

Revista de Divulgación, Investigación e Innovación

Tequío

Experiencias educativas: discriminación y Educación Superior

STEM access for Latina bilingual teacher
candidates: Discrimination *en la educación*.
How do informal programs motivate women
to pursue STEM related fields

Engaging in *Testimonio* as a walk through *el
laberinto* (the labyrinth) of higher education:
Releasing, receiving and returning to the
field with deeper purpose

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Eric Pozos Vásquez
"La cosecha"
Linografía
76 x 56 cm
2019
Oaxaca

Editorial

El presente número de *Tequio*, titulado “Experiencias educativas: discriminación y Educación Superior”, contiene dos artículos en inglés que se aproximan al análisis de las mujeres latinas en Educación Superior en Estados Unidos. A través una reflexión profunda en campo, las autoras y los autores de este número dan cuenta de la dificultad en la inserción de las mujeres latinas en Educación Superior, reconociendo la existencia de barreras estructurales a nivel simbólico y financiero a las que se tienen que enfrentar aquellas que decidan formarse académicamente en el vecino país.

El primero, “STEM Access for Latina Bilingual Teacher Candidates: Discrimination en la educación. How do Informal programs motivate Women to Pursue STEM Related Fields”, aborda un debate actual y urgente. Situadas en Estados Unidos, una nación de profunda diversidad, pero con un fenómeno de racismo y discriminación, las autoras exploran la incorporación de la población latina en escuelas de ese país, y discuten oportunamente la forma en que los programas informales impulsan a las mujeres, o no, a estudiar en áreas relacionadas con las ciencias, tecnologías, Matemáticas e ingenierías.

El segundo, “Engaging in Testimonio as a Walk Through el Laberinto (Labyrinth) of Higher Education: Releasing, Receiving and Returning to the Field with Deeper Purpose”, presenta una profunda reflexión sobre el camino que atraviesan las estudiantes para cursar su formación universitaria y menciona que suele parecer un laberinto. En este análisis las/os autora/es sostienen que el testimonio es una herramienta que permite liberar, lo que llaman, el trauma social generado por las experiencias de violencia estructural.

Ambos artículos nos hablan de una realidad actual y es una aproximación necesaria para comprender la violencia económica y simbólica que viven estudiantes latinas en Estados Unidos, que esperamos constituya una valiosa aportación para los lectores de este número de *Tequio*.

María Leticia Briseño Maas
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Yoshi Nakagawa
"Pale Blue Dot"
Aguafuerte, aguafinta
105.5 x 37.5 cm
2013
Oaxaca



Claire Cowie
"Remembrances"
Serigrafía, xilografía, grabado,
monotipo y acrílico
61 x 76.3 cm
2018
Seattle



Mario Guzmán
"Mujer en azul"
Grabado en MDF
69.5 x 50 cm
2017
Oaxaca

STEM access for Latina bilingual teacher candidates: Discrimination en la educación

How do informal programs motivate women to pursue STEM related fields

Margarita Machado-Casas,¹ Katherine Talati² & Ana Baron³

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Abstract - The lack of proper representation of women of color in the field of bilingual science, technology, engineering, and math (STEM) is a crucial matter when addressing the needs of the US as a country moving toward diversity and inclusion. The research project represented in this paper investigates and addresses the need for teacher preparation courses that will adequately set up their bilingual preservice teachers to enter into the field with the proper background experiences to engage their future students in STEM related lessons. Findings reveal the negative ideologies related to gender bias found in teacher education, the importance of STEM related women empowerment, and how those vested in STEM education must continue to debunk the impostor syndrome felt by students in STEM related fields. Despite the challenges present for women in bilingual teacher preparation programs in STEM, we must continue to create sanctuaries where students of color can thrive in environments that are conducive to their unique experiences and fulfill their learning needs in STEM.



Keywords:

STEM, women, education, teacher education.

¹ San Diego State University. ORCID: 0000-0003-2051-2444

² Texas A&M University San Antonio. ORCID: 0000-0001-6939-350

³ San Diego State University. ORCID: 0000-0002-0613-2755

Introduction

The condition of Latina/o students in the United States has received considerable attention over the last several years (Gandara & Contreras, 2009). As noted by Mercado, "insufficient attention has been paid in developing teacher capacities for teaching students from marginalized communities" (Mercado, 2012, p. 24). This is especially the case of women of color going into the bilingual science technology, engineering and math (STEM) field. STEM and bilingual education have been noted as areas of high need by the US Department of Education and areas in which there is a sizeable shortage of teachers. And Grant points out that "concerns over low achievement levels in mathematics and science have propelled educators in these fields to take the lead in determining teacher capacities, but these assessments typically use traditional 'neutral' framework in which the role of race or power is left unexamined" (Grant, 2008, p. 24). Much has improved in terms of graduation rates of Latinos in the US. However, disparities in high school graduation rates between Latinas/os and White students are still challenging (Rodríguez, 2014; Swanson, 2004). There are many factors that influence the dropout rate among Latina/os in the US -the lack of opportunities is one of them, but there are other differences based on race, class, gender, and immigration status, plus the current anti-Latino sentiment affecting the US today (Orfield, 2004; Orfield, Losen, Wald & Swanson, 2004; Rodríguez, 2014; Miron, 1996). These historical and policy-driven conditions contribute to perpetuate an undereducated polity with detrimental effects for the United States, especially among Latinas/os who not only are the largest and fastest growing minority group in the country, but also constitute a majority of all school-aged children in states such as California and Texas (Fry & Lopez, 2012; Gandara & Contreras, 2009). As noted by Ladson-Bilings (2005), diversity in the teaching field means portraying an accurate picture of today's current multicultural and democratic society -one that includes gender. Despite the demographic

significance of Latinos in the United States and its public schools specifically, who constitute nearly one fourth of all K-12 students nationally, it is clear that any undereducated group of people is not only far less likely to compete globally and promote economic growth for local communities, but is also less likely to participate in conventional politics (i.e., voting), less likely to have access to fair wages, health care, and thriving communities (Anyon, 1997; 2005).

Informal learning experiences: Promoting STEM in higher education for women educators

Informal learning can take place in any space outside a school, a that does not follow a regular school curriculum. Since, in most cases, learning takes place beyond school hours, several researchers have explored the benefits of activities that have been implemented as a part of extended, informal learning or after-school programs. Such programs regularly ran as part of other after-school activities, and often take a different approach when they are implemented in a university teacher preparation program, as they have to follow a strict university schedule (Machado-Casas & Alanís, 2015). Such investigations have shed light on situated learning processes (Lave & Wenger, 1991). For example, La Clase Mágica (LCM), an after-school bilingual and bicultural technology program, has demonstrated the utility of learning as it occurs in a setting in which the learner is at the center, learning is guided through the zone of proximal development, horizontal dialogue occurs, and in which social imagination abounds (Vasquez, 2003; Flores, Vasquez & Clark, 2014). The benefits of informal learning activities are evident as learners continue to engage in problem-solving and critical thinking (Lecusay, 2015; Schuetze, Claeys, Flores & Sczech, 2014). As a form of expansive learning (Engestrom, 2001) within a community of practice (Lave & Wenger, 1991), Schuetze Claeys, Flores and Sczech (2014) used several studies that have identified how

critical it is to incorporate these specialized fields within the university level, especially as it pertains to STEM fields. The more exposure to these subjects university students get, the more likely they will be to connect with them. Therefore, the settings inside or outside university classrooms are critical in allowing students possibilities, especially those that refer to field-based professions, such as the teaching field. Informal learning opportunities play a key role, especially as a way for students to connect to a field of study. Schuetze Claeys, Flores and Sczech observed that the expansive learning activities mutually fostered "creativity, imagination, recursive discovery process, and natural curiosity" (2014, p. 39). These are the types of activities needed within the teaching profession in order for teaching candidates to accumulate experience and be encouraged to choose a STEM related field with a bilingual education emphasis. These highly specialized fields are often ignored or simply not addressed in relation to STEM. Another study finding was the transferability of the concepts learned. In other words, what was learned in the robotics clubs was then applied to the daily classroom lessons. This concept can be used in relation to scientific language in Spanish -its transferability has to be made visible in order for future teachers to see the connection and the necessity.

Theoretical framework

In today's time restrictive world, informal activities can provide a way to expose students to various methods and fields of study (Machado-Casas & Alanís, 2015; Machado-Casas, Alanís & Ruiz, 2017). This becomes particularly important when working in areas of high need, such as STEM and bilingual education. According to Flores, Vasquez and Clark (2014), La Clase Mágica (LCM) informal activities generate a transworld pedagogy which honors and is anchored in Vygotsky's notion of culture, dialogic discourse, the sacred sciences, and critical pedagogy. Incorporating Vygotsky's notion of culture in informal activities

suggests that we see the individual as a cultural-historical being with multiple knowledges, which are used in anchoring new learning and development. As noted by Diaz and Flores (2001), scientific concepts can only be transformed from everyday concepts within a school setting. They note that these are important for higher order thinking abilities and for the continued intellectual and personal development of an individual. Hence, prior cultural knowledge is cultivated in a manner in which active and expansive learning occurs. Additionally, "the use of [egalitarian] communicative strategies in educational contexts to facilitate social inclusion of underