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# Emerging Trends in Metaphoric Images of Curriculum Reform Implementation in Schools: A Critical Literature Review

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Abstract. Curriculum reform is often difficult to conceive, disseminate, and implement, resulting in the use of metaphors to make sense of how changes initiated at national level are enacted in schools. This theoretical paper, which employs Critical Metaphor Analysis (CMA), constructs an account of emerging trends in metaphoric language to unlock the complexity of reform implementation. A deductive critical review of literature was adopted as the qualitative design to glean insights into how metaphors have been used to shape mental images of curriculum reform across time and space. Findings indicated converging and diverging trends in metaphoric semantics. While some studies have equated curriculum change to a battlefield and a ghost of control, others have likened reform implementation to driving through the fog or wearing a donated gown of the wrong size. School reform has also been portrayed as a journey, a jigsaw puzzle, and a gardening project demanding meticulous planning and concentration. The unique contribution of this research is the clustering of reform metaphors into a three-tiered spectrum of pessimism, ambiguity, and optimism, thereby extending insights into the dynamics of curriculum enactment. Strategic implementation is recommended so that curriculum reform may be couched in metaphors of hope instead of anger and confusion.

**Keywords:** critical literature review; critical metaphor analysis; emerging trends; metaphors; reform policy implementation

## 1. Introduction

The use of metaphoric language to make sense of curriculum reform policy and its implementation has a long tradition in education (Carpenter, 2008; Craig, 2020; Ganon-Shilon & Schechter, 2017; Priestley & Philippou, 2018; Witherspoon & Crawford, 2014). Metaphors create mental images of complex realities in schools

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and classrooms. For instance, to explain the latent (and, at times, overt) conflicts between teachers (who may resist curriculum change) and supervisors (who enforce compliance), reform implementation is often viewed as a war and the school as the battleground (Cuban, 2006). Metaphors, therefore, are essential components of language and cognitive processes to perceive reality, envision change, and make sense of how curriculum reforms are implemented. Ganon-Shilon and Schechter (2017, p. 7) defined a metaphor as "an image in which two elements or characteristics have become identical through the transfer from one semantic field to another ..." The battlefield metaphor, for example, is transferred from military language to describe confrontation in schools. Cuban (2003, p. 4) thus reimaged teachers as "soldiers of reform" because, in many countries, teachers implement reforms they did not craft – like soldiers who fight wars initiated by politicians.

By combining two ideas from unrelated semantic fields, metaphors assist in creating mental pictures that can clarify complex issues, such as curriculum implementation. However, scholars such as Lakoff and Johnson (1980), McCandless (2012), Davis (2018) and Craig (2020) argued that metaphors are not there to explain complex issues only. They are part of everyday language because people are natural metaphor users. Davis (2018, p. 183) argued that "humans are not principally logical thinkers. We are mainly analogical beings, adept at construing associations among diverse happenings, mapping conceptual domains onto one another and then taking our own figurative inventions literally". Consequently, teachers, administrators, parents, learners, and researchers use metaphors to create comparisons among seemingly incoherent and illogical experiences so that they can understand them better.

Metaphors are often employed without thinking of the words and phrases as figurative language. "We use metaphor most effectively when unaware it is being used," remarked Davis (2018, p. 183). For example, "life is a journey" and "I can't swallow that claim" are common analogies we use unconsciously in daily language (Lakoff & Johnson, 1980, p. 46). So, metaphors are naturally embedded in human thought and language, making them "unavoidable, influential and enriching" (Badley & Brummelen, 2012, p. 3). The human desire to make sense of concrete and abstract concepts makes the use of metaphors (in life and education) inevitable, beneficial, and gratifying.

Priestley and Philippou (2018) coined the spider-webs metaphor to illustrate that curriculum implementation may appear organized and similar on the surface, when it is, in fact, complex and unique. The different school contexts in which state-initiated reforms are enacted make reform implementation unduplicable, although the guiding policy may be the same.

Ganon-Shilon and Schechter (2017, p. 1) used the metaphoric image of "steering through the fog" to depict the anxiety and confusion most school principals experience as they implement new reform policy and pressurize teachers to adopt new practice. The fog metaphor implies lack of clear vision in the minds of school

principals who guide teachers on how to implement curriculum change, reducing chances of successful school reform.

