2009) also conceptualized the null curriculum as involving such dimensions as cognitive processes and contents that are disregarded from the curriculum for political or cultural reasons. They gave an example of the cognitive dimension as when science is taught in an approach that involves mostly facts and formulas rather than discovery. The content dimension may take forms such as the exclusion of certain tribes in the books or historical preference on certain gender over the others in the lessons.

Theme 2: Null curriculum occurs at hierarchical levels. Null curriculum occurs at points when people of different degrees of authority exclude something from the curriculum. While scholars have tackled the levels of null curriculum differently, there is a considerable agreement. When these different levels are synthesized, they can be organized as intended null curriculum, implemented null curriculum, and experiential null curriculum.

Gholami et al. (2016), in their depiction of the locus where null curriculum occurs, named the first level as the intended null curriculum. They described the intended null curriculum as caused by government policies, dominant parties, and educational systems. For example, they pointed out the change of curriculum authorship mainly to serve the interests of a certain party, leading to the change of contents. The second level is called implemented null curriculum described as which occurring when teachers and other authorities remove parts of the curriculum because, for one reason, to meet the needs and interests of students.

These two levels, the intended null curriculum and implemented null curriculum, are concurred in the earlier writings of Assemi et al. (2013) and adapted by Adib et al. (2014). Moreover, both authors added a third level known as the experiential null curriculum. They described implemented null curriculum as one that is caused by students themselves when they neglect or pay little attention to competencies or contents which

they are supposed to learn for some reason like students feel these competencies or contents are not in their areas of talent or interests.

Theme 3: Null curriculum can be identified using different frames of reference. Scholars agree that the null curriculum can only be identified from the perspective of a broader frame of reference. It emerged that three frames of reference are functional starting points to determine the null curriculum. These frames of reference are universal curriculum, rhetorical curriculum, and overt curriculum.

The term universal curriculum is operationally formulated in this review as the general curriculum of all possible elements in the field of study, taking inspiration from the seminal work of Flinders et al. (1986) on the theoretical basis and practical usage of the null curriculum. They described that in determining the null curriculum, a "curriculum universe" should be identified. If a curriculum universe is identified, then one may grasp an overt curriculum in one hand, and so to speak, a null curriculum in the other.

On the other hand, Mitchell (2016), in his illustration of the types of curriculum, identified two frames of reference in determining the null curriculum. The first is called the rhetorical curriculum, defined as a curriculum that comes from an overarching educational body or professional organization involved in concept formation and content changes (Wilson, 2015). This type of curriculum can be broad and based on the expert knowledge of overarching educational bodies or professional organizations. With the rhetorical curriculum as the frame of reference, the null curriculum can be identified by comparing the overt curriculum and then identifying what processes or contents are absent, forming the null curriculum.

The other frame of reference identified by Mitchell (2016) is the overt curriculum. The overt curriculum is also variously known in the literature as the "written curriculum" and "explicit curriculum" (Eisner, 1979) to mean the curriculum confined in the written understandings and directions formally designated by authorities (Wilson, 2015). It is also often termed as an "official curriculum" that is embodied in approved state curriculum plans and guides (Posner, 2005). According to Mitchell (2016), the null curriculum emerges when what is intended in the overt curriculum is not realized in the received curriculum or what students take out of the classroom.

3.2. Challenges in the concepts of null curriculum

This study further attempted to look at the challenges in the fundamental concepts of the null curriculum. After a closer look at each concept concerning a broader analytical perspective on the phenomenon, this study identified the following challenges:

Challenge 1: The overlaps in the intellectual processes dimension. As can be recalled, Eisner (1979) originally conceptualized that the null curriculum consists of the

intellectual processes dimension and contents or subject areas dimension. He further described the intellectual processes dimension as composed of the cognitive, psychomotor, and affective domains. However, it can be observed that other scholars interpreted and organized specifically the intellectual processes dimension and its three domains differently. While some regarded the trilogy as compact, others tried to separate the domains from each other.

