

# Chapter 14

## A Critical Co/Autoethnographic Exploration of Self: Becoming Science Education Researchers in Diverse Cultural and Linguistic Landscapes



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### 14.1 Globalization Influences Our Lives, and Thus Influences Our Research

In today's globalized society, linguistic and cultural worlds collide bringing people, cultures, and languages together in diverse ways that can influence a person's identity and sense of self. Due to the porous boundaries of people's identities, increased globalization can lead to identity confusion, which can influence how open individuals are to integration (Hermans and Hermans-Konopka 2010). This confusion increases as countries across the world experience what Vertovec (2006) describes as super-diversity, a "world in one city" (Benedictus and Godwin 2005, p. 2). Super-diversity can be described as a dynamic interplay of variables among increasing numbers of new, small and scattered, multiple-origin, transnationally connected, socio-economically differentiated, and legally stratified number of immigrants throughout the world (Vertovec 2007). While some researchers have claimed that globalization can result in a loss of cultural diversity (Tomlinson 2003), the integration of plurilingual and pluricultural people in diverse contexts can also result in greater awareness of diversity. To understand the impact of globalization on an individual's identity and sense of self, research can be a powerful tool. In particular, research that critically focuses on examining oneself can reveal new knowledge of the self that may inform one's research endeavors.

In this chapter, we share the process of collaborative autoethnography (co-autoethnography), that we used to individually and collaboratively examine and reflect

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upon our experiences at the start of our doctoral research paths. We used this critical methodology to help us make sense of our individual and collective experiences in two different multilingual/multicultural research settings – South Korea and Luxembourg. Specifically, we attempt to tease apart the relationship that exists between language, culture, and self. In addition, building from a discussion of the benefits and challenges of implementing this method, we share what we learned from this narrative process about ourselves, and about how we engaged and continued to engage in science education research. We share our co-autoethnographic process that helped us push the boundaries of our research, and that gave each of us a deeper understanding of our own positionality within our research contexts. We do so with the hopes of encouraging other researchers to undergo such processes in order to further investigate their own self and the position of their selves in their research.

## 14.2 Our Study of Ourselves

This study shares our narratives that are based on our experiences as researchers and science educators in a globalized world. Our co-autoethnographies and analysis are twofold and centered around critically exploring what it means to be researchers who are language and culture learners, or *newcomers*. By newcomers, we mean *us*, as we each arrived in a culture that was new to us when we started our own respective doctoral programs. Specifically, we explored these research questions: *How am I positioned as a language learner in this new multicultural/multilingual context? What impact does this have on my work as a science education researcher, and in academia, in general? How does my experience reflect that of students in multilingual/multicultural science classrooms?* In the sections that follow, we elaborate our co-autoethnographic process of our time as *newcomers* and how through the lens of positionality and intersectionality we were able to tease apart our relationship to language, culture, and self.

### 14.2.1 What Is Collaborative Autoethnography?

Autoethnography is a form of qualitative research that involves systematically looking at the self and the social phenomena involving the self (Ali-Kahn 2011). This method focuses on data that is collected, analyzed, and interpreted based on a researcher's understanding of the world and the people around them. This type of research is context conscious and has deliberate intentions of connecting the self with others, the self with the social, and the self with surrounding contexts (Wolcott 2004). The co-autoethnographic approach adds an additional layer to autoethnography, in that it involves processes of sharing autoethnographies in a community with others as an additional layer(s) of analysis and critical reflection.

Co-autoethnography as a research methodology is a powerful tool that uncovers data that can richly inform individuals, the community, and society as a whole. In adopting this research approach, it was key for us to understand it both as a theory and as a method. We briefly describe each in the next sections.

### ***14.2.2 Autoethnography as a Theory***

Autoethnography involves an iterative study of the *self* (auto) and its connections to *culture* (ethno) through systematic *analysis* (graphy) (Ellis and Bochner 2000). It is a research methodology that, as Sarah Wall (2008) explains, provides a way to give voice to personal experiences, and at the same time to advance sociological understanding. We adopted the stance of Coia and Taylor (2009, p. 2) who explain that, “we can never understand our own practice until we have some measure of understanding of our place in the execution of that practice”. In other words, all circumstances and choices that we make, as well as the perceptions we adopt and develop, involve our beliefs, values, and prior experiences (Coia and Taylor 2009). Adopting this stance in our research provides us – teachers, researchers, individuals, etc. – the opportunities to reflect upon past experiences and the roles we undertook in various circumstances and to further explore connections between these past experiences and the way we perceive and understand things today. To this end, autoethnography as a theory emphasizes the importance of exploring and recognizing our own practices and assists us in unpacking the reasons for enacting certain practices in our *newcomer* situations.

### ***14.2.3 Autoethnography as a Method***

As Ellis et al. (2011) explain, when researchers use autoethnography they selectively write about past events in which they took part, then analytically look at these events to derive cultural meanings and connections. Building on this, we approached our autoethnographies by writing *evocative personal narratives* (Ellis and Bochner 2000) centered on our professional and personal experiences in our new multicultural/multilingual contexts; this involved our day-to-day and life-changing experiences related to culture and language. By focusing on our diverse professional and private lived experiences, we were able to reconstruct vivid textured narratives to critically analyze the factors that informed the development of our *self*. This included examining how we were positioned, how we positioned ourselves based on others’ positioning, and how this positioning influenced the way we viewed and conducted science education research as language-learners in our multilingual/multicultural contexts. The autoethnographic narratives we constructed allowed us to identify and highlight key instances when our current understanding of self, cultural and linguistic structures, and our attitude/response to being multicultural and multilingual

newcomers was evident. Then, working together to analyze our narratives and perspectives allowed us to serve as critical peers. In this way, co-autoethnography incorporates multivocality into the examination of one's self. (Hernandez et al. 2017). This process afforded us opportunities to further investigate our "self" and our perspectives in both our professional and personal experiences.

#### ***14.2.4 Collaboratively Writing Autoethnography***

The process of collaboratively gathering and analyzing data based on personal narratives of our lived experiences initially seemed difficult and impossible. Would we be safe expressing our true voices? How critically do we want to explore the past? How can we learn from past experiences and share what we learned without implicating those close to us who might have been involved? Yet, the co-construction of themes and ideas, as well as the challenging task of identifying the self – by listening to others' varying perspectives – bears richer data than that which emanates from a solo-researcher's narrative. According to Ngunjiri et al. (2010), collaboration between researchers provides space to stir one another's memory, to probe questions unsettling to one another's assumptions, and to challenge one another for greater detail through constructive discussions. The collaborative discussion about and sharing of narratives helps focus each the of the researchers to mutually be accountable for one another's writings and analysis (Ngunjiri et al. 2010). To this end, we worked past our initial doubts and began individually writing our exploratory narratives. We then began collaboratively analyzing our understanding of our self/identities. We chose to examine our identities on two planes: First, in each of our native contexts versus in our *newcomer* multicultural/multilingual contexts; and second, our awareness of and connections between the language and culture and its connection to our research. The next section describes the transition we made from what we knew as our "norm" to being positioned as a *newcomer*.

### **14.3 Our New Multilingual, Multicultural Worlds**

Prior to this joint venture in research, we each had lived most of our lives in a similar setting – speaking English while living in the United States. Then, as we began our journey as science education researchers, we each dove into a new context that was linguistically and culturally very different and much more diverse than we imagined. Learning to live in these new multilingual and multicultural contexts brought challenges that forced us to confront who we were, or thought we were. We were faced with having to think about the ways others perceived us, as well as how we perceived ourselves – in our *old* and *new* surroundings – and how this positioned us to think and act in certain ways. Thus, this research approach assisted us through a process of collaborative analysis, in shedding light on various themes and tensions

involved with our becoming researchers in new contexts and our positions as *newcomers*.

## 14.4 Theoretical Approaches

In this next section, we elaborate two theoretical lenses that grounded our co-autoethnographic exploration of our *newcomer* selves. Our combined use of these lenses afforded us opportunities to connect what we were experiencing to what has been discussed in prior literature on the intersection of language and identity, and to extend this to our own lived experiences as newcomers.

### 14.4.1 Positionality

Positionality is generally revealed through discursive practices that result in the establishment of the self and others. It also simultaneously can serve as a resource through which all persons involved can negotiate new positions (Harré and Langenhove 1991). Positionality does not have an end product since positioning and re-positioning is a continuous, ongoing process that takes place not only in relation to other people, but also in relation to oneself (Hermans and Hermans-Konopka 2010). Thus, it involves an ongoing production and reproduction of the self (Davies and Harré 1990).

The lens of positionality highlights the concept of “others” and “othering”, which is not outside of the self, but rather an intrinsic part of the self (i.e. self-conflicts, self-criticism, and self-agreements) (Hermans and Hermans-Konopka 2010). Since one’s position gradually and continuously changes, it can be an important factor to consider when reflecting upon the self. A position can be influenced both by the way one is positioned by surrounding communities and by society as a whole, which in turn influences how one intrinsically positions oneself. The acknowledgement of the processes involved in positioning and how influential surrounding communities can play a critical role in the positionality of researchers and their work is important. In any research, we believe it is essential for researchers to recognize and critically examine their identity. Since positionality does not occur in isolation, the cultural, social, historical, and linguistic contexts that surrounded us were essential to consider. Thus, in addition to positionality, we drew upon intersectionality as a theoretical lens, which helped us to consider the complexity of our multicultural/multilingual contexts, yet to provide a clearer understanding of their complexity.

### ***14.4.2 Intersectionality***

As we began thinking about the different positionalities involved in the development of our selves, and our identities, it helped us to additionally apply the lens of intersectionality. This lens can serve as a powerful tool to examine and bring awareness to crucial factors that intersect in the shaping of our identities, as individuals and as researchers (Martin et al. 2013). Employing intersectionality as a research lens helped us identify and problematize consequences that resulted from simultaneously interacting factors in our lives related to our genders, our positions as researchers, and our positioning relative to the diverse linguistic and cultural factors we were facing as new researchers and newcomers in our communities. The intersecting factors that we identified and distilled from our discussions surrounding our written narratives were relative to each of our distinct ethnic backgrounds, nationalities, language resources, and our past experiences with education (both our own, and also as we each worked as science educators prior to starting our doctoral studies), and being women in the sciences. Identifying these intersecting factors allowed us the space to construct and deconstruct ourselves and to examine how these facets informed our identities – who we were, who we are, and who we are striving to become as researchers in science education. Applying the lenses of positionality and intersectionality throughout our co-autoethnographic approach equipped us to carefully interrogate each of our beliefs, thoughts, practices, and most importantly our mindsets in relation to our self and to others in our own respective research contexts.

## **14.5 Method of Collaboration**

In this section, we discuss the process we used to engage in collaborative autoethnography. Specifically, we offer examples of how we generated and shared individual narratives that described our experiences as newcomers to new countries, and as novice science education researchers. We first met at a Cultural Studies of Science Education (CSSE) writing conference in Luxembourg in the summer of 2013. We both attended a workshop on education in multilingual and multicultural contexts and were introduced to each other, specifically since we were both just beginning our doctoral studies. As we talked, we realized that though we were living in very different contexts, we had a lot in common, which initiated our autoethnographic collaboration. Once we informed ourselves about the theory and methodology involved in participating in a co-autoethnographic process, we began by discussing ethical issues related to our process. Ellis and Bochner (2000) provide an excellent guide for considering the particular ethical issue involved in conducting autoethnography. The two main issues we discussed included, assuring each other that all information shared with one another would not be shared elsewhere without

permission, and that publications would maintain the anonymity of those involved unless they provided consent.

### 14.5.1 *Setting Goals for Our Narrative Writing*

Once we discussed and agreed upon ethical guidelines, we started writing individual narratives to explore our backgrounds of who we are, where we initially lived, how we came to our respective new multilingual/multicultural context, what we were interested in pursuing/studying in this different context, and how/why this experience was important for us as researchers in science education. We began each of our narratives by detailing our own cultural, linguistic, and social backgrounds, making sure to describe our new contexts in which we each lived and worked. We provide a summary of who we are in Table 14.1.

At the start of our collaboration, we discussed the challenges we faced as we left what we once knew and embarked on living and conducting research in culturally and linguistically unfamiliar places. We decided it would be interesting to share our experiences first before diving into the various positions and intersecting factors that were shaping our identities. We provide a short narrative of our selves below that served as a basis for our initial collaborate analysis.

### 14.5.2 *Narrative Summaries: A Look at Our Self: What We Knew and Choosing to Leave It*

*Jennifer* I was born and raised in the United States and lived as a language minority for most of my life, always struggling to figure out where and how I belonged. I was limited in both the English and Korean languages; neither was foundationally set when I was growing up. I only spoke and verbally understood Korean, while academic English was a constant challenge for me to overcome. My transition to Korea

**Table 14.1** Brief summary of our backgrounds that provided the initial context of our co-autoethnographic study

Jennifer	Sara
Born and raised in the United States as an ethnic Korean	Born and raised in the United States as an English-speaking Caucasian
Languages: L1 – Korean, L2 – English	Language: English
Struggled with academic English for years	Learned “foreign” languages in school
<i>Transition</i>	<i>Transition</i>
Relocated to South Korea in 2011 for science education doctoral program	Relocated to Luxembourg in 2010
Identity as a Korean-American, <i>Jaemi Kyopo</i>	Knew none of the languages (Luxembourgish, German, French)

was not easy. Regardless of being ethnically Korean, I realized that the language tools I came with were “outdated”; in other words, I was speaking Korean from the 1980s – the language my immigrant parents spoke after leaving the rapidly changing country. Upon my arrival, I was quickly identified as a *Kyopo* (Korean-American) who did not speak or understand Korean well. My relationship to language jumped backwards; my Korean skills resembled my limited English language skills that I struggled with back in the United States. I was a language learner once again. I felt as though I was never able to “win”. My perspective started shifting as I began talking and collaborating with Sara. I started to recognize the benefits of my struggles and how they can inform my future years on both a personal level and towards research – generating opportunities to connect with the greater science education community.

*Sara* My move to Luxembourg in 2010 was the first time I took a critical look at my relationship to the languages I spoke. I was living in a new country and spoke none of the three languages (Luxembourgish, German, or French) at a level that would allow me to communicate with people in day-to-day interactions, such as at the grocery store, or to convey to a doctor why I was not feeling well. I was in many ways, for the first time, silenced. To me growing up as a Caucasian female who was raised in a middle-class family in the United States speaking English, knowing a foreign language was something exotic. It was a skill that one used on trips and in other-away lands. I describe it this way purposefully to illustrate the fairy-tale view of my relationship to language. When I moved to multilingual Luxembourg, the glass bubble shattered. I could not express myself. I could not connect. I was placed in migrant classes where people assumed I did not know how to read. I began to question everything through the lens of language. It was at this point that I met Jennifer and we decided it could be interesting to explore each of our experiences in our new contexts.

## 14.6 Collaborative and Recursive Data Collection and Analysis

The process of co-autoethnography is a backwards, forwards, and sideways movement that involves individual narratives (vignettes) and responses that have been written into them through talking, theorizing, and analyzing contexts with other collaborating members (Coia and Taylor 2009). To this end, we conducted multiple recursive cycles of analysis. Since we were living in different countries, we utilized as much technology as possible to assist us. We exchanged narratives via email and



had collaborative conversations via Skype. We utilized a Skype plug-in to record our video conversations, which allowed us to collect data in several different layers. Our data sources were comprised of our narrative writings, email exchanges, and video recordings of our real-time conversations. We further explain this process in the sections that follow.

### 14.6.1 *Generating Narratives*

The key to the data that we collected was our intentionality to hold fast to an ethnographic approach. Writing down our narratives took precedence over our verbal conversations in order to provide space for us to individually reflect upon our self and our experiences. According to Faith Ngunjiri et al. (2010), dialogue is richest when method takes precedence over personality, thus our writings were vignettes that explored themes that we separately reflected upon in writing first.

In order to critically look at ourselves as both language and culture learners, our vignettes were focused on answering the following questions: *What is happening with language in my life right now? What language spaces do you encounter in your current context? What happens in those spaces?* Although we started by addressing these questions, we also freely wrote other feelings and/or thoughts that were relevant (see Table 14.2) and that arose while writing. Whether our experiences were in the past or the present, at a younger age or something experienced recently, we created a plethora of narratives through this free-writing process.

**Table 14.2** Example of the thoughts we initially noted, individually, in efforts to begin writing our autoethnographic narratives

Jennifer	Sara
Tendencies in Korea – Wanting to speak the hybrid language, <i>Konglish</i> (Korean and English hybrid language) – Continually surrounding myself with English-speaking people (mostly the expat community) – Unknowingly encouraging native Korean(s) speakers to use <i>Konglish</i> by my use of the hybrid language with them; <i>Konglish</i> was only used when both languages are easily recognizable for both me and the native Korean(s); they began to realize my comfort in speaking out words that are difficult in Korean	How does being a language learner affect my work as a PhD student? – I delay writing emails – I draft more drafts than I would in English – I don’t understand everything – I see more than I hear – I pick up on subtle clues because I can’t rely on the spoken – I miss jokes and cultural generalities

### 14.6.2 Analysis of Our Narratives

The narratives that we wrote followed the model shown in Fig. 14.1. We followed a recursive cycle that involved individually writing, discussing the writing, teasing apart the obvious and hidden pieces of useable writing, and re-writing to improve or add new content. The vignettes were exchanged over several cycles so that we could read one another's stories, try to understand where the other person was coming from, probe more in-depth with questions to further one another's thought processes, and to help support claims with literature-based resources.

After the first round of exchanging vignettes, we utilized the Skype platform to begin discussing and our ideas, which mostly involved checking in with one another, further describing areas we found interesting or needing more explanation, and identifying themes from what we shared. The entire Skype conversation was recorded using a plug-in and we produced transcripts of our conversations. This data, which we analyzed individually and collaboratively, was used to identify themes that emerged from both our narratives and conversations together about our (Fig. 14.1) and to recognize if ideas/thoughts we wrote from what we recollected and the things we said were aligned within each of our stories and retellings (see Fig. 14.2).

Next, we individually conducted transcript review from the first round of analysis. This prompted us to come together again to write detailed explanations to questions that arose during our first round of narratives and Skype transcript analyses.

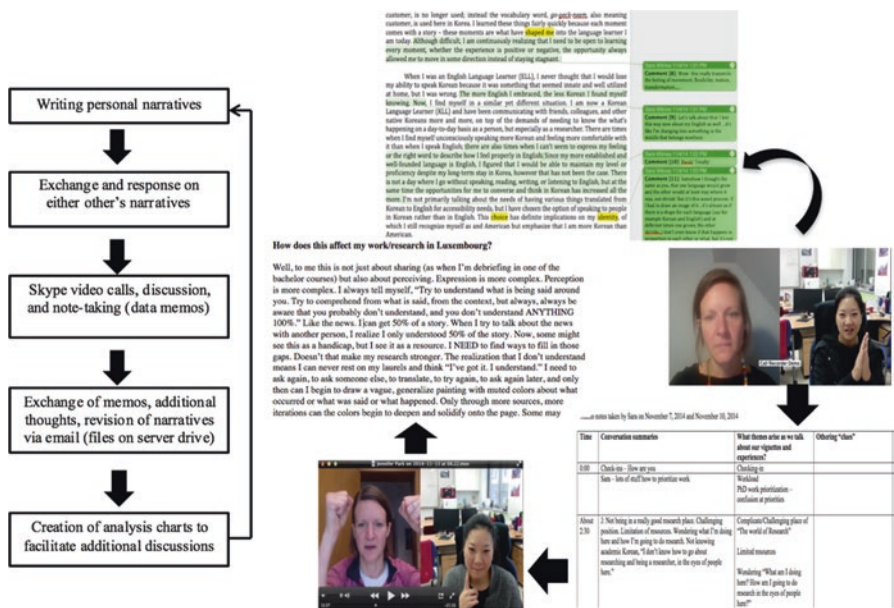


Fig. 14.1 A flow chart of our collaborative recursive autoethnographic process

**Skype Memo of 20141105 Skype Jen and Sara first Autoethno Conversation**

Meeting with Jen on 5/11/14 to exchange ideas comments and talk about the first round of work that we exchanged the week prior.

Memo notes taken by Sara on November 7, 2014 and November 10, 2014

Time	Conversation summaries	What themes arise as we talk about our vignettes and experiences?	Othering "clues"
0:00	Check-ins – How are you	Checking-in	
	Sara – lots of stuff how to prioritize work	Workload PhD work prioritization – confusion at priorities	
About 2:30	J: Not being in a really good research place. Challenging position. Limitation of resources. Wondering what I'm doing here and how I'm going to do research. Not knowing academic Korean, "I don't know how to go about researching and being a researcher, in the eyes of people here."	Complicate/Challenging place of "The world of Research"  Limited resources  Wondering "What am I doing here? How am I going to do research in the eyes of people here?"	
	S: Not being able to get a grant because I don't know the local languages. How we did data collection in a team to overcome the language barrier.	Strategies to make research work when one is researching in a language setting in which they are not "fluent".	3:13 THEY are like, YOU can't do research here, YOU don't know the languages. (How do researchers clue into positionality what techniques do they use?)

**Fig. 14.2** Sample analytic memo constructed while listening to the video data and reading Skype transcripts

This led us back to the drawing board to recollect additional experiences related to the themes we extracted, and to develop additional vignettes. Our recursive approach was our attempt to analyze existing data, while adding on layers of new data through a collaborative, reflective, and participatory process involving both of us (Coia and Taylor 2009). This collaborative and recursive process uncovered very interesting themes and ideas that we did not necessarily anticipate, and that would not have been possible to uncover if we had done this process on our own, in our own respective contexts.

## 14.7 Insights from Our Analyzed Lived Experiences

As a result of collaboratively analyzing our narratives, we discovered insights into the complex themes and challenges that arise when one attempts to live, work, and conduct science education research in new cultural and linguistic landscapes. While each of our positions and intersecting factors were unique to our own contexts, this collaborative investigation allowed us to draw comparisons that helped us to critically compare our situations. The insights from this collaborative process supports current theoretical understandings regarding the positioning of newcomers in multilingual/multicultural learning environments. It additionally helped us to realize the methodological strength of co-autoethnography as a way to explore our positions and the multitude of intersections present in our everyday experiences.

During the analysis of our narratives and Skype transcripts, we made sure to examine the data resources using the lens of positionality and intersectionality. In

this way, we became more conscious and intentional about identifying factors that positioned us, as well as how we positioned ourselves, in certain ways within our personal and research contexts. We identified interesting terms and phrases that were not necessarily written, but that we repeatedly verbalized during our conversations. The next sections elaborate realizations and insights that emerged during our collaborative analysis.

### 14.7.1 *We Were Often Positioned as the “Other”*

In analyzing our Skype discussions about our narratives, it became apparent that in our speech and descriptions of ourselves and our contexts, that we both embraced the category of the *other*. By this we mean, we positioned ourselves as not as belonging, but as being the *other* (*newcomer*). During our first Skype conversation, the terms “us” and “them” were prominent. We were alarmed that we used these words frequently when describing our lived experiences as newcomer PhD students in multilingual/multicultural contexts. For example, there was a complex interplay of positionality, culture, intersecting factors – being female, foreigner PhD students, and language as revealed in the following excerpt we extracted from our analysis:

...from my lab, it's [daily tasks and behavior] very fluid because I know the culture and we all speak English in here, but when I walk down the hallway I don't know who's gonna speak what to me...and I should speak Korean, it's fixed, the culture is Korean. I have to bow to professors [and other colleagues] when I see them or I have a choice to be out of that fixed context, putting myself as the other by saying, “hi” instead of bowing.

Our analysis supports prior findings that explain that despite increasing linguistic and cultural diversity in parts of the world, there are *norms* and *boundaries* that still exist in many communities that maintain division. These often lead to the creation of marginalized groups that are positioned as the *other*, a group of people separated from communities due to systemized categories. In our case, through our collaborative process, we found these norms and boundaries not only in the communities we were participating in, but also in ourselves, in the ways we spoke and described our own abilities and interactions. If we relate this to the *othering* and marginalization of culturally and linguistically diverse students in science classrooms, it is clear that we, as is the case for many of the students with whom we conduct research, were often positioned as the *other*, and positioned ourselves as the *other*, which had a direct impact on our lives and our research.

We, too, conveyed a deficit view of multilingualism (language proficiency). It became clear that in the stories that we shared, reflected upon, and analyzed, we were almost always portrayed by others, or by ourselves, as deficient in both our new languages and cultural settings (countries and in academia). We did not honor the strengths that we had developed during the critical period of coming-to-be-proficient in a new cultural and linguistic landscape and our less-than-fluent abilities. It may have been our automatic instinct of trying to “fit in” and acculturate to the multicultural/multilingual context, but at the same time the level of value our

surroundings placed on the diversity of culture and language we claimed played a crucial role. For example, we saw ourselves as not fluent in our new languages, and thus, not being good enough. We were unconsciously positioning ourselves, and found instances in our narratives of others positioning us as well, as deficient relative to assumed monolingual norms. Our analysis revealed the unconscious ways we too were positioning ourselves as deficient. Revealing the ways we were self-positioning provided us the opportunity to be critical of the unconscious positioning of ourselves and how this intersected with our roles as educators and researchers. It also allowed us the space to consider how we might project these views onto our students and in our research.

## **14.8 Collaborative Autoethnography Illuminated Our Positions and Subjectivities**

Our collaborative autoethnography study involved a reflexive and recursive processing approach to investigate the way we position ourselves in the stories we tell and how circumstances are internalized as part of our identities; not taking such steps to break down our narratives would obscure the understanding of our positioning. Having a better understanding of yourself, personally and as an educational researcher, is critical since we hold “our own frames of reference” which surface during the analysis phase of research (Erickson 1986) (in Glesne and Peshkin 1992); this can cause biased results making the data irrelevant and invalid. Collaboratively utilizing this method afforded us the ability to engage in a mutually supportive practice of voicing and sharing our difficult positions and frames of reference as language learners in new contexts. Co-autoethnography provided a mechanism for us to create community around personal stories and histories filled with feelings of being “othered”, positioned “outside” of a culture thus acting upon the positioning characteristics, and being “deficient” in a language or knowledge in a culture. In addition, this approach allowed us to retell our stories in positive and non-deficit ways, which empowered us to re-position ourselves in our respective multicultural/multilingual contexts.

Collaborative autoethnography helped us form a space in which we could look at our own selves with a critical gaze through supportive collaboration with each other. In the space we created through our use of this methodology, we gained back parts of our voices we had lost as newcomers. It also allowed us to critically examine these voices within safe places as we moved forward into academia, where critical spaces were not created within the official structures of our doctoral programs. Our collaboration on this research project was a time for us to pause and reflect on our journeys. In doing so, we were able to “pause and critically tease apart (our) positions in order to breathe new life into our theorizing and our writings in all its different forms) (Giampapa and Lamoureux 2011, p.129). It afforded us the space to be critical of who were becoming as newcomers to academia, and to examine the voices we were forming within our new roles.

## 14.9 Implications for Science Education Researchers and Educators

This study has implications for science educators and researchers in multicultural/multilingual contexts as it emphasizes the importance of bringing to light researchers' and teachers' predispositions toward language learners in general, and in research contexts in particular. As the writer and activist Barbara Deming (n.d.) once explained, "the longer we listen to one another – with real attention – the more commonality we will find in all our lives. That is, if we are careful to exchange with one another life stories and not simply opinions." The collaborative process of listening to ourselves and listening to each other helped us understand the power of this personal, yet collaborative, process. We created a safe space for us to assume a critically reflexive stance towards our own lives and experiences while in the process of becoming researchers. It enabled us to change how we positioned ourselves and others, both in our daily interactions and in our work with research participants. We offer our example of the use of co-autoethnography, as a way to explore one's position as both an individual and a researcher, in that it can bring light to one's own perspectives in diverse cultural and linguistic contexts.

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