Curriculum reform "can assume the form of a tragedy or a romance, or perhaps even a comedy" (Labaree, 2005, p. 275), depending on how reform policy is implemented and who is observing the process. Labaree (2005) used the romance-tragedy-comedy metaphor (borrowed from Shakespearean literature) to reimagine what can happen when schools experiment with new ideas. Reform policy may be received with excitement by teachers, administrators, parents, and even learners - like romance. However, implementation may bring undesired and unpleasant results - like a tragedy. Sometimes, reform outcomes may miss the target, making observers (who may be policy makers, supervisors, or parents) laugh - as if they were watching a comedy. A single metaphor, though, can send multifarious and contradicting messages to researchers and readers. So, Priestley and Philippou (2018, p. 153) cautioned that any metaphor is likely to "highlight some aspects of the analogy whilst it silences others". For instance, a metaphor may emphasize confusion in a reform initiative while underplaying the rewarding potential embedded in the same policy. This makes it difficult to perceive any metaphor as a comprehensive and conclusive analogy of how reform policy is enacted in schools. No single metaphor, therefore, can provide a complete representation of the complexity of reform implementation, but a combination of metaphors can assist in generating a picture closer to reality.

McCandless (2012) argued that metaphors can be abused to stir up emotions that undermine curriculum reform. If metaphors do not fit the data emerging from a study, findings can be misrepresented. In the same vein, Carpenter (2008) questioned whether metaphors shed light or cast shadows in qualitative research. When appropriately used, metaphors illuminate reality and bring new insights into curriculum implementation processes. If they are misused, however, they can distort and produce a blurred vision of reality, undermining the purpose for which they were created. Carpenter (2008) advised that the use of metaphors should not override the data and subject under investigation. The theme being explored and the data from the empirical fieldwork come first before the researcher can search for appropriate metaphors to describe them.

#### Statement of the problem

Literature has shown that the use of metaphors in studies on curriculum reform implementation is complex and heavily contested territory (Carpenter, 2008; Ganon-Shilon & Schechter, 2017; McCandless, 2012). Several studies have focused on how metaphors are used to make sense of top-down curriculum implementation initiatives in different countries (Craig, 2020; Derrington, 2013; Priestley & Philippou, 2018; Taylor et al., 2018; Witherspoon & Crawford, 2014). However, very few studies have traced trends and patterns in the use of metaphors to make sense of the complexity of curriculum reform implementation across different nations. The present study extends the reform policy debate by searching for converging and diverging trends in metaphors used to capture the experiences, challenges, and opportunities emerging in international literature on curriculum implementation. The intention is to contribute novel insights on

metaphors of curriculum change used in existing literature over the past 20 or so years. In pursuit of this objective, two research questions lynchpin this critical literature review:

- What are the trends in the use of metaphors to construct mental images of reform policy implementation in schools?
- How can the patterns of convergence and divergence in reform metaphors improve the sense-making of controversies and paradoxes embedded in school curriculum change?

To answer these questions, Critical Metaphor Analysis (CMA) was employed as the theoretical framework and a deductive critical review of reform implementation literature was adopted as the qualitative research design.

## 2. Theoretical Framework: Critical Metaphor Analysis

This study taps into CMA theory put forward by Charteris-Black (2004). CMA brings together critical discourse analysis, rhetoric, cognitive linguistics, and pragmatics to reveal the conscious and unconscious intentions of metaphor users. Charteris-Black (2004, p. xiii) explained that CMA is "an approach that integrates linguistic analysis with cognitive understanding and social insight in explaining why a metaphor rather than some alternative mode of expression was chosen in a particular type of discourse". The theory assumes that the primary function of metaphor is persuasion. The intention is to influence the audience or readers to view controversial issues from the metaphor user's perspective.

Charteris-Black (2004) emphasized that metaphor concerns human thought, physical reality, language use. So, the functions of metaphor are cognitive, pragmatic, and rhetorical. The original use of metaphor is rhetorical to arouse people's emotions (Hu & Xu, 2017; McCandless, 2012). The cognitive function concerns how metaphors are interpreted by listeners or readers. The pragmatic role complements the cognitive function by exploring the purpose of metaphor use within specific contexts. The pragmatic use of metaphor takes metaphor back to its original function – to persuade and arouse emotions.

CMA is an appropriate theoretical lens for the current study because the theory guides the scrutiny of metaphors and the intentions underlying their use in curriculum reform implementation studies. CMA unfolds in three stages: metaphor identification, metaphor interpretation, and metaphor explanation (Charteris-Black, 2004). Metaphor identification allows a close reading of existing literature to pick and record metaphors used to describe the nature and processes of curriculum change. Interpretation is an analysis of the context in which the reform metaphor is employed, and the meaning ascribed to it. Using CMA as the illuminating lens, the current study identifies metaphors, interprets, and groups them into emerging patterns according to how they are used. The study then makes sense of the metaphors within the context of reform implementation they were generated. CMA helps in tracing trends in metaphor construction and deployment to decipher the contradictions and opportunities entrenched in the implementation of top-down curriculum reform initiatives.

## 3. Methodology

This qualitative study is a critical review of existing global literature on metaphors that describe and explain school reform policy implementation over the past 20 years. Data collection and analysis took place concurrently and iteratively.

#### Level 1

The first search and analysis of journal articles on reform metaphors was done on Google Scholar. An initial search offered a grand total of over 2 000 books and journal articles exploring metaphoric language in curriculum reform.

#### Level 2

The second level of data collection and analysis involved reducing the literature search to manageable quantities. To do this, three keywords were used: metaphors of curriculum, metaphors of reform implementation, and metaphors of curriculum change. After scanning through the articles and books delivered using these keywords, 62 journal articles and books were identified. The abstracts of these articles and books were scrutinized for relevance to the research questions anchoring this study. Twenty-four articles and books were found to be closely aligned to the use of metaphors to construct mental images of curriculum reform implementation in various countries. The 24 articles and books which were downloaded to anchor this critical literature review are summarized in Table 1.

Table 1: Articles and books reviewed

	Title	Author(s)	Metaphor(s) used
1	Metaphors we live by	Lakoff and	- Food for thought
		Johnson (1980)	- Ideas are food
			- Swallow the claim
2	Reforming again, again, and	Cuban (1990)	- Flourishing garden
	again		- Masterful cultivator
3	The lure of curricular reform and its pitiful history	Cuban (1993)	- Pitfalls of reform
4	The blackboard and the	Cuban (2003)	- Soldiers of reform
	bottom line: Why schools	(	- Battles for reform
	can't be businesses		
5	Getting past futile	Cuban (2006)	- Reform as war
	pedagogical wars		- Schools as battlefields
6	The teacher's soul and the	Ball (2003)	- Reform as terror
	terrors of performativity		
7	An epidemic of education	Levin (1998)	- Policy epidemic
	policy: What can we learn for		
	each other?		
8	The relationships between	Craig (2001)	- The monkey's paw
	and among teachers' narrative		
	knowledge, communities of		
	knowing, and school reform:		
	A case of "The monkey's		
	paw"		
9	"Data is [G]od": The influence	Craig (2020)	- Monkey business
	of cumulative policy reforms		- Monkey see and do
	on teachers' knowledge in an		- Monkey suits

			Post and a second and a second
	urban middle school in the		- Butterfly under a pin
10	United States	C (2000)	- In the eye of a storm
10	Metaphors in qualitative	Carpenter (2008)	- Life is a journey
	research: Shedding light or		- Battle metaphor
11	casting shadows?	D	<ul><li>Theater metaphor</li><li>Curriculum is a</li></ul>
11	Curriculum is a journey towards wisdom	Brouwer (2012)	
12		Radley and Van	journey - Dropping out
12	Metaphors: Unavoidable, influential and enriching	Badley and Van Brummelen (2012)	<ul><li>Dropping out</li><li>Digging below the</li></ul>
	inituential and enticining	Drummelen (2012)	surface
			- Accompanying
			children
13	Curriculum visions	Doll and Gough	- Ghost of control
10	Carried and The Control of the Contr	(2002)	- Clock-work
14	Metaphors and meaning:	Derrington (2013)	- Walking a tightrope
	Principals' perception of	8 ( )	- Wading in unknown
1	teacher evaluation		waters
	implementation		- Dive in and drown
	-		- Dive in and dog-
			paddle
			- Chasing a tire while
			driving
15	The use and misuse of	McCandless (2012)	- Map of school learning
	metaphor in education and		- Broken system
	education reform		
16	Progressivism, schools and	Labaree (2005)	- Romance
	schools of education		- Tragedy
			- Comedy
17	Pre-service teachers'	Alanovila (2017)	<ul><li>Tragicomedy</li><li>Spider-webs</li></ul>
17	metaphorical perceptions	Akınoğlu (2017)	- Spider-webs
	regarding the concept of		
	curriculum		
18	Making sense while steering	Ganon-Shilon and	- Severe headache, deep
	through the fog: Principals'	Schechter (2017)	waters & chains,
	metaphors within a national		angler at sea, puppet
	reform implementation		on a string
	•		- Steering through the
			fog, special gift gown,
			circus acrobat
			- Jigsaw puzzle, fishing
			expedition, pioneering
			act, tailoring project,
			amusement park
19	Metaphors of leadership and	Witherspoon and	- Blanket policy
-	spatialized practice	Crawford (2014)	- Unrealized space
20	On the many metaphors of	Davis (2018)	- Learning as
	learning and their		acquisition
1	associated educational frames		- Learning as construing
01	D1:	T 1 1	- Cloud of associations
21	Breaking and making	Lambert and	- Policy storm
	curriculum from inside 'policy	O'Connor (2018)	
	storms' in an Australian pre-		

