

Subtractive Schooling and Authentic Cariño: Translanguaging in the Bilingual and Dual  
Language Classroom.

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Translanguaging es una característica crítica del bilingüismo y tiene el potencial de ser un importante enfoque pedagógico en la educación bilingüe. Sin embargo, bilingual education has not traditionally enacted translanguaging pedagogy and instead has focused on the development of monolingual proficiency of two languages. Esto no deja ver el posible potencial de la pedagogía del translenguaje. This monolingual approach to bilingualism, which emphasizes the separation of languages, can be viewed como un producto pedagógico del proyecto colonial- y como un ejemplo de subtractive schooling because it devalues the rich translanguaging practices of bilinguals.

Empezando con un repaso de las teorías de translanguaging, subtractive schooling and the politics of caring (Valenzuela, 1999/2010), este capítulo propone entonces la promulgación de una pedagogía del translanguage that acts as a force that counters pedagogical practices that police language. We give examples from the field of this conception in practice y reflejamos acerca del impacto en estudiantes. We conclude by offering practical implications for teachers and guiding questions.

### **Review of translanguaging**

El término, “translanguaging,” tiene dos significados primarios that we bring to light. First, it can be used to describe a type of pedagogy. En cuanto a la pedagogía, el término, “translanguaging,” originates from the Welsh term *trawsieithu*, which was first developed by Cen Williams (1994). Williams lo utilizó para describir las prácticas pedagógicas donde las maestras y maestros planifican lessons that include the intentional switching of languages for different tasks. For example, in a literacy lesson, students might read in English and write in Welsh (Williams, 1994, as cited in Baker, 2011). Since its inception, translanguaging has been taken up by a wide range of scholars (e.g. Creese & Blackledge, 2010; Canagarajah, 2011;

García, 2009; García & Wei, 2014) para considerar “the complex language practices of plurilingual individuals and communities” and “the pedagogical approaches that use those complex practices,” (García & Wei, 2014, p.20).

Second, in terms of its role as a theory of bilingualism, in Canagarajah’s (2011) work, he defines translanguaging as, “the ability of multilingual speakers to shuttle between languages, treating the diverse languages that form their repertoire as an integrated system,” (p.401). En el libro fundamental de García y Wei (2014) en translanguaging lo definen como, “the enaction of language practices that use different features that had previously moved independently constrained by different histories, but that now are experienced against each other in speakers’ interactions as one *new whole*,” (p.21). De esta manera, translanguaging es una manera de pensar sobre el uso del lenguaje que irrumpe con definiciones estáticas de idiomas “standard” y highlights the active nature of languaging. The emphasis is not on language, but rather on languaging, which is defined as “the simultaneous process of continuous becoming of ourselves and of our language practices, as we interact and make meaning in the world,” (García & Wei, 2014 p.8).

### **Review of subtractive schooling and the politics of caring**

Drawing on findings from an ethnographic study at Seguí High School (pseudonym), Valenzuela (1999/2010) contends that schools subtract value from the cultural capital that Mexican American students bring to school in two significant ways. Primero, las escuelas están envueltas activamente en la práctica de “de-Mexicanization” la cual desenfatisa y marginaliza students’ languages, cultures, and community-based identities. Esto es significativo ya que esta exclusión sistemática de las culturas, lenguajes e identidades de nuestros estudiantes impacta tanto el engagement de los estudiantes como el achievement académico de estos. A social effect

of “de-Mexicanization,” is that by assimilating or “whitewashing” U.S.-born, Mexican American youths’ identities (Urrieta, 2016), las escuelas quebrantan las posibilidades of connections forming between immigrant and U.S.-born, Mexican youth. De esta manera, los jóvenes son incapaces de acceder el capital social important to academic success that can potentially be found in these relationships (Coleman, 1988).

