Pedagogical translanguaging: Examining the credibility of unitary versus crosslinguistic translanguaging theory

Jim Cummins University of Toronto

Abstract

This article analyzes the credibility of two conceptions of pedagogical translanguaging theory, namely, unitary translanguaging theory (UTT) and crosslinguistic translanguaging theory (CTT). I argue that there is no difference in pedagogical implications between UTT and CTT, but there are significant differences in the way UTT and CTT pedagogies are framed theoretically. UTT claims that the bilingual's linguistic system is unitary and undifferentiated and that languages have no cognitive or linguistic reality. Based on this claim, UTT rejects several theoretical concepts including the notion of academic language, additive (approaches to) bilingualism, the common underlying proficiency (CUP) and the pedagogical importance of teaching for transfer across languages. CTT, by contrast, affirms the legitimacy of these theoretical concepts, which are fully consistent with dynamic or heteroglossic orientations to bilingual cognitive processing. Within CTT, bilinguals actually do speak languages, involving multiple registers and fluid boundaries, and teaching for transfer across these boundaries is a prime function of pedagogical translanguaging.

Key words: additive bilingualism, academic language, common underlying proficiency, crosslinguistic translanguaging theory, unitary translanguaging theory, teaching for crosslinguistic transfer

Résumé

Cet article analyse la crédibilité de deux conceptions de la théorie du translanguaging pédagogique, c'est-à-dire, la théorie du translanguaging unitaire (UTT) et la théorie du translanguaging interlinguistique (CTT). Je soutiens qu'il n'y a pas de différence dans les implications pédagogiques entre l'UTT et le CTT, mais qu'il existe des différences significatives dans la façon dont les pédagogies UTT et CTT sont encadrées théoriquement. L'UTT affirme que le système linguistique des bilingues est unitaire et indifférencié et que les langues n'ont aucune réalité cognitive ou linguistique. Basé sur cette affirmation, l'UTT

Correspondence should be addressed to Jim Cummins: james.cummins@utoronto.ca

CAHIERS DE L'ILOB / OLBI JOURNAL

Vol. 12, 2022 33-55 doi.org/10.18192/olbij.v12i1.6073

© The author(s).

rejette plusieurs concepts théoriques, notamment la notion de langue académique, les (approches du) bilinguisme additif, la compétence sous-jacente commune (CUP) et l'importance pédagogique de l'enseignement du transfert entre les langues. Le CTT, en revanche, affirme la légitimité de ces concepts théoriques, qui sont pleinement cohérents avec les orientations dynamiques ou hétéroglossiques du traitement cognitif bilingue. Dans le cadre du CTT, les bilingues parlent réellement des langues, ce qui implique des registres multiples et des frontières fluides, et l'enseignement pour le transfert à travers ces frontières est une fonction primordiale du translanguaging pédagogique.

Mots-clés: bilinguisme additif, langue académique, compétence sousjacente commune, théorie du translanguaging interlinguistique, théorie du translanguaging unitaire, enseigner pour les transferts interlinguistiques

Introduction

In 2009, García's book *Bilingual education in the 21st century: A global perspective* launched the construct of *translanguaging* from its origins in the context of Welsh/English bilingual education (Williams, 1994, 1996, 2000) into global prominence in the education of multilingual and minoritized students. As Jaspers has pointed out, the concept of translanguaging has become a "terminological house with many rooms" (2018, p. 2). He noted that translanguaging "can apply to an innate instinct that includes monolinguals; to the performance of fluid language use that mostly pertains to bilinguals; to a bilingual pedagogy; to a theory or approach of language; and to a process of personal and social transformation" (p. 3). Ballinger et al. (2017) similarly pointed to the multiple uses of the term *translanguaging*, which encompasses a theory of cognitive processing, societal use of multiple languages in communicative interactions, classroom language use behaviours among emergent bilingual students, and teaching practices that attempt to harness students' multilingual repertoires to enhance learning.

My focus in this article is on *pedagogical translanguaging*, which I define as *instruction designed to enable students to use their entire multilingual repertoire in carrying out academic tasks and activities*. As noted by Jaspers (2018) and Ballinger et al. (2017), García and colleagues (2021; Otheguy et al., 2015, 2019) go considerably beyond this core pedagogical focus in their conceptualization of translanguaging. García, together with colleagues Flores, Seltzer, Wei, Otheguy, and Rosa (2021), recently synthesized their conception of translanguaging in an article entitled *Rejecting abyssal thinking in the language and education of racialized bilinguals: A manifesto*. They adapt the construct of *abyssal thinking* from the work of Portuguese decolonial philosopher Boaventura de Sousa Santos (2014), who argued that much of

contemporary scholarship both in language education and other spheres of the social sciences has been tainted by a hegemonic orientation that creates a hierarchy between the 'superior' knowledge and lifeways of 'civil society' and the knowledge and lifeways of colonized communities, thereby relegating colonized knowledge and lifeways to an existential abyss. This is clearly an accurate characterization of historical colonization as well as the ongoing reality experienced by what Blauner (1969) has called *internal colonies*— Indigenous and other minoritized communities subjected to coercive relations of power over generations. The issue to be considered in the present article concerns the *criteria* for consigning particular theoretical constructs in language education to the realm of abyssal thinking. Obviously, more than simply assertion is required to make this case (von der Mühlen et al., 2016).

The elaboration of translanguaging theory proposed by García et al. (2021) can be paraphrased as follows:

- Translanguaging offers a way to delink from the logics derived from colonialism and global capitalism. (p. 16)
- Translanguaging places questions of equity for racialized bilinguals and broader societal inequities at the center of the analysis. (p. 16)
- Translanguaging rejects abyssal thinking and enables us to understand the language practices of racialized bilingual communities in all their complexity and heterogeneity without imposing evaluative colonial hierarchies on these practices. (p. 6)
- Translanguaging pedagogy does not require bilingual students to hold their named languages as separate cognitive linguistic entities or to use one of them for the purpose of learning the other. (p. 15)
- Translanguaging theory emboldens teachers to build on their racialized students' linguistic gifts which are often stifled by monoglossic ideologies that conceive of bilingualism as two sharply separate named languages. (p. 17)

In multiple publications, García and colleagues (e.g., García & Li, 2014; García et al., 2021) have characterized as 'monoglossic' theoretical concepts that have long been seen as foundational both to the rationale for bilingual education and our understanding of equitable instructional practices to promote academic achievement for minoritized students. These theoretical concepts include the promotion of additive bilingualism, the notion of the common underlying proficiency (CUP) that support teaching for transfer across languages, and the construct of *academic language* that differs in important respects from the everyday conversational language of social interaction (Cummins, 2000; Wong Fillmore, 2014, 2021). García and colleagues (2021;

Otheguy et al., 2019) argue that these concepts, as well as the concept of *codeswitching*, emanate from a dual correspondence theory that differs only minimally, if at all, from monoglossic conceptions of bi/multilingualism that view languages as separate, autonomous, static, and independent of each other.

In this article, I analyze the theoretical credibility of these claims. In doing so, I distinguish between two versions of translanguaging theory which I label unitary translanguaging theory (UTT) and crosslinguistic translanguaging theory (CTT). UTT incorporates the core theoretical proposition advanced by García and colleagues (2021) that the bilingual's cognitive system or 'mental grammar' is unitary and undifferentiated. By contrast, CTT claims that language-specific features *do exist* in the bilingual's cognitive system and that the concepts of additive bilingualism, academic language, the common underlying proficiency, and teaching for crosslinguistic transfer are theoretically credible and represent effective tools to challenge the operation of coercive power relations in the education of minoritized bilingual students. The theoretical legitimacy of the concept of codeswitching has been debated by MacSwan (2017, 2022), Bhatt and Bolonyai (2019, 2022), García et al. (2021) and Otheguy et al. (2019) and will not be addressed in this article.

The core theoretical division between CTT and UTT is that CTT proposes fluid and porous boundaries between languages in the multilingual's linguistic system, whereas UTT proposes no boundaries and no languages. Within UTT, the verb forms *languaging* and *translanguaging* are legitimate but the noun form *a language/languages* is illegitimate. García and Lin (2017) express this position by claiming that "bilingual people do not speak languages" (p. 126). CTT, by contrast, acknowledges that bilingual people speak, understand, read, and write languages; people also study languages in order to integrate them into their cognitive system, and language teachers across the globe support learners in adding new language skills to their linguistic repertoires.

Despite the different theoretical orientations of UTT and CTT, these frameworks share many commonalities in their approach to the education of multilingual learners. I expressed this commonality as follows:

The different orientations of UTT and CTT to the legitimacy of the construct of *language* should not obscure the fact that both theoretical perspectives view languages as socially constructed, they reject rigid instructional separation of languages, and they deplore the frequent devaluation of the linguistic practices that many minoritized students bring to school. Both orientations to translanguaging theory also endorse dynamic conceptions of multilingual cognitive functioning. And, finally, UTT and CTT both view translanguaging pedagogy as a central component in the struggle for social justice and equity in education. (Cummins, 2021b, p. 28)

Prior to analyzing the alternative claims of UTT and CTT, I believe that it is important to position myself in relation to the issues under discussion. Many of the theoretical constructs that are intrinsic to CTT, but rejected by UTT, have been incorporated into the theoretical framework for the education of multilingual learners that I have advanced progressively over a period of more than 40 years. These constructs have exerted a significant impact on the education of minoritized students since the early 1980s and have emerged both from collaborative inquiry with educators and analysis of educational data. I strongly reject the claim that notions of academic language, additive bilingualism, the common underlying proficiency and teaching for crosslinguistic transfer reflect monoglossic ideologies, abyssal thinking, discourses of appropriateness, and raciolinguistic ideologies.

I expressed my orientation to academic inquiry as follows in the preface to my book *Rethinking the education of multilingual learners* (2021a):

My interest starts and ends with what happens between teachers and students in classrooms. The focus of the book on theoretical concepts is, at the same time, intensely practical. The purpose of pursuing theoretical ideas is to contribute to changing instructional practices so that they become evidence-based and more effective in promoting equitable outcomes across social groups. (p. xxxiv; emphasis in original)

This orientation is necessarily open to the insights that emerge from multiple disciplines that concern themselves with what happens between teachers and students in classrooms. I suggested that we need to root our inquiry in the lives of educators, students and communities, and extend the dialogue beyond the boundaries of epistemological convictions and what May (2022) has termed disciplinary orthodoxy:

The people we, as researchers, need to listen to and engage with, care nothing about whether we identify as sociolinguists, psycholinguists, sociologists, psychologists, or whether our inspiration comes from critical pedagogy, cultural studies, critical race theory, sociocultural theory, or any of the other myriad fractures that divide the academic world. They also don't care about whether our intellectual efforts are rooted in postmodernism, poststructuralism, positivism, or any other '-ism'. Educators do care passionately, however, about their students and how to engage them in powerful learning. (Cummins, 2021a, p. xli)

In the sections that follow, I outline and critique the foundational claim of UTT that the multilingual's individual cognitive/linguistic system is unitary and undifferentiated. I then examine the credibility of the UTT claims that notions of academic language, additive (approaches to) bilingualism, the common underlying proficiency, and teaching for crosslinguistic transfer are

monoglossic and abyssal/raciolinguistic in nature. In evaluating the credibility of UTT claims, I apply the following three criteria, which are described in more detail in Cummins (2021a):

- *Empirical adequacy*: to what extent is the claim consistent with all the relevant empirical evidence?
- Logical coherence: to what extent is the claim internally consistent and non-contradictory?
- Consequential validity: to what extent is the claim useful in promoting effective pedagogy and policies?

A critical analysis of UTT claims

Is the bilingual's linguistic system unitary and undifferentiated?

García and colleagues (2021) succinctly articulate their claim that bilinguals *language* with a unitary linguistic system as follows: "Our proposal advocates effacing the line of cognitive demarcation purportedly separating the languages of the bilingual, a line that, born of abyssal thinking, is sustained by hegemonic sociocultural structures and ideologies but not by psycholinguistic reality" (p. 13). The same point was expressed by Otheguy et al. (2019):

In our view, the myriad lexical and structural features mastered by bilinguals occupy a cognitive terrain that is not fenced off into anything like the two areas suggested by the two socially named languages. ... [The] position that, while allowing for some overlap, the competence of bilinguals involves language specific internal differentiation ... which we have called the dual correspondence theory ... has had pernicious effects in educational practices. (p. 625)

These statements explicitly propose a two-way *causal connection* between the proposition that languages have psycholinguistic reality in our cognitive systems and abyssal (deficit-oriented) thinking that exerts pernicious effects on the educational experiences and opportunities of minoritized students. Specifically, UTT argues that claims of psycholinguistic or neurolinguistic language demarcation are born of, or derive from, colonial-era abyssal thinking but also sustain and perpetuate these racist ideologies. The UTT position can be broken down into the following claims:

- The cognitive organization of bilingual/multilingual students' linguistic repertoire is unitary with no demarcation between named languages.
- Any theorist or educator who claims that languages do have psycholinguistic reality is implicated in hegemonic ideologies, variously termed abyssal, colonial, deficit-oriented, and raciolinguistic.

Theoretical claims (e.g., Cummins, 1981, 2021a; MacSwan, 2017)
that the competence of bilinguals reflects both shared and languagespecific components (labelled 'dual correspondence theory') are
essentially indistinguishable in their pernicious educational effects from
monoglossic ideologies that advocate complete instructional separation
of languages.

Empirical adequacy of the unitary hypothesis

The empirical adequacy of the UTT claim that the bilingual's linguistic system is unitary and undifferentiated with no language-specific elements has been challenged by Bhatt and Bolonyai (2019, 2022) who review compelling data from studies of aphasia demonstrating that the different languages of bilinguals have specific patterns of neural representation and organization. Bhatt and Bolonyai cite the case of JZ, a Basque-Spanish bilingual individual with aphasia, whose linguistic functioning in each language was affected in markedly different ways by his aphasia:

JZ's aphasia impacted his languages to different degrees: his first language, Basque, was more impaired than his second language, Spanish. In particular, the Bilingual Aphasia Test revealed deficits in first language production, but intact production in his second language. Such differential language loss does not find an account in translanguaging theory: a unitary linguistic system cannot explain why one language is impacted (more) than another in differential bilingual aphasia. (Bhatt and Bolonyai, 2019, p. 18)

Obviously, Bhatt and Bolonyai's claim that these findings refute translanguaging theory applies to UTT but not to CTT, which allows for both shared and language-specific organization of languages in our cognitive system.

Logical coherence of the unitary hypothesis

The logical coherence of UTT claims regarding the unitary and undifferentiated nature of the bilingual's mental lexicon can also be called into question. For example, García and Kleifgen (2019) argue that "A translanguaging literacies approach also includes strategies such as translation and cross-linguistic study of syntax, vocabulary, word choice, cognates, and discourse structure" (p. 13). In relation to this very reasonable statement, educators might well ask questions such as the following:

- If languages are real only in a social sense but not a linguistic sense, what are we translating between?
- What does *crosslinguistic* mean if languages don't exist within the individual's linguistic system and if there is no transfer between languages?

 If languages have no cognitive or linguistic reality, how should we interpret cognates?

Pedagogical implications of the unitary hypothesis

The claim that bilingual people do not speak languages because languages do not exist in our cognitive system is likely to sow confusion among multilingual teachers and students who *do* believe that they actually speak multiple languages. Within the propositional structure of UTT, it is illegitimate and meaningless to ask the simple question: "How many languages do you speak?" Clearly, teachers also believe that they *are* teaching languages and students believe that they *are* learning languages. The reaction of many teachers when they are informed that the languages they teach exist in the social realm but have no reality within the individual's cognitive apparatus or architecture is likely to be along the lines of "OK, whatever. What are the implications of this for my teaching?" The short answer to this question is that the claim that languages have no linguistic or cognitive reality entails *no implications* for classroom instruction.

UTT theorists have been unable to point to any pedagogical initiative or activity that is implied by UTT but not by CTT. For example, all the translanguaging instructional initiatives described by Celic and Seltzer (2013), García and Kleyn (2016) and García et al. (2016) are totally consistent with translanguaging initiatives described by multiple authors who have not endorsed the claim that languages have no psycholinguistic reality (e.g., Carbonara & Scibetta, 2020a, 2020b; Cenoz & Gorter, 2021; Cummins, 2007, 2021a; Cummins & Early, 2011). Furthermore, many translanguaging instructional initiatives (e.g., Chow & Cummins, 2003; DeFazio, 1997; Williams, 1996, 2000) predated the UTT theorization of translanguaging (e.g., García, 2009) and thus are not in any sense influenced by, or dependent upon, specific UTT claims.

In short, there is no credibility to the UTT assertion that pernicious educational effects result from theoretical positions that posit language specific internal differentiation in the multilingual's cognitive system. UTT theorists have demonstrated no logical or empirical connection between abyssal or raciolinguistic ideologies and the claim that languages have psycholinguistic reality.

Is the construct of academic language inherently and invariably raciolinguistic?

Flores (2020) articulated this claim as follows: "academic language is a raciolinguistic ideology that frames racialized students as linguistically deficient and in need of remediation" (p. 22). The purported inherent raciolinguistic

character of academic language was elaborated in the *Manifesto* document written by García et al. (2021):

We argue that raciolinguistic ideologies undergird the notion that racialized bilinguals lack a construct known in schools as "academic language." Efforts to purportedly teach racialized students to use academic language are fundamentally flawed. These efforts emerge from abyssal thinking claiming that there is an inductively established set of features that defines academic language that distinguishes it from non-academic language. But all we have, in fact, is the a priori category of academic language — assumed, not discovered — deductively supported by a meager number of defining shibboleths. (p. 7)

García and colleagues (2021) do not address in any substantive way the empirical issue of the extent to which there are differences in the *relative* frequency with which certain linguistic features (e.g., passive voice, low-frequency vocabulary) are employed in academic contexts as compared to everyday face-to-face interactions. This claim was briefly discussed by García and Solorza (2020) who acknowledged that "formulations such as these often describe the language of written academic texts" (p. 5), but they claimed that this language is not characteristic of typical teacher-student classroom interactions.

Wong Fillmore (2021) has pointed out that this argument ignores the fact that success in school depends on the extent to which students develop expertise in reading increasingly complex *written* texts and learning how to *write* coherently for a variety of audiences and in a variety of genres across the curriculum. May (2022) has similarly argued that it is fundamental for critical educators to equip their students with academic language registers while simultaneously enabling their students to identify the ways in which these academic language registers intersect with societal power relations.

Logical inconsistencies in UTT claims regarding academic language

Claims by UTT theorists that the construct of academic language is a raciolinguistic product of abyssal thinking are undermined by their endorsement of the need to teach minoritized students to understand and use the language registers of schooling. The various translanguaging pedagogical guides (e.g., Celic & Seltzer, 2013) developed by the CUNY-NYSIEB¹ project in collaboration with educators explicitly align translanguaging instructional strategies with the Common Core State Standards, which place strong emphasis on the development of academic language. García (2009) has also

¹City University of New York and New York State Initiative on Emergent Bilinguals.

insisted on the need to teach standard academic language to minoritized students:

Because literacy relies on the standard, the standard language itself is taught explicitly in school, and it *certainly needs to be taught.* ... We are not questioning the teaching of a standard language in school; without its acquisition, language minority children will continue to fail and will not have equal access to resources and opportunities. But we have to recognize that an *exclusive* focus on the standard variety keeps out other languaging practices that are children's authentic linguistic identity expression. (p. 36; emphasis in original)

In response to the apparent contradiction between this statement and the subsequent claim by UTT theorists that academic language is inherently raciolinguistic, I posed the question: "what researcher or theorist over the past 60 years has argued that instruction should focus *exclusively* on the standard variety and prohibit minoritised students from using their authentic spoken varieties of L1 and L2?" (Cummins, 2021a, p. 164). I noted that although instructional practice frequently fails to live up to this ideal, there is consensus among researchers that schools should build on the linguistic resources that students bring to school as part of a process of affirming the *funds of knowledge* that exist in minoritized communities.

It is certainly legitimate to be concerned with the inappropriate way schools have frequently attempted to teach academic language skills to students (minoritized and non-minoritized). But these pedagogically problematic practices do not, by themselves, invalidate the construct of academic language, which is rooted in an extensive array of empirical data (e.g., Biber, 1986; DiCerbo et al., 2014). An instructive analogy can be drawn with the concept of *democracy*:

The concept of democracy is systematically perverted by autocratic regimes around the world and is also undermined in some countries that ostensibly proclaim their commitment to universal suffrage (e.g., through widespread and ongoing attempts to suppress the voting rights of racialised minorities ...). However, the operation of these power relations that undermine the democratic process does not invalidate the concept of democracy itself. It is logically invalid to scapegoat or blame *democracy itself* for these perversions of democracy in practice. (Cummins, 2021a, p. 132; emphasis in original)

Empirical support for the construct of academic language

In their critique of the construct of academic language, UTT theorists have not addressed the empirical basis of the construct. Typical is García and Solorza's (2020) dismissal of the construct of *Core Academic Language Skills* (e.g., Uccelli et al., 2015a, 2015b) as little more than a white middle-class

linguistic and cultural norm constructed by processes of colonization and nation-building. The extensive empirical research carried out by Uccelli and colleagues that support the construct is ignored and presumably viewed as irrelevant.

Likewise, the earlier empirical foundation for the construct reviewed by Bailey (2007), Cummins (1984, 2000), DiCerbo et al. (2014) among others has been ignored by UTT theorists. In this regard, it is pertinent to note that the construct initially emerged from the realities of educator-student interactions, specifically a qualitative analysis of teacher referral forms and psychological assessments of more than 400 students of immigrant background (Cummins, 1980, 1984). This analysis documented the ways in which standardized psychological tests were being used inappropriately to label emergent bilingual students as having 'special needs', thereby potentially excluding them from educational opportunity. This research identified and challenged structural characteristics of curriculum and assessment that were reinforcing coercive relations of power.

Empirical support for the conversational/academic language distinction includes clear differences in the acquisition trajectories for these two dimensions of language proficiency among emergent bilingual students (see Cummins, 2021a, for a review). Gándara (1999), for example, concluded on the basis of research carried out in California that "while a student may be able to speak and understand English at fairly high levels of proficiency within the first three years of school, academic skills in English reading and writing take longer for students to develop" (p. 5). She noted the significant implications of these developmental patterns for assessment and instruction:

While some students are sufficiently fluent in English to participate in many classroom activities, it would be unreasonable to expect these students to perform academic tasks involving reading and writing in English at the same level as native English speakers until they have had sufficient time to develop these skills. (p. 5).

In short, the critique of the construct of academic language by UTT theorists amounts to little more than assertion in light of their dismissal of the extensive empirical evidence supporting the construct and the logical inconsistency of insisting that standard academic language must be taught to minoritized students while at the same time characterizing such language as a product of abyssal thinking and inherently and invariably raciolinguistic.

Is additive bilingualism a raciolinguistic concept?

UTT claims in relation to the constructs of *additive bilingualism* (e.g., García et al., 2021) and *additive approaches to bilingualism* (e.g., Flores & Rosa, 2015) are encapsulated in the following quotations:

The notion of additive bilingualism took root in bilingual education programs all over the world, bolstering the colonial lines that had been established between dominant and non-dominant people and their languages and histories, as well as between native and non-native students. To combat the form of abyssal thinking that continually stigmatizes colonized populations' language practices as deficient based on a static notion of linguistic legitimacy, we conceptualize bilingualism as "dynamic". (García et al., 2021, p. 11)

[S]tandard language and additive bilingualism have been used as instruments to minoritize the language practices of some bilinguals and rendering them as deficient. (García, 2020, p. 16)

discourses of appropriateness ... lie at the core of additive approaches to language education. (Flores & Rosa, 2015, p. 166)

from a raciolinguistic perspective, the limitation to additive bilingualism is that ... it offers a purely linguistic analysis of a phenomenon that is highly racialized. (Flores, 2019, p. 56)

These claims can be traced to two main sources. While distancing themselves from the claim that 'languages don't exist' on the grounds that languages do have social reality, García and colleagues (2021) endorse Makoni and Pennycook's (2005) position that concepts that are premised on a notion of discrete languages, such as language rights, mother tongues, additive bilingualism, multilingualism, and codeswitching are just as problematic as the notion of discrete languages itself. According to this perspective, these concepts reproduce existing oppressive structures derived from colonial ideologies. García et al. (2021) defend their opposition to language rights by arguing that "rather than perceive minoritized *languages* as autonomous entities that are entitled to rights, our work focuses on the rights of racialized *people* to be educated on their own terms and on the basis of their own language practices" (p. 4; emphasis in original).

A second source of the UTT claim that additive bilingualism is inherently monoglossic is the consistent conflating by UTT theorists of additive bilingualism with static, autonomous, non-dynamic conceptions of bilingual cognitive processing. As expressed by García (2020), "The bilingualism of Latinx bilingual students is not simply additive; it is dynamic" (p. 16). I pointed out that UTT theorists have presented no empirical evidence or coherent logical argumentation that additive conceptions of bilingualism are non-dynamic (Cummins, 2021a). The purported oppositional status of additive versus dynamic ignores the fact that the antonym of additive is subtractive and the antonym of dynamic is static. The absence of any logical connection, let alone oppositional connection, between additive and dynamic hardly constitutes a robust foundation for claiming that additive bilingualism is non-dynamic. Thus, the equivalence between additive and static has simply been

asserted without logical argumentation or empirical justification (Cummins, 2021a). As any baker knows, the addition of two or more substances does not mean that they remain inert and separate from each other. Thus additive in no way implies static, inert, separate, autonomous, or independent. The process of crosslinguistic intersection, interaction, cross-fertilization, and dynamic interdependence within the common underlying proficiency is a core theoretical proposition within CTT and in no way inconsistent with heteroglossic or dynamic conceptions of bilingualism.

Misrepresentation by UTT theorists of the origins and meaning of additive bilingualism

Many researchers over the past 45 years (e.g., May, 2011, 2014; Molyneux et al., 2016) have referenced the construct of additive bilingualism to highlight ways in which educators can challenge coercive relations of power by actively promoting opportunities for minoritized students to develop literacy in both their home language (L1) and the school language (L2). The term was introduced by Lambert (1974, 1975) to highlight educational alternatives to the subtractive experiences of minority groups who were pressured to replace their home languages with the dominant language. He argued that the "important educational task of the future, it seems to me, is to transform the pressures on ethnic groups so that they can profit from an additive form of bilingualism" (1975, p. 68; emphasis in original). Thus, the construct of additive bilingualism is rooted, from its origins, in a sociopolitical challenge to the assimilative societal and educational forces, often operating over generations, that denied minoritized students opportunities to develop literacy in their home languages, and, in the process, frequently undermined their language and literacy development in the school language. In the case of many Indigenous communities, the shaming, physical punishment, and sexual abuse experienced by students in residential schools amounted to torture, which the Truth and Reconciliation Commission of Canada (2015) characterized as cultural genocide.

In light of the characterization of additive bilingualism by UTT theorists as a *psycholinguistic construct* referencing only the organization of languages in the bilingual's cognitive/linguistic system, it is important to point out that *none* of the many researchers who have used the term additive bilingualism over the past 45 years have made any claims regarding the cognitive or neurolinguistic organization of languages associated with additive bilingualism.² This is

²Lambert (1974, 1975) originally proposed the distinction between additive and subtractive bilingualism, and he also advocated strict linguistic separation in the context of French immersion programs. He later expressed this instructional philosophy

illustrated by the description of the construct offered by critical educational theorists Nieto and Bode (2018), who have identified the construct as an important conceptual tool to challenge racism in the educational system:

Additive bilingualism refers to a framework for understanding language acquisition and development that adds a new language, rather than subtracts an existing one. This perspective is radically different from the traditional expectation in our society that immigrants shed their native language as they learn their new language, English. ... Additive bilingualism supports the notion that two is better than one — that English plus other languages can make us stronger individually and as a society. (p. 194; emphasis in original)

Contrast this description with García's (2019) claim that additive bilingualism involves "the enforcement of named languages as wholes to be used separately [which] stigmatizes even further [minoritized speakers'] more dynamic and fluid multilingual practices" (p. 157). This characterization of additive bilingualism is similar to Flores and Rosa's (2015) assertion that additive approaches to bilingualism are permeated by discourses of appropriateness fueled by raciolinguistic ideologies. However, these claims lack credibility because they are backed up by no empirical evidence and no theorist is identified who has endorsed or promoted discourses of appropriateness or enforcement of named languages in association with additive approaches to bilingualism.

Does the construct of additive bilingualism ignore societal power relations?

A common theme running through UTT critiques of the construct of additive bilingualism is that racism and other forms of coercive power relations are ignored, or as expressed by Flores (2019), additive bilingualism offers "a purely linguistic analysis of a phenomenon that is highly racialized" (p. 56). Obviously, the abstract concept of additive bilingualism is not making any

as follows:

No bilingual skills are required of the teacher, who plays the role of a monolingual in the target language ... and who never switches languages, reviews materials in the other language, or otherwise uses the child's native language in teacher-pupil interactions. In immersion programs, therefore, bilingualism is developed through two separate monolingual instructional routes. (1984, p. 13)

However, Lambert made no connection between this highly problematic 'two solitudes' orientation and additive bilingualism. For example, in their evaluation of the initial St. Lambert immersion program, Lambert and Tucker (1972) made no reference to the notion of additive bilingualism. Thus, any suggestion that the construct of additive bilingualism implies or promotes linguistic separation in the instructional process is without foundation (Cummins, 2021a).

theoretical claims and so the question becomes: To what extent do proponents of additive bilingualism offer a purely linguistic analysis of underachievement among minoritized students rather than identifying the racialized power structures that undermine students' academic engagement and achievement?

The short answer to this question is that the promotion of additive bilingualism among minoritized students has always been characterized as a repudiation of the subtractive societal and educational forces that have operated in countries around the world to suppress minoritized students' languages and cultural knowledge. In the context of my own work, the construct of additive bilingualism has been closely integrated with a detailed analysis of societal power relations and their impact on student/teacher identity negotiation. The central proposition of this theoretical framework is that underachievement among students from minoritized communities is caused by patterns of power relations operating both in schools and in the broader society. It follows that minoritized students will succeed educationally only to the extent that patterns of teacher-student interaction in school challenge the coercive relations of power that prevail in society at large (Cummins, 1986, 2001, 2021a).

This framework highlighted the role of teacher agency and specified explicitly the ways in which teachers, individually and collectively, could create contexts of empowerment with their students by promoting additive bilingualism, teaching for crosslinguistic transfer, and ensuring that students were enabled to use language powerfully across a range of registers, including the literate registers required for success in school.

Is the notion of crosslinguistic transfer harmful to the education of racialized bilinguals?

In the context of volatile debates regarding the legitimacy and effectiveness of bilingual programs for minoritized students, I also proposed the notion of a *common underlying proficiency* (CUP) to explain the fact that in well-implemented bilingual programs, instruction through minoritized students' home language (L1) entails no adverse effects on the development of literacy in the dominant societal language (L2). I argued that the CUP makes possible transfer of concepts, skills, and learning strategies across languages. This dynamic crosslinguistic interaction implies that teachers in both bilingual and monolingual programs should actively promote productive contact and transfer across languages.

García and Li (2014) critiqued the notion of a common underlying proficiency, because, in their estimation, it still constructs students' L1 and L2 as separate: "Instead, translanguaging validates the fact that bilingual students' language practices are not separated into ... home language and

school language, instead transcending both" (p. 69). They argued that we can now "shed the concept of transfer ... [in favour of] a conceptualization of integration of language practices in the person of the learner" (p. 80).

More recently, García and colleagues (2021) expressed their concerns with the concept of teaching for crosslinguistic transfer as follows:

The two named languages are entities with linguistic features that are viewed as separate, even though language proficiency is common to both languages. But we believe that the notion of cross-linguistic transfer, when both languages are conceived as separate and autonomous entities, has proven harmful to the education of racialized bilinguals. (p. 11)

They elaborate this point by arguing that a focus on teaching for transfer positions the student's L1 as simply a scaffold to facilitate the learning of L2. Thus, teachers are concerned with teaching autonomous languages rather than teaching racialized bilingual students, with the result that these students "are often rendered as inadequate in one language or another, or even in both" (p. 12). By contrast, within the unitary network of meanings proposed by UTT, knowledge of language features is represented as being *accessed* rather than transferred.

Logical inconsistencies in UTT characterization of teaching for crosslinguistic transfer

There are myriad contradictions in these assertions. For example, García et al., (2021) acknowledge that the constructs of the common underlying proficiency and teaching for crosslinguistic transfer conceive of language proficiency as common to both languages. Yet, they simultaneously argue that these constructs conceive of languages as separate and autonomous entities. Which is it — common and shared or separate and autonomous?

They also *believe* that the notion of crosslinguistic transfer has proven harmful to the education of racialized bilinguals. They provide no empirical evidence, documentation, or instructional examples to support this belief. They suggest on the basis of their classroom observations that teachers who think in terms of crosslinguistic transfer focus only on mobilizing students' L1 as a scaffold for learning L2. This is certainly not what we have observed in our collaboration with teachers who have engaged students' multilingual repertoires in activities such as creating dual language identity texts (Cummins & Early, 2011). These activities *were* highly effective in scaffolding students' transfer of conceptual knowledge and literacy skills across languages; but they also exerted a powerful impact on learning by connecting instruction to students' lives, affirming students' identities, reinforcing students' awareness of how academic language works, and expanding their active engagement

with literacy. Furthermore, by incorporating students' multilingualism into the instructional process, these teachers challenged the raciolinguistic exclusion of students' linguistic and cultural capital from curriculum and instruction.

Empirical support for the CUP model

The extensive empirical support for the notion of a common underlying proficiency and crosslinguistic transfer has been noted in multiple studies and reviews of the research literature (e.g., Cummins, 2021a; Dressler & Kamil, 2006; National Academies of Sciences, Engineering and Medicine [NASEM], 2017). For example, in a study involving 196 sixth graders with Spanish language backgrounds who started learning English in kindergarten and were continuously enrolled in a U.S. school, MacSwan et al. (2017) reported that Spanish literacy accounted for 29% of the variance in English academic achievement (assessed by the Mathematics, Language, and Reading subtests of the Stanford Achievement Test). They concluded that "students would be well served academically by a language program that supports their growth in literacy in L1 while learning L2" (p. 234). The comprehensive review of research on the education of English learners in the United States conducted by NASEM (2017) summarized its findings as follows:

A growing body of research dating back to the 1960s reveals that the two languages of bilinguals do not exist in isolation and to the contrary, are highly interactive. ... The two languages of bilinguals share a cognitive/conceptual foundation that can facilitate the acquisition and use of more than one language for communication, thinking, and problem solving. (p. 243)

In short, the research evidence overwhelmingly rejects the 'belief' on the part of UTT theorists that the notion of the common underlying proficiency and teaching for crosslinguistic transfer has exerted a *harmful* effect on the education of racialized bilinguals. Unfortunately, this research evidence has been ignored rather than critically examined by UTT theorists.

Consistency of the CUP with dynamic models of bi/multilingualism

The common underlying proficiency construct made no attempt to chart the complexities either of multilingual communication or the cognitive organization of languages in our brains. It was proposed to explain a very different set of educational phenomena (see Cummins, 1981, 2021a). As Jessner (2006) has pointed out, dynamic models of bilingualism go far beyond the notion of a common underlying proficiency in exploring the cognitive organization and interactions among the languages of multilingual people. However, the common underlying proficiency construct is entirely consistent with dynamic systems theory. I made this point in elaborating the

theoretical basis for teaching for crosslinguistic transfer and arguing against 'two solitudes' models of bilingualism and bilingual education:

The theoretical constructs elaborated by Cook (1995) and Jessner (2006) are not in any way inconsistent with the notion of a common underlying proficiency (CUP).... What all these constructs share is a recognition that the languages of bi- and multilinguals interact in complex ways that can enhance aspects of overall language and literacy development. They all also call into question the pedagogical basis of monolingual instructional approaches that appear dedicated to minimizing and inhibiting the possibility of two-way transfer across languages. (Cummins, 2007, p. 234)

Conclusion

The central argument of this article is that many theoretical claims associated with UTT are logically flawed and asserted with minimal reference to empirical evidence. Counter-intuitive and empirically unsupported claims such as "bilingual people do not speak languages" (García and Lin, 2017, p. 126) risk undermining the important contributions that pedagogical translanguaging has made, and hopefully will continue to make, to equitable antiracist education for minoritized and multilingual students. The present analysis has affirmed the theoretical credibility of concepts such as academic language, additive bilingualism, the common underlying proficiency and teaching for crosslinguistic transfer which are associated with CTT but rejected as abyssal or raciolinguistic by UTT. These concepts are embedded into and constitute integral components of a broader analysis of how societal power relations intersect with patterns of teacher-student identity negotiation in school. They represent important evidence-based theoretical tools that have operated over the past 40 years to enable researchers and educators to challenge disempowering educational structures and interactions.

Acknowledgement

I would like to thank the anonymous reviewer whose useful suggestions have been incorporated into this version of the article.

References

Bailey, A. (2007). Introduction: Teaching and assessing students learning English in school. In A. Bailey (Ed.), *The language demands of school: Putting academic English to the test* (pp. 1–26). Yale University Press.

Ballinger, S., Lyster, R., Sterzuk, A., & Genesee, F. (2017). Context-appropriate crosslinguistic pedagogy: Considering the role of language status in immersion education. *Journal of Immersion and Content-Based Language Education*, *5*(1), 30–57. https://doi.org/10.1075/jicb.5.1.02bal

- Bhatt, R.M., & Bolonyai, A. (2019). On the theoretical and empirical bases of translanguaging. Working Papers in Urban Language & Literacies, Paper 254, 1–25
- Bhatt, R.M., & Bolonyai, A. (2022). Code-switching and its terminological other—translanguaging. In J. MacSwan (Ed.), *Multilingual perspectives on translanguaging* (pp. 154–180). Multilingual Matters.
- Biber, D. (1986). Spoken and written textual dimensions in English: Resolving the contradictory findings. *Language*, 62, 384–414.
- Blauner, R. (1969). Internal colonialism and ghetto revolt. *Social Problems*, 16(4), 393–408. https://doi.org/10.2307/799949
- Carbonara, V., & Scibetta, A. (2020a). *Imparare attraverso le lingue: Il translan-guaging come pratica didattica* [Learning across languages: Translanguaging as a teaching practice]. Carocci Editore.
- Carbonara, V., & Scibetta, A. (2020b). Integrating translanguaging pedagogy into Italian primary schools: Implications for language practices and children's empowerment. *International Journal of Bilingual Education and Bilingualism*, 25(3), 1049–1069. https://doi.org/10.1080/13670050.2020.1742648
- Celic, C., & Seltzer, K. (2013). Translanguaging: A CUNY-NYSIEB guide for educators. CUNY-NYSIEB, The Graduate Center, The City University of New York. https://www.cuny-nysieb.org/wp-content/uploads/2016/04/Translanguaging-Guide-March-2013.pdf
- Cenoz, J., & Gorter, D. (2021). Pedagogical translanguaging (Elements in Language Teaching). Cambridge University Press. https://doi.org/10.1017/9781009029384
- Chow, P., & Cummins, J. (2003). Valuing multilingual and multicultural approaches to learning. In S.R. Schecter and J. Cummins (Eds.), *Multilingual education in practice: Using diversity as a resource* (pp. 32–61). Heinemann.
- Cook, V. (1995). Multi-competence and the learning of many languages. *Language*, *Culture and Curriculum*, 8(2), 93–98. https://doi.org/10.1080/07908319509525193
- Cummins, J. (1980). Psychological assessment of immigrant children: Logic or intuition? *Journal of Multilingual and Multicultural Development*, 1(2), 97–111. https://doi.org/10.1080/01434632.1980.9994005
- Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students. In California State Department of Education (Ed.), Schooling and language minority students: A theoretical framework (pp. 3–49). Evaluation, Dissemination and Assessment Center, California State University.
- Cummins, J. (1984). Bilingualism and special education: Issues in assessment and pedagogy. Multilingual Matters.

Cummins, J. (1986). Empowering minority students: A framework for intervention. *Harvard Educational Review*, 56(1), 18–36. https://doi.org/10.17763/haer.56.1.b327234461607787

- Cummins, J. (2000). Language, power and pedagogy: Bilingual children in the crossfire. Multilingual Matters. https://doi.org/10.21832/9781853596773
- Cummins, J. (2001). *Negotiating identities: Education for empowerment in a diverse society* (2nd ed.). California Association for Bilingual Education.
- Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. *Canadian Journal of Applied Linguistics/Revue canadienne de linguistique appliquée*, 10(2), 221–240. https://journals.lib.unb.ca/index.php/CJAL/article/view/19743
- Cummins, J. (2021a). Rethinking the education of multilingual learners: A critical analysis of theoretical claims. Multilingual Matters.
- Cummins, J. (2021b). Translanguaging: A critical analysis of theoretical claims. In P. Juvonen & M. Källkvist (Eds.), *Pedagogical translanguaging: Theoretical, methodological and empirical perspectives* (pp. 24–68). Multilingual Matters. https://doi.org/10.21832/9781788927383-004
- Cummins, J., & Early, M. (Eds.). (2011). *Identity texts: The collaborative creation of power in multilingual schools*. Trentham Books.
- DeFazio, A.J. (1997). Language awareness at The International High School. In L. van Lier and D. Corson (Eds.), *Encyclopedia of Language and Education: Vol. 6. Knowledge about language*. (pp. 99–107). Kluwer Academic.
- DiCerbo, P.A., Anstrom, K.A. Baker, L.L., & Rivera, C. (2014). A review of the literature on teaching academic English to English language learners. *Review of Educational Research*, 84(3), 446–482. https://doi.org/10.3102/0034654314532695
- Dressler, C., & Kamil, M. (2006). First- and second-language literacy. In D. August and T. Shanahan (Eds.), *Developing literacy in second-language learners. Report of the National Literacy Panel on Language-Minority Children and Youth* (pp. 197–238). Lawrence Erlbaum Associates. https://doi.org/10.4324/9781315094922
- Flores, N.L. (2019). Translanguaging into raciolinguistic ideologies: A personal reflection on the legacy of Ofelia García. *Journal of Multilingual Education Research*, 9, Article 5, 45–60. https://fordham.bepress.com/jmer/vol9/iss1/5
- Flores, N. (2020). From academic language to language architecture: Challenging raciolinguistic ideologies in research and practice. *Theory into Practice* 59(1), 22–31. https://doi.org/10.1080/00405841.2019.1665411
- Flores, N., & Rosa, J. (2015). Undoing appropriateness: Raciolinguistic ideologies and language diversity in education. *Harvard Educational Review*, 85(2), 149–171. https://doi.org/10.17763/0017-8055.85.2.149
- Gándara, P. (1999). Review of research on instruction of limited English proficient students: A report to the California legislature. University of California at Santa Barbara, Linguistic Minority Research Institute.

- García, O. (2009). Bilingual education in the 21st century: A global perspective. Wiley-Blackwell.
- García, O. (2019). Decolonizing foreign, second, heritage, and first languages: Implications for education. In D. Macedo (Ed.), *Decolonizing foreign language education: The misteaching of English and other colonial languages* (pp. 152–168). Routledge. https://doi.org/10.4324/9780429453113
- García, O. (2020). Singularity, complexities and contradictions: A commentary about translanguaging, social justice, and education. In J.A. Panagiotopoulou, L. Rosen, & J. Strzykala (Eds.), *Inclusion, education and translanguaging: How to promote* social justice in (teacher) education? (pp. 11–22). Springer Fachmedien.
- García, O., Flores, N., Seltzer, K., Li, W., Otheguy, R., & Rosa, J. (2021). Rejecting abyssal thinking in the language and education of racialized bilinguals: A manifesto. *Critical Inquiry in Language Studies*, 18(3), 203–228. https://doi.org/10.1080/15427587.2021.1935957
- García, O., Ibarra Johnson, S., & Seltzer, K. (2016). *The translanguaging classroom:* Leveraging student bilingualism for learning. Caslon.
- García, O., & Kleifgen, J.A. (2019). Translanguaging and literacies. Reading Research Quarterly, 55(4), 553–571. https://doi.org/10.1002/rrq.286
- García, O., & Kleyn, T. (Eds.). (2016). Translanguaging with multilingual students: Learning from classroom moments. Routledge. https://doi.org/10.4324/9781315695242
- García, O., & Li, W. (2014). Translanguaging: Language, bilingualism and education. Palgrave Macmillan. https://doi.org/10.1057/9781137385765
- García, O., & Lin, A.M.Y. (2017). Translanguaging in bilingual education. In O. García and A.M.Y. Lin (Eds.), Encyclopedia of Language and Education: Vol. 5. Bilingual and multilingual education (pp. 117–130). Springer.
- García, O., & Solorza, C.R. (2020). Academic language and the minoritization of U.S. bilingual Latinx students. *Language and Education*, 35(6), 505–521. https://doi.org/10.1080/09500782.2020.1825476
- Jaspers, J. (2018). The transformative limits of translanguaging. Language and Communication, 58, 1–10. https://doi.org/10.1016/j.langcom.2017.12.001
- Jessner, U. (2006). Linguistic awareness in multilinguals: English as a third language. Edinburgh University Press.
- Lambert, W.E. (1974). Culture and language as factors in learning and education. In F.E. Aboud & R.D. Meade (Eds.), *Cultural factors in learning and education*. *Proceedings of the Fifth Western Washington Symposium on Learning* (pp. 99–122). Western Washington University.
- Lambert, W.E. (1975). Culture and language as factors in learning and education. In A. Wolfgang (Ed.), *Education of immigrant students: Issues and answers* (pp. 55–83). Ontario Institute for Studies in Education.

Lambert, W.E. (1984). An overview of issues in immersion education. In California State Department of Education (Ed.), *Studies on immersion education: A collection for United States educators* (pp. 8–30). California State Department of Education.

- Lambert, W.E., & Tucker, G.R. (1972). *Bilingual education of children: The St. Lambert experiment*. Newbury House.
- MacSwan, J. (2017). A multilingual perspective on translanguaging. *American Educational Research Journal*, 54(1), 167–201. https://doi.org/10.3102/0002831216683935
- MacSwan, J. (2022). Introduction: Deconstructivism—A reader's guide. In J. MacSwan (Ed.), *Multilingual perspectives on translanguaging* (pp. 1–41). Multilingual Matters.
- MacSwan, J., Thompson, M.S., Rolstad, K., McAlister, K., & Lobo, G. (2017). Three theories of the effects of language education programs: An empirical evaluation of bilingual and English-only policies. *Annual Review of Applied Linguistics*, 37, 218–240. https://doi.org/10.1017/S0267190517000137
- Makoni, S., & Pennycook, A.D. (2005). Disinventing and (re)constituting languages. *Critical Inquiry in Language Studies: An International Journal*, 2(3), 137–156. https://doi.org/10.1207/s15427595cils0203_1
- May, S. (2011). The disciplinary constraints of SLA and TESOL: Additive bilingualism and second language acquisition, teaching and learning. *Linguistics and Education*, 22(3), 233–247. https://doi.org/10.1016/j.linged.2011.02.001
- May, S. (2014). Disciplinary divides, knowledge construction, and the multilingual turn. In S. May (Ed.), *The multilingual turn: Implications for SLA*, *TESOL and bilingual education* (pp. 7–31). Routledge. https://doi.org/10.4324/9780203113493
- May, S. (2022). Afterword: The multilingual turn, superdiversity, and translanguaging—The rush from heterodoxy to orthodoxy. In J. MacSwan (Ed.), *Multilingual perspectives on translanguaging* (pp. 343–355). Multilingual Matters.
- Molyneux, P., Scull, J., & Aliani, R. (2016). Bilingual education in a community language: Lessons from a longitudinal study. *Language and Education*, *30*(4), 337–360. https://doi.org/10.1080/09500782.2015.1114630
- National Academies of Sciences, Engineering, and Medicine (NASEM). (2017). Promoting the educational success of children and youth learning English: Promising futures. The National Academies Press. https://doi.org/10.17226/24677
- Nieto, S., & Bode, P. (2018). Affirming diversity: The sociopolitical context of multicultural education (7th ed.). Pearson.
- Otheguy, R., García, O., & Reid, W. (2015). Clarifying translanguaging and deconstructing named languages: A perspective from linguistics. *Applied Linguistics Review*, 6(3), 281–307. https://doi.org/10.1515/applirev-2015-0014

- Otheguy, R., García, O., & Reid, W. (2019). A translanguaging view of the linguistic system of bilinguals. *Applied Linguistics Review*, 10(4), 625–651. https://doi.org/10.1515/applirev-2018-0020
- Santos, B.S. de (2014). Epistemologies of the south: Justice against epistemicide. Routledge. https://doi.org/10.4324/9781315634876
- Truth and Reconciliation Commission of Canada. (2015). Canada's residential schools: The history, Part 1, Origins to 1939: The Final Report of the Truth and Reconciliation Commission of Canada, Volume 1. McGill-Queen's University Press. https://publications.gc.ca/pub?id=9.807830&sl=0
- Uccelli, P., Barr, C.D., Dobbs, C.L., Phillips Galloway, E., Meneses, A., & Sanchez, E. (2015a). Core academic language skills: An expanded operational construct and a novel instrument to chart school-relevant language proficiency in preadolescent and adolescent learners. *Applied Psycholinguistics*, 36(5), 1077–1109. https://doi.org/10.1017/S014271641400006X
- Uccelli, P., Phillips Galloway, E., Barr, C., Meneses, A., & Dobbs, C. (2015b). Beyond vocabulary: Exploring cross-disciplinary academic-language proficiency and its association with reading comprehension. *Reading Research Quarterly*, 50(3), 337–356. https://doi.org/10.1002/rrq.104
- von der Mühlen, S., Richter, T., Schmid, S., Schmidt, E.M., & Berthold, K. (2016). Judging the plausibility of arguments in scientific texts: A student–scientist comparison. *Thinking and Reasoning*, 22(2), 221–249. https://doi.org/10.1080/13546783.2015.1127289
- Williams, C. (1994). Arfarniad o ddulliau dysgu ac addysgu yng nghyd-destun addysg uwchradd ddwyieithog [An evaluation of teaching and learning methods in the context of bilingual secondary education] [Unpublished doctoral dissertation]. University of Wales.
- Williams, C. (1996). Secondary education: Teaching in the bilingual situation. In C. Williams, G. Lewis, & C. Baker (Eds.), The language policy: Taking stock. Interpreting and apraising Gwynedd's language policy in education (pp. 39–78). Canolfan Astudiaethau Iaith (CAI).
- Williams, C. (2000). Welsh-medium and bilingual teaching in the further education sector. *International Journal of Bilingual Education and Bilingualism*, 3(2), 129– 148
- Wong Fillmore, L. (2014). English language learners at the crossroads of educational reform. *TESOL Quarterly*, 48(3), 624–632. https://doi.org/10.1002/tesq.174
- Wong Fillmore, L. (2021). Foreword. In J. Cummins (Ed.), *Rethinking the education of multilingual learners: A critical analysis of theoretical claims* (pp. xxi–xxvii). Multilingual Matters.