	service teacher education			
	course			
22	Curriculum making as social	Priestley and	-	Spider-webs
	practice: Complex webs of	Philippou (2018)		
	enactment			
23	A gardening metaphor: A	Taylor et al. (2018)	-	Gardening metaphor
	framework for closing racial			
	achievement gaps in			
	American public education			
	system			
24	Educators' experiences with	Velthuis et al.	-	Pile of shit
	governance in curriculum	(2021)	-	Dirty plate of
	change processes:			spaghetti
	A qualitative study using rich		-	Bible in a church
	pictures			

#### Level 3

The third level of data analysis involved an intensive study of the 24 downloaded journal articles and books to identify metaphors used. The thematic approach to data analysis was used following Laws et al.'s (2003, p. 395) seven-step linear sequence:

- **Step 1**: Reading and re-reading all the collected data;
- **Step 2**: Drawing up a preliminary list of themes arising from the data;
- **Step 3**: Re-reading the data;
- Step 4: Linking the themes to quotations and notes;
- **Step 5**: Perusing the categories of themes to interpret them;
- **Step 6**: Designing a tool to help discern patterns in the data; and
- **Step 7**: Interpreting the data and deriving meaning.

#### Level 4

We used qualitative content analysis (Sandelowski, 2000) to examine metaphors used in selected reform implementation literature. Qualitative content analysis allowed for data collection and analysis to take place concurrently. Using Laws et al.'s (2003) thematic approach and Charteris-Black's (2004) CMA, we identified metaphors from the selected books and journals and listed them as they were picked from the literature (see Table 1). Using the list in Table 1, metaphors illustrating common concerns were grouped together. Three clusters emerged. The first cluster grouped metaphors which expressed anger, frustration, and disillusionment with reform policy implementation. The second cluster brought together metaphors which voiced ambiguity, confusion, and uncertainty; and the third cluster congregated metaphors of hope and positive expectations. The three clusters are summarized in Table 2.

Table 2: Trends in metaphor use and emerging clusters

Metaphors of anger (Pessimism)	Metaphors of confusion (Ambiguity)	Metaphors of hope (Optimism)	
Reform as:  - a battlefield  - a severe headache  - deep waters and chains  - an angler at sea with no fishing rod  - a puppet on a string  - a wild ride on a rollercoaster  - a butterfly under a pin  - monkey business  - a monkey's paw  - the ghost of control  - terrors of performativity  - a pile of shit  - dirty plate of spaghetti  - Bible in a church  - chasing a tire while driving a car  - broken system  - blanket policy	Reform as:  - steering through the fog  - spider-webs  - a donated gown of the wrong size  - learning to teach in the eye of a storm  - policy storm  - policy epidemic  - walking a tightrope  - wading in unknown waters  - dive in and drown	Reform as:  - a garden project  - a journey  - a fishing expedition  - clock-work  - a pioneering act  - a tailoring project  - an amusement park  - a jigsaw puzzle  - dive in and dogpaddle	

These three clusters guide the presentation of the findings in the subsequent section.

# 4. Findings

This study traces trends in the use of metaphors in existing implementation literature to conceptualize and make sense of how curriculum change is enacted in schools. Three clusters that emerged during the deductive critical review of literature are used as themes to anchor the presentation of findings.

## 4.1 Metaphors of Anger and Disillusionment

To register discontent with a national reform program they were implementing, school principals in Israel described reform implementation as "a severe headache", "deep waters and chains", "an angler at sea with no fishing rod", and "a puppet on a string" (Ganon-Shilon & Schechter, 2017, pp. 13-14). Reform implementation in American schools has been compared to "war" and schools to "battlefields" (Cuban, 2006, p. 793). Other metaphors used to register disillusionment with curriculum reform include "a butterfly under a pin" (Craig, 2020, p. 2), "monkey business", and "a monkey's paw" (Craig, 2001, p. 303). Doll and Gough (2002, p. 34) equated curriculum change to "the ghost of control" which haunts teachers by penalizing them for non-compliance to policy.

#### *The monkey metaphor*

Teachers at T.P. Yaeger Middle School in Texas (USA) used the metaphor of the monkey to express their disappointment with a state-mandated teaching reform. The teachers were angry because they were required to use specific models of

teaching "cleanly, not creatively" (Craig, 2001, p. 308). They were assessed by a state-hired consultant to ensure compliance. The head of the literacy department at the school labelled the reform "monkey see, monkey do" (Craig, 2020, p. 4). One teacher viewed it as "a monkey on one's back". Another teacher complained that all teachers were dressed in "monkey suits" to conduct "monkey business" (Craig, 2020, p. 4) because they were expected to teach following strict guidelines.

Craig (2020, p. 4) observed that: "The models of teaching reform planted seeds of discontent among Yaeger's teachers ..." Consequently, the teachers used monkey metaphors to vent their anger and frustration with the program. This initiative was described as "the monkey's paw" by another teacher (Craig, 2001, p. 303). *The monkey's paw* is a satire by J. Jacobs. In this story, a monkey's paw is carried from one of the British colonies to Britain. What the British thought was a trophy was, in fact, a talisman with a spell cast on it to teach them not to interfere in other people's business. In the end, the British regretted having carried the monkey's paw to their homeland. The moral in this metaphor is that curriculum reforms borrowed from external sources, and imposed without consideration to local context, are often rejected by the user system.

## The ghost of control

Literature has shown that teachers generally resent reforms imposed on them by policy makers (Ball, 2003; Craig, 2020). Doll and Gough (2002, p. 34) equated reform policy and the authorities who enforce compliance to "the ghost of control" which haunts teachers. They argued that curriculum policy has stifled school reform since the sixteenth century because teachers are expected to implement changes in a mechanical manner. The scientific approach, which has dominated school knowledge since Isaac Newton (1642–1727), assumes that knowledge is there in the universe waiting to be discovered – forcing teachers to follow certain rules and procedures when implementing curriculum change.

Doll and Gough (2002, p. 46) proposed the displacement of the mechanistic approach to curriculum reform with a complexity paradigm which views change as "complex and dynamic web of interactions evolving naturally into more varied interconnected forms". The complexity perspective posits that teachers cannot implement curriculum policy as given. They need the autonomy to reform their practice without being haunted by policy restrictions and terrors of performativity (Ball, 2003). Instead of arbitrarily disseminating reforms, which teachers are expected to implement, policy reformers need to provide opportunities for conversation with teachers, school administrators and local communities. Space for innovation and recognition of unique local contexts is necessary so that the ghost of control over teachers can be exorcised.

#### Angler at sea, deep waters, and chains

One school principal compared himself to an angler at sea without a fishing rod, and asked: "Can you fish without a rod?" (Ganon-Shilon & Schechter, 2017, p. 13). He wanted to depict the huge gap between policy makers' expectations and inadequate resources in schools. Another principal remarked that: "I was thrown into deep waters without proper gear" (Ganon-Shilon & Schechter, 2017, p. 13). She used this metaphor to illustrate that reforms were disseminated into schools

without adequate preparations and resources to facilitate implementation. Performativity demands made by most school systems throughout the world remain a major obstacle to reform uptake by administrators and teachers (Ball, 2003). Implementing school reform often involves activities that reduce time to prepare students for summative high-stakes examinations.

Another principal described himself as "chained" because "each year, my school is assessed by the number of students entitled to a matriculation certificate" (Ganon-Shilon & Schechter, 2017, p. 14). His success as a principal was measured by the number of students who matriculated, not the implementation of reforms. Ball (2003) compared reform policy and the accompanying supervision to enforcing compliance to a reign of terror which has forced some teachers to quit the profession. The ghost of control, which Doll and Gough (2002) chastised, appears indeed difficult to exorcise. Change implementors thus remain shackled to policy at the deep end of the sea, making it difficult for them to appreciate the opportunities embedded in new policies.

## 4.2 Metaphors of Anxiety, Confusion, and Uncertainty

Several metaphors have been used to demonstrate the anxiety, confusion, and uncertainty teachers and school administrators go through when they implement reform policy, which, in their view, is not clearly communicated or does not have enough support from policy makers. One teacher characterized the frustration she was going through in implementing a state-mandated teaching model as "learning to teach in the eye of a storm" (Craig, 2020, p. 2). In a similar vein, reform implementation has been described as "steering through the fog" and "a very special gown received as a gift" (Ganon-Shilon & Schechter, 2017, p. 13). The special-gift metaphor is an exciting analogy of the anxiety principals experience as they try to implement curriculum change.

Reform as a special gift of the wrong size

A school principal with 23 years of experience compared new reform policy to a special gown he received as a gift. Unfortunately, the gown was of the wrong size. He explained:

"I need to re-tailor this item to match my 'school measurements' ... I greatly respect reform regulations and demands, yet, focusing on students' pedagogical needs is no less important than the reform's formal definitions. The gown will have to be remade to fit my measures ..." (Ganon-Shilon & Schechter, 2017, p. 13).

It requires strength and vision for school principals to re-tailor reform policy to school specifications, lest this is misconstrued as non-compliance by curriculum supervisory authorities. Non-compliance to policy is an act of misconduct in many education systems across the world. Consequently, most school administrators resort to superficial implementation of reform policy.

School principals are tasked with the formidable task of reconciling contrasting external and internal demands when they enact change. Ganon-Shilon and Schechter (2017, p. 4) explained that: "Principals are encumbered by the complexity of how to negotiate between internal school goals (e.g., maintaining

autonomy...), and external demands (e.g., meeting regulations for accountability and standardization for outcomes)." Negotiating the slippery terrain of policy implementation makes principals and teachers use anxiety metaphors to express their experiences and frustrations with reform compliance.

## *Spider-webs* and the fly

The spider-webs metaphor has been used by teachers, administrators, and researchers to explain the complexity and confusion that often characterize reform implementation (Akınoğlu, 2017; Priestley & Philippou, 2018). Priestley and Philippou (2018, p. 153) explained that "spider-webs in nature appear to have particular parts arranged in some recognizable patterns. Yet they are also simultaneously quite dissimilar, as spider-webs are in reality organically formed drawing upon unique circumstances, becoming unique and unduplicable". At surface level, spider-webs appear similar and organized, but they are complex and unique because they are formed at different though connected sites.

The sites of spider-webs are equivalent to international, regional, and national institutions, where reform policy is crafted, and local institutions, where policy is interpreted and implemented. These reform sites can be supra-national organizations like the United Nations and World Bank, cascading to the ministries of education, universities, teacher education colleges, local communities, schools, and classrooms. It is in these reform sites that the non-linearity and complexity of policy-to-practice processes unfold (Priestley & Philippou, 2018), exposing conflicting interests of different policy actors. Like flies caught in spider-webs, policy makers and implementation actors get entangled in the complex maze of policy crafting and implementation. It is not surprising, therefore, that policy reformers are often trapped in an endless cycle of "reforming again, again, and again" (Cuban, 1990, p. 3), like flies trying to free themselves from the spiderwebs. But the more the flies struggle for freedom, the more they get entangled. The spider-webs and fly metaphor illustrates that policy reforms may be easy to proclaim but are difficult to attain, partly because the outcome of a reform initiative may be as unpredictable as a storm.

#### Reform as policy storm

Lambert and O'Connor (2018, p. 159) viewed the conflict of interest and confusion surrounding the roles and actions of different policy actors as "policy storm" because the implementors "are simultaneously constrained and inspired by policy". Reform policy brings both challenges and opportunities in one package. This mixture of contrasting possibilities is usually a recipe for anxiety and confusion among implementation actors faced with the daunting task of translating ideas into practice. Sense-making of policy across multiple sites and among various implementation actors is often fraught with ambiguity, conflict of interest, and tug-of-war, resulting in implementation muddling. Lambert and O'Connor (2018) used the storm metaphor to demonstrate the volatility and unpredictability associated with curriculum change. Interestingly, failure to achieve intended reform outcomes often ignites new policy reforms – to rectify past failures.

## The epidemic of reform

More than two decades ago, Levin (1998, p. 131) observed that curriculum reform was spreading across the globe like "a policy epidemic". The term epidemic is used in the health sciences to signify the spread of diseases at alarming rates across communities and nations. Levin (1998) transformed the word *epidemic* into a reform metaphor to reimage the proliferation of curriculum change across the world as a policy pandemic. It appears reforms in education continue unabated in the 21st century mainly because curriculum change is big business politically and economically (Cuban, 2006). Many politicians and policy makers find the lure of educational reform irresistible, despite a history of failure at the implementation level. Curriculum transformation has always been a tempting invitation in the past, even though it has a "pitiful history" of unfulfilled policy pronouncements (Cuban, 1993, p. 182). Reform failure, however, invites new reform policy, resulting in policy pandemics across nations.

Ball (2003, p. 215) explained that: "An unstable, uneven but apparently unstoppable flood of closely inter-related reform ideas is permeating and reorienting education systems in diverse social and political locations which have very different histories." This policy epidemic is spearheaded by powerful agents such as the World Bank and the Organisation for Economic Cooperation and Development (OECD), making it difficult for politicians, policy makers, and educationists to resist the tempting invitation. The churning out of one reform policy after the other at macro- and micro-level unwittingly fuels implementation anxiety and confusion.

#### 4.3 Metaphors of Hope and Positive Expectations

Not all studies and participants, however, view reform policy and its implementation from a negative perspective. Research by Brouwer (2012), Ganon-Shilon & Schechter (2017), Doll and Gough (2002), and Taylor et al. (2018), for instance, showed positive expectations from teachers and administrators involved in curriculum change. Cross-cutting themes in metaphors of hope include the need for thorough preparation, wise decision-making, and focused determination if sustainable reform is to be realized.

#### The garden metaphor

Taylor et al. (2018) used a gardening metaphor to propose a reform implementation model that can accelerate the closure of the racial achievement gaps between white and black students in the USA. The gardening metaphor identifies six constructs which must be coordinated to bring meaningful changes that can improve the achievement of African American learners at all levels of education. These six elements are (i) soil (representing the students), (ii) seed (curriculum and pedagogy), (iii) root (culture), (iv) environment (context), (v) gardener (teacher), and (iv) gardener support (training and administration). A careful and sustained integration of these six elements can reduce the achievement gap between black and white students.

Nonetheless, Taylor et al. (2018) were not the first to use the gardening metaphor to illustrate how learner achievement can be accelerated. Some three centuries ago, Jean-Jacques Rousseau (1712–1778), in his book *Emile*, used the metaphor of

the teacher as a gardener (Douglass, 2010). Rousseau's philosophy of naturalism argues that the role of the gardener (teacher) is not to change the flowers (children) in the garden (school). The gardener's duty is to nurture the flowers by watering them, removing the weeds, and providing required nutrients so that they can grow to their full potential. Teachers must create an enabling environment so that every learner becomes what s/he is destined to be. The maturation of flowers in the garden is heavily dependent on the skills and efforts of the gardener. Naturally, a poor gardener will produce shriveled and unattractive flowers. Conversely, a dedicated and hardworking gardener will produce robust and healthy flowers.

## Reform as a journey.

Another metaphor of hope in this critical literature review is "curriculum is a journey towards wisdom" (Brouwer, 2012, p. 68). Curriculum as a journey "is oriented primarily toward cultivating character, toward formation rather than information. This requires a careful dance of cultivation and natural growth" (Brouwer, 2012, p. 85). The 'curriculum as a journey' metaphor illustrates that there are no easy pickings in reform implementation because change requires prudent initiative (cultivation) and focused determination (nurturing). Curriculum reform does not happen on its own, just like a journey which requires someone to initiate and persevere to reach the destination. Reform cannot be hurried; it must be gradual and consistent, like a journey. The ancient Chinese saying, "A journey of a thousand miles begins with a single step" helps illustrate the difficulty of kickstarting and sustaining curriculum reform.

#### Reform as clockwork

Closely aligned to the journey metaphor, although there are nuanced differences, is "curriculum as clock-work" (Doll & Gough, 2002). The clockwork metaphor implies that change takes place over time, just like the movement of a watch. Clock movement may appear slow, but it is consistent, accurate, and cannot be hurried. It is often futile to fast-track curriculum change – just as it is fruitless to quicken the pace at which the clock moves. Similarly, hurried reforms are likely to be superficial and fade with time.

Fullan and Miles (1992, p. 737) coined the term "faddism" to explain why and how large-scale reforms often fail. The faddism metaphor is a semantic construction from textile linguistics. Clothes lose their original color (fade) due to laundry and passage of time. When reforms are hurriedly implemented, an artificial impression of change is created. With time, though, these reforms slowly disappear from practice and eventually become extinct. Faddism is a product of a rushed superficial approach to curriculum transformation which makes change unsustainable. Casiro and Regehr (2018, p. 2) remarked that: "Focusing on curricular changes and program evaluation while ignoring the processes of change (the mechanisms of decision making and implementation) is one of the key mistakes that lead to failed change efforts." For any reform initiative to take root, consistent effort to nurture the change process is needed, like clockwork.

## 5. Discussion

This research has shown convergences and divergences in metaphoric allegory used in curriculum reform implementation studies. Some metaphors showed anger, others reflected confusion, and yet others espoused hope and positive expectations in curriculum change. This diversity in reform metaphors indicates that curriculum policy enactment remains contentious and no single cluster of can comprehensively capture the complexity implementation. Davis (2018, p. 184) cautioned that: "Too heavy a reliance on a single cluster of metaphors can skew perspectives ... and sway opinions." The current study circumvented the pitfalls of a loop-sided cluster of metaphors by using the CMA approach to present a balanced classification of reform images. The CMA framework (Charteris-Black, 2004) allowed an interrogation of reform metaphors from a diversity of angles. Consequently, this critical literature review has shown that a single reform policy can be viewed by implementation actors from a multiplicity of contrasting (and, often, conflicting) perspectives.

The complexity of reform makes it difficult to view reform from a linear or unipolar perspective. No reform policy can be perceived by different implementors from an entirely negative or positive viewpoint because individual sense-making and implementation contexts are bound to differ. Some reform metaphors overlap and transcend the clusters emerging in the current study. For instance, reform as "a policy epidemic" (Levin, 1998, p. 131) can be viewed as a metaphor of pessimism, or confusion with change. The same image can be interpreted as an optimistic metaphor depicting the proliferation of curriculum change. The multifarious interpretation of a single metaphor resonates with Labaree's (2005) observation that a single reform policy can be viewed as romance, tragedy, comedy, or tragicomedy - depending on one's position on the ladder of reform. Carpenter (2008) and McCandles (2012) have shown that, instead of clarifying reform paradoxes, metaphors can cast long shadows that blur the sensemaking of curriculum change. Readers' cultural differences, for example, may make a metaphor have a different meaning to different people, distorting the meaning the originator of the metaphor intended to convey.

The multifarious interpretation of a single metaphor has resulted in the assumption that "one must have a special talent to be able to use metaphor, and only great poets or eloquent speakers can be its masters" (Hu & Xu, 2017, p. 94). This seemingly entrenched view was initially challenged by Lakoff and Johnson (1980), who argued that metaphors are used unconsciously in everyday language to explain both simple and complex thoughts. Even children at Early Childhood Education can understand and use folklore, imagery, and metaphor in learning disaster management and other concepts (Rahiem & Rahim, 2020). So, no special talent is needed to use metaphors because humans are natural metaphor users. Daily expressions that often go unnoticed, like: "That's food for thought" (Lakoff & Johnson, 1980, p. 46) and "life is a journey" (Carpenter, 2008, p. 276) testify that metaphors are part of daily language. Similarly, curriculum reform is often equated to a journey which requires time, patience, and concerted effort to achieve planned outcomes (Brouwer, 2012; Doll & Gough, 2002). The journey allegory shows that reform implementation must not be construed as easy enterprise

because there are many unanticipated obstacles to change. Without focus and determination, curriculum reform often fails, just like a poorly organised journey.

#### 6. Conclusion

This study made sense of the paradoxes, challenges, and opportunities embedded in curriculum change, as reflected in the metaphors that implementation actors and researchers used. The outstanding contribution of the current study to existing literature is that it clusters reform metaphors into a three-tiered spectrum of pessimism, confusion, and optimism, a spectrum hitherto non-existent in curriculum metaphor studies. This critical literature review has picked on what can be considered graphic metaphors of curriculum reform implementation. It is neither intended nor implied that the metaphors identified and discussed in this study are an exhaustive representation of metaphors of curriculum change. Metaphors have been used since time immemorial and are therefore innumerable. Metaphors have also been used, either deliberately or unconsciously, in many implementation studies without even mentioning the word metaphor. Future research can examine why metaphors of disillusionment and confusion persist even when efforts are instituted to support reform implementation. Future studies can broaden the conversation on metaphoric allegory by focusing on metaphors used to understand 21st century concepts and competencies used in technologymediated instruction, globalization, and other emerging themes in curriculum reform. Teachers, school principals, policy reformers, and researchers remain at liberty to coin new metaphors, combine, or restructure existing ones to illustrate overlapping agreements or sharp differences in reform implementation discourse.

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