Provenzo et al. (2009) previously discussed two dimensions of the null curriculum. According to them, the first dimension involves what they called cognitive processes that are disregarded as the null curriculum. They gave an example of this dimension as memorization, creativity, and independence. However, Eisner (1979) was advanced in his time that he had identified cognitive processes earlier as one of the three domains under the intellectual processes dimension. He critiqued this artificial separation in the light of the practice where educators place too much emphasis on the cognitive domain in teaching.

Furthermore, Walsh (1993) stressed an affective dimension of the null curriculum, which in other words, is the learning for its own sake. This attempt to separate the affective domain from the intellectual processes dimension is a move against the overemphasis of the cognitive domain. However, strictly speaking, affective as a dimension still falls under the broader concept of intellectual processes. This is supported by Noddings (2012) who later contended that the affective domain is one of the trilogy domains under the dimension of intellectual processes and should not be treated as independent.

Eisner (1979) is still the most cited author when it comes to the idea of dimensions of the null curriculum. The differences in the dimensions may have resulted from the different contexts of the authors, thus placing an overemphasis on the point of elevation of one domain to a dimension. Nonetheless, this feature of the null curriculum just revolves around the two dimensions and the three domains. Some overlaps appear due to the use of the word "dimension" to mean just a "domain".

Challenge 2: The inconsistencies of implemented and experiential levels. The hierarchical concept of intended, implemented, and experiential levels of the null curriculum first appeared in the writing of Assemi et al. (2013). However, when closely examining specifically the levels of implemented null curriculum and experiential null curriculum against the fundamental nature of the null curriculum, some inconsistencies come into view.

First, the implemented null curriculum, described as intellectual processes or contents that teachers remove or ignore (Assemi et al., 2013; Adib et al., 2014; Gholami et al., 2016), is a curriculum that has been embodied in the written intentions of the overt curriculum, only excluded by the teachers in the process. This implemented null curriculum appears to be parallel to the unselected curriculum and unenacted curriculum

in the critical realist ontology of the curriculum of Wilkinson (2014). He explained that unselected curriculum is comprised of topics from the national overt curriculum but are not selected by teachers for the school while the unenacted curriculum is a curriculum comprised of topics for enaction from the school overt curriculum but are not enacted by the teachers in the classroom. It is clear that both the unselected curriculum and unenacted curriculum are embodied in the written intentions of the overt curriculum, only to be excluded in the process, which resembles the notion of the implemented null curriculum.

Moreover, in the same typology, Wilkinson (2014) distinguished the null curriculum at the level of national policy is comprised of those topics that are omitted by policymakers and curriculum planners, thus not published in the written intentions of the educational system. This null curriculum described in this typology is different from the unselected curriculum and unenacted curriculum, thus different from the implemented null curriculum of Assemi et al. (2013), Adib et al. (2014), and Gholami et al. (2016). Hence, in a strict sense, the unselected curriculum, the unenacted curriculum, and the proposed implemented null curriculum fundamentally remain a portion of the overt curriculum, but precisely not a null curriculum at the same time.

Second, the experiential null curriculum, defined as intellectual processes and contents that students neglect or pay little attention (Assemi et al., 2013; Adib et al., 2014), denotes a curriculum that has been taught by teachers in the classroom but not learned by the learners in the process. Hence, in the sense that intellectual processes and contents in the experiential null curriculum are taught by the teachers, they cannot be considered at the same time as null curriculum, which by original definition, is a curriculum that is not taught and not learned (Eisner, 1979; Le Grange, 2016; Milner, 2017).

Furthermore, these proposed levels of implemented null curriculum and experiential null curriculum (Assemi et al., 2013; Adib et al., 2014; Gholami et al., 2016) seem to have been technically elaborated in curriculum alignment studies that attempt to find out the gap in between the written dimension, enacted dimension and assessed dimension of the overt curriculum. For example, given the recent emphasis on the attainment of intellectual processes and contents in education, scholarly works of Webb (1997), Anderson (2002), Pellegrino (2006), and Seitz (2017) stressed that appraisal of absent intellectual processes and contents between written dimension, enacted dimension, and assessed dimension should be done to determine the gap. The concept of a gap in between the written dimension, enacted dimension, and assessed dimension in curriculum alignment studies technically points both to the levels of implemented null curriculum and experiential null curriculum. The implemented null curriculum is the gap between the written dimension and the enacted dimension while the experiential null curriculum is the gap between the gap between the enacted dimension and the assessed dimension.

Therefore, for instance, in the exploratory investigation of the null curriculum in the field of nutritional literacy by Kian (2016), the experiential null curriculum that was pointed out is a gap caused by the misalignment between the enacted dimension and the assessed dimension of the overt curriculum. The study identified this experiential null curriculum or the gap by reviewing the competencies specified in the written dimension; developing a standardized test that assesses the literacy of learners based on the enacted dimension of the overt curriculum; administering the standardized test to the learners; and using inferential statistics to determine the neglected domains. Take note that the use of statistics to identify the discrepancy is a feature of some alignment models.

As a whole, considering the fundamental ideas of the null curriculum, the levels of implemented null curriculum and experiential null curriculum appeared to be not technically valid as they are rather fragments of the overt curriculum that are just unselected, unenacted or unlearned in the process. This notion is strengthened by the idea that implemented null curriculum and experiential null curriculum are most possibly curriculum gaps, a well-explored territory in many curriculum alignment studies. These analyses have no intention to restrict the discourse about the null curriculum but only illuminate the grey areas to gain a more focused scope of the null curriculum.

Challenge 3: The unknown extent of the universal curriculum. Especially for researchers interested to develop procedure on how to identify the null curriculum, the extent to what should be covered by the universal curriculum can pose an overwhelming challenge. If it should be a curriculum that has a universal element, then it should consider a wide scope that cuts across place and time. It can be recalled that Flinders et. al (1986) introduced the idea of a universal curriculum as a frame of reference for identifying the null curriculum. However, in their text, they did not offer directions or even a hint on how this universal curriculum can be defined.

The universal curriculum as a frame of reference to determine the null curriculum was done by Asghar et al. (2015) in their research on the null curriculum in sex education. Although they did not call it a curriculum universe, they defined a frame of reference in sex education by determining essential topics through a review of studies and opinions of experts. However, this study did not fully specify the criteria in forming the universal curriculum in its broadest essence to ensure its universality.

As a means to approximate the essence of universality in all possible ways, two basic criteria seem to be useful in the choice of curriculum that would serve as universal curriculum: the spatial scope and temporal scope. In terms of spatial scope, the curriculum must fulfill one of the following standards in order of priority: international covering several countries from different continents; continental covering several countries in a continent; or national covering a country with a reputable educational system in a continent. When it comes to temporal scope, the curriculum must have been

developed as immediate as the period at present and as far as the subject or discipline under study was established. The purpose of these criteria is to make the derived elements remain universal with respect to space and time dimensions of universality.

4. Conclusion

Based on the results, it was found out that the themes that emerge from the fundamental concepts collectively describe the null curriculum as a phenomenon that takes multiple dimensions, occurs at hierarchical levels, and can be identified using different frames of reference. It was further revealed that the overlaps in the intellectual processes dimension, the inconsistencies of the implemented and experiential levels, and the unknown extent of universal curriculum draw challenges in fully understanding the null curriculum. This paper provides a synthesis of pieces of evidence in understanding the null curriculum.

These conclusions present several implications and suggestions. First, the theoretical ground where different fundamental concepts commonly meet, e.g. three domains under the intellectual processes dimension, should be consistently used. A consensus at least on the dimensions of the null curriculum will level off discussions, thus provide a clearer depiction of the null curriculum. Second, there is a need to further probe on how the levels of implemented null curriculum and experiential null curriculum are matched to the concept of the null curriculum or the phenomenon of the curriculum gap. This move will establish the accurate boundaries of two concepts in practice. Third, exploratory research may be conducted to establish the possibility of defining the universal curriculum as a frame of reference to identify the null curriculum. It will serve as a springboard to test if a body of the null curriculum in a field can be systematically identified using it as a frame of reference. Lastly, a procedural model to identify the null curriculum (Cahapay, 2020) may be attempted to add to the knowledge on the structures that underlie the process of determining the null curriculum and guide curriculum development practices where matters of curriculum exclusion occur.

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