En adición a el proceso de “de-Mexicanization,” hay un desajuste en cómo los estudiantes Mexican American ven la educación y cómo la ven sus maestros in that “teachers expect students to *care about* school in technical fashion before they *care for* them, while students expect teachers to *care for* them before they *care about* school” (Valenzuela, 2005, p.83). This type of caring is labeled as aesthetic caring, “whose essence lies in an attention to things and ideas...rather than centering students’ learning around a moral ethic of caring that nurtures and values relationships (Valenzuela, 1999/2010, p.22). Estos factores se combinan para crear ambientes escolares que no apoyan los recursos culturales y lingüísticos que los Mexican y Mexican American students bring to school, fostering a sense of estrangement from the dominant culture embodied in a school curriculum that is itself chauvinistic, privileging the histories, stories, and experiences of the dominant Anglo group in U.S. society. Esta situación es exacerbada por los impactos curriculares que tienen políticas educativas como el No Child Left Behind Act (NCLB), issues facing bilingual learners, y la escasez de maestras/os Latina/o en nuestras escuelas públicas.

Authentic caring ofrece un contraste a aesthetic caring. Authentic caring, “emphasizes relations of reciprocity between teachers and students,” (Valenzuela, 1999/2010, p.61). In authentic caring, los estudiantes y las/los maestros commit to a relationship that is built upon confianza y vulnerabilidad. Valenzuela (1999/2010) further argues that authentic caring is

necessary pero no suficiente, rather, “conceptualizations of educational ‘caring’ must more explicitly challenge the notion that assimilation is a neutral process so that cultural and language affirming curricula may be set into motion,” (p.25). El concepto de *critical care* (Antrop-González & De Jesús, 2006) builds on this perspective of caring, eschewing notions of colorblind caring and focusing on the importance of the “sociocultural context” of caring (p.413). We will draw on the notion of critical care en la próxima sección sobre re-envisioning subtractive schooling and caring.

Finalmente, en el corazón de esta conversación sobre caring y schooling está nuestra visión de lo que entendemos por el término educación. A primera instancia, one might assume that education y educación mean the same thing, however, educación is a more expansive term than education. Educación highlights “the family’s role of inculcating in children a sense of moral, social, and personal responsibility and serves as the foundation for all other learning. Though inclusive of formal academic training, educación additionally refers to competence in the social world, wherein one respects the dignity and individuality of others,” (Valenzuela, 1999/2010, p.23). Educación is a folk model of education that is values-based en vez de human capital-based. In centering values, educación promueve la idea que si una persona no sabe como ser humana/o y tratar a la gente con respeto y cariño, entonces academic knowledge and skills are immaterial. La distincion entre educación and education is lost when we are forced to speak in a monolingual English repertoire.

### **Re-envisioning subtractive schooling and caring**

En éste capítulo reconocemos que los conceptos de authentic caring en “Subtractive Schooling” (Valenzuela, 1999) se quedan cortos al no considerar en detalle el potencial de la

pedagogía del translenguaje como parte de este framework. En la obra *Subtractive Schooling* (Valenzuela, 1999/2010) se profundiza en el concepto de *politically aware authentic caring* that builds on Bartolomé's (2004) understanding of political awareness. *Politically aware, authentic caring* significa un “commitment to social justice in ways that represent the authentic, collective interests of the Mexican American community's historic struggle for equity, fairness and due process” (Valenzuela, 2008, p. 505). In this chapter we extend that notion to include la pedagogía del translenguaje como parte del proyecto de *politically aware, authentic caring*. In addition, we build on Curry's (2016) model of authentic cariño and show how translanguaging pedagogy fits into this model.

En Seguin High School, Valenzuela (1999/2010) encontró que el los jóvenes nacidos en los Estado Unidos eran “socially de-capitalized” por sus maestros, administradores and school policies que resultan en de-identification de su lenguaje español, su país y sus identidades. En este proceso los estudiantes que utilizan el translenguaje como su idioma, son automáticamente vistos como incompetentes dentro del contexto académico y como semilingües (Rosa, 2016), alluding to the student's putative inabilities to speak either language “correctly.” Cuando se considera la historia colonial del Southwestern United States, y como los Estados Unidos se apoderó del 40 por ciento de las tierras mejicanas en 1848 por medio del Treaty of Guadalupe de Hidalgo (San Miguel & Valencia, 1998), podemos comenzar a entender el origen y potencial de las pedagogías del translenguaje en los salones de clase.

El trabajo de maestras y maestros que protagonizan un *politically aware, authentic caring*, no está completo if they do not honor, lift and systematically use their student's translanguaging skills as part of their teaching and learning. When this is not the case, los educadores participan en the erasure of repertorios lingüísticos de los estudiantes bilingües

nacidos aquí en los Estados Unidos, de sus historias y destrezas. When, in the contrary, they bring translanguaging into the lesson in appreciative ways como parte del *politically aware, authentic caring*, están también reconociendo las dimensiones políticas y de poder que son parte innegable de nuestro trabajo como educadores. Para que esto ocurra, maestros y maestras deben ver los recursos lingüísticos complejos de los estudiantes que utilizan el translenguaje como un recurso valioso y como un derecho, no como un problem that has to be solved or fixed by erasing such an important aspect of their identities (Ruiz, 1984). De esta manera, we build upon the *politically aware, authentic caring*, y translanguaging como un componente aditivo que debe estar presente en nuestros salones de clase. En la próxima sección we provide concrete examples of how la pedagogía del translenguaje se llevó a cabo en un salón de cuarto grado como parte del classroom and institutional effort to enact an additive schooling experience for Mexican American and Central American students.

### **Examples from classrooms**

Salmerón engaged in a case study on translanguaging at Molina Elementary School (pseudonym), which has demográficas similares a Seguin High School, the site where the subtractive schooling framework was developed. Las dos escuelas están ubicadas en urban school districts en Texas. Semejante a Seguin, Molina's student body is predominantly Mexican with a mix of immigrant and U.S. born students. A diferencia de Seguin, at Molina there are strong examples of *authentic cariño* that are often enacted through a translanguaging stance and translanguaging pedagogy. Nosotros utilizamos Curry's (2016) model of *authentic cariño*, to outline the ways that at Molina we can see translanguaging as an enactment of *authentic cariño* in terms of familial cariño, intellectual cariño, and critical cariño.

The case study focused en las maneras que Ms. Watson y Ms. Gomez, two 4th grade one-way dual lenguaje maestras, take up translanguaging pedagogy in literacy instruction and how this impacts their students. Ms. Gomez, who is in her tenth year of teaching, identifies as una mexicana, and a sequential Spanish/English bilingual (Genesee, Paradis, & Crago, 2004) who learned Spanish from birth and learned English in adulthood. Ms. Watson who is in her fifth year of teaching, identifies as a White woman and is a sequential English/Spanish bilingual who learned English from birth and Spanish in childhood (Genesee, Paradis, & Crago, 2004). Ambas maestras estan comprometidas to creating classroom communities that honor students' linguistic repertoires and support them to develop biliteracy.

**Intellectual cariño.** Educators who exhibit intellectual cariño “care about students’ intellectual development, aiming to foster their habits of mind and engagement with big ideas,” (Curry 2016, p.892). At Molina, translanguaging era integral al teachers’ enactment of intellectual cariño. Por ejemplo, Ms. Gomez and Ms. Watson were committed to teaching their students literacy in English and Spanish each day and made changes to their schedule to reach this goal. In their school district, un modelo común is to alternate the language of instruction for literacy based on the week or day. In their second year at Molina Ms. Gomez and Ms. Watson negotiated with their principal and district supervisor to pilot a new schedule where they taught an English literacy block in the morning and a Spanish literacy block in the afternoon. Las maestras propusieron que giving students the opportunity to use both languages each day was integral to their biliteracy development. Within each literacy block, the teachers modeled translanguaging and the students were able to draw on their full linguistic repertoire. Por ejemplo, in the mini-lesson, las maestras implementaron el método preview-view-review by strategically utilizing Spanish and English for different parts of the lesson. Al comienzo de la



lección, la maestra comparte la meta instruccional en español, continues to teach in English, y al final revisa la meta instruccional en español. In a middle of the year reflection, ambas maestras expresaron que they saw an increase in students' developing biliteracy in comparison to the previous year when students were not given the opportunity to use both languages each day. In this way, the teachers showed a commitment to holding their students to the high standard of both developing biliteracy and enacting intellectual cariño.

**Familial cariño.** Familiar cariño está construido sobre un fundamento de “reciprocity, trust, and connectedness between and among students and teachers,” (Curry, 2016, p. 892). At Molina, familiar cariño es en el corazón of the community ethos around language practices. The classrooms were a mix of immigrant and U.S.-born students who had a variety of home language practices. In order for the students to feel comfortable speaking, reading, and writing in English and Spanish, they also needed to feel supported by each other. Estos estudiantes lingüísticamente flexibles demostraron familiar cariño when they showed grace for each other's language practices. Por ejemplo, when students were in peer writing partnerships and they found linguistic errors in each others' writing, instead of focusing on their mistakes, they asked questions about the students' meaning in their writing. La cooperación en las parejas de escritura was often seen in the partnerships that were composed of students born in the United States and immigrant students. This theme of intergenerational cooperation between the Latina/o students is contrary to what is seen in subtractive schooling contexts where there is often a lack of cooperation between different Latina/o groups that stems from school practices that serve to divide students (e.g., Valenzuela, 1999). Una pedagogía de translenguaje is crucial to developing a community that enacts familiar cariño and is supportive of each others' linguistic practices.

**Critical cariño.** Critical cariño, como la idea de “critical care” por Antrop-González and De Jesús’ (2006), “refers to caring undertaken with historical and political consciousness of students’ communities and a desire to interrupt inequity,” (Curry, 2016, p.892). By its nature, la pedagogía del translenguaje, is subversive to dominant monolingual linguistic ideologies and privileges the dynamic linguistic practices of students’ communities. Al valorar los repertorios lingüísticos de todos los estudiantes, translanguaging pedagogy se convierte parte de el culturally affirming curricula that challenges linguistic inequities. At Molina, critical cariño era evidente en las maneras que Ms. Watson and Ms. Gomez honored the students’ linguistic practices and did not require their language to fit a strict definition of standard language. Por ejemplo, if one of the teachers was speaking to a student in English and the student’s response used translanguaging, the teacher did not prompt the student to respond in English. By demonstrating linguistic flexibility, the teachers challenged traditional notions of acceptable language practices. Ms. Watson and Ms. Gomez both explained that they believed that each child has a unique linguistic repertoire that is shaped by their communities. By not forcing them to fit into monolingual conceptions of language, they provided the students with an opportunity to be vulnerable y desarrollar sus repertorios lingüísticos.

### **Practical implications for teachers**

Las maestras y maestros who currently work with our Latina/o, bilingual children tienen la responsabilidad de honrar y desarrollar sus full linguistic repertoires if they are to claim that they enact politically aware authentic caring. The language ideologies conveyed by maestras y maestros, tienen un lasting impact en las maneras en las cuales nuestros estudiantes ven, no tan solo su schooling, pero también su identidad como bilingües. Por lo tanto, translanguaging practices must be a part of politically aware caring, as it opens a space for teachers to value

student's full linguistic repertoires. As we look back to the classroom examples provistos en este capítulo, we see how enacting this type of care might require for teachers and schools to restructure the ways in which they enact language instruction akin to the teachers at Molina. This could mean advocating for translanguaging pedagogy at a school or district level and calling into question traditional notions of bilingual pedagogy.

As we look forward, we are challenged to think about what these pedagogías del translenguaje como parte de un modelo de politically aware authentic caring, representan para el assessment de nuestros estudiantes bilingües. As pressures for standard assessments rise and with the reality that teachers and students are often presionados a tomar esas prueba estandarizadas en inglés, que significan estas presiones para las maestras y maestros que promueven y utilizan these types of pedagogías? Por otra parte, as more districts across the nation begin to develop Two Way Dual Language programs, las maestras y maestros tienen el reto de apoyar el desarrollo lingüístico of more and more diverse groups of children who bring varying degrees and registers of both Spanish and English. Keeping a framework of politically aware authentic caring at the forefront, how do teachers honor and continue to develop los repertorios lingüísticos de aquellos estudiantes quienes han sido históricamente marginados?

### **Conclusion**

Similarly to how students must be able to translanguage in order to express their full selves, we, too, must similarly translanguage in order to convey our full selves. Meaning often cannot be directly translated and there are meanings that are missed when we are forced to express ourselves monolingually. Por ejemplo, hay elementos del cariño that are not expressed by care and elements of care que cariño no verbaliza. Los dos términos son simultaneously nuanced and each one has

their own dimensions and derivatives. Translanguaging nos permite verbalizar conocimientos profundos al utilizar los idiomas and capture nuances not otherwise possible. This academic practice sheds light onto the truly complex linguistic practices of our Latina/o, bilingual children and the ways that they draw on translanguaging para comunicar y llegar a ser entendidos.

### **Reflection on writing bilingually**

This is the first time that I, Angela Valenzuela, have ever written in this way, translanguaging across English and Spanish. The challenge for me in this piece was in not only writing alternatively in English and Spanish, but also writing across registers in both languages. It made me think a lot about codeswitching and how in working across two symbolic systems, there are “correct” and “incorrect” ways to codeswitch. So why isn’t this also true for translanguaging? This very notion, however, of correct and incorrect forms is ironic given that a rationale for translanguaging is that it liberates discourse from its regimented structure in classrooms and schools. That said, the added layer of registers, coupled with wanting to make the piece accessible, complicates matters for me. I wonder if I would feel differently if my academic Spanish were as strong as my academic English. The good thing about all of this though is that in contrast to my regular, monolingual English writing, every single word, phrase, and sentence is fully intentional and ultimately, as a co-author, negotiated. As an interactional or conversational approach, however, I love the complexity, fluidity, and richness that translanguaging brings to classroom environments. It smacks of freedom, of libertad, and a long-overdue enhancement for a millennial generation responsible for the “Latinx” movement that tests boundaries, binaries, and assumptions about gender and identity in an otherwise highly gendered language. As importantly, translanguaging points to ever more ways to convey authentic cariño in all our relations.

I, Cori Salmerón, have translanguaged in poems que escribí sobre mis experiencias personales, pero nunca en el contexto de academic writing. To me, translanguaging seems suited to el género de poesía because my memories occurred in both languages. When I first started writing this chapter it was difficult for me to use translanguaging because estoy tan acostumbrada a escribir en inglés y leer artículos académicos en inglés. Necesito cambiar la manera de expresar mis ideas y open my mind to new linguistic possibilities. As I continued to write, I began to feel more comfortable drawing on both languages. I am now thinking about ways to desarrollar mi escritura académica en español y otras oportunidades de usar translenguaje. En mi niñez, nunca tuve la oportunidad de aprender en español en a situation that valued the way that my family used Spanish. Además, mi familia has experienced *subtractive schooling* and they do not place mucho valor académico en el español . As someone who is going through the process of reclaiming my “lost” heritage language, me siento afortunada de escribir con Nathaly porque me siento cómoda translanguaging with her and drawing on her more formal academic Spanish. This type of partnership is integral in bilingual classrooms that honor translanguaging.

The first time I, Nathaly Batista-Morales, translanguaged in writing, outside of informal settings such as texting, was when working on the abstract of this chapter. The process gave me goosebumps, and I immediately had to share that feeling with one of my colleagues. No podía creer que fuese permitido el utilizar todos mis recursos lingüísticos académicos en un espacio como este capítulo. As a sequential bilingual, learning español en Puerto Rico y luego English in the United States, I held cemented language separation ideologies that I have had to deconstruct a lo largo de mis estudios doctorales. También es cierto que el proceso no se sintió natural al principio, it took several iterations of editing in some sections as my brain warmed up. In the last few work sessions however, empecé a utilizar más y más mi español académico, el cual había

estado escondido en una gaveta por todos estos años. It feels as if, with the exception of very specific terms such as *subtractive schooling*, el proceso de utilizar translanguaging en mi escritura me abrió la puerta a ver mi español as a viable option when writing academically.

Pulling on each other as a resource, no tan solo nos ayudó a poder producir este capítulo, pero reafirmo nuestras identidades lingüísticas. Tanto en salones universitarios como en las aulas escolares, we invite Bilingual and Dual Language teachers to move beyond the isolation that often characterizes teaching and enter into relationships with a spirit of vulnerability. En estas relaciones, teachers can support each other not only linguistic resources, but as a community that engages in authentic cariño in the process of affirming each other's linguistic and cultural identities, not only as Latinas/os but as translanguagers. Estas relaciones de cariño auténtico, pueden servir como modelo a sus futuros estudiantes de cómo honrar y apoyar los repertorios lingüísticos de cada uno, especially as bilingual education moves into Two-Way Dual Language models, in which inequities between students groups have been documented.

### **Extension questions**

1. Reflexiona on your past schooling experiences, when did you feel cared about? How was this connected to the way that teachers treated your linguistic practices?
2. Piensa acerca de your current teaching practices. How are you engaging in translanguaging pedagogy and authentic cariño?
3. ¿Cómo imagina translanguaging pedagogy and authentic cariño connecting to your future teaching practices?

### **Glossary of terms**

- Subtractive schooling: a method of schooling that systematically takes away minoritized students' language and culture con la meta de asimilación a el grupo mayoritario.
- Authentic caring: care donde los estudiantes y las/los maestros commit to a relationship that is built upon confianza y vulnerabilidad.
- Aesthetic caring: care where attention is placed on things and ideas en vez de las relaciones.
- Politically aware caring: care que representa un compromiso a los intereses auténticos y colectivos de la Mexican American community's historic struggle for equity, fairness and due process.
- Educación: a folk model of education that is values-based en vez de human capital-based.
- Authentic cariño: un tipo de care that is based on Latino/a cultural values and is composed of familial, intellectual, and critical cariño.
- Familial cariño: care que está construido en un base de trust and 'reciprocity' entre los estudiantes y maestras.
- Intellectual cariño: care por el desarrollo intelectual de los estudiantes.
- Critical cariño: care que considera la historia y political struggles de las comunidades de los estudiantes y está centrado around the goal of dismantling inequities.

## Works Cited

- Antrop-González, R., & De Jesús, A. (2006). Toward a theory of critical care in urban small school reform: examining structures and pedagogies of caring in two Latino community-based schools. *International Journal of Qualitative Studies in Education: QSE*, 19(4), 409–433.
- Baker, C. (2011). *Foundations of bilingual education and bilingualism*. Bristol, UK: Multilingual Matters.
- Canagarajah, S. (2011). Codemeshing in academic writing: Identifying teachable strategies of translanguaging. *The Modern Language Journal*, 95(3), 401–417.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, S95–S120.
- Creese, A., & Blackledge, A. (2010). Translanguaging in the bilingual classroom: A pedagogy for learning and teaching? *The Modern Language Journal*, 94(1), 103–115.
- Curry, M. W. (2016). Will you stand for me? Authentic cariño and transformative rites of passage in an urban high school. *American Educational Research Journal*, 53(4), 883–918.
- García, O. (2009). Education, multilingualism and translanguaging in the 21st century. *Social Justice through Multilingual Education*, 140–158.
- García, O., & Wei, L. (2014). *Translanguaging and education*. London, UK: Palgrave Macmillan.



- Genesee, F., Paradis, J., & Crago, M. B. (2004). *Dual language development & disorders: A handbook on bilingualism & second language learning*, Baltimore, MD: Paul H Brookes Publishing.
- Miguel, Jr., San, G., & Valencia, R. (1998). From the Treaty of Guadalupe Hidalgo to Hopwood: The educational plight and struggle of Mexican Americans in the Southwest. *Harvard Educational Review*, 68(3), 353–413.
- Rosa, J. D. (2016). Standardization, racialization, languagelessness: Raciolinguistic ideologies across communicative contexts. *Journal of Linguistic Anthropology*, 26(2), 162–183.
- Ruíz, R. (1984). Orientations in language planning. *NABE Journal*, 8(2), 15–34.
- Urrieta, L., Jr. (2016). Colonial structures, identities, and schooling: My take on multicultural education and White supremacy. In F.E. Objakor & J. Martinez (Eds), *Latin@ Voices in multicultural education: From invisibility to visibility in higher education* (p.95-120). Hauppauge, NY: Nova Science Publishers.
- Valenzuela, A. (2008). Ogbu's voluntary and involuntary minority hypothesis and the politics of caring. In J. Ogbu (Ed.). *Minority Status, Oppositional Culture, and Schooling*, 496–530, Abingdon, UK: Taylor, Francis, & Routledge Group.
- Valenzuela, A. (2005). Subtractive schooling, caring relations, and social capital in the schooling of US-Mexican youth. In L. Weis & M. Fine (Eds). *Beyond Silenced Voices: Class, Race, and Gender in United States Schools*, (83–94). Albany, NY: SUNY Press.

Valenzuela, A. (1999/2010). *Subtractive schooling: U.S. - Mexican youth and the politics of caring*. Albany, NY: SUNY Press.

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]*. University of Wales, Bangor. Retrieved from <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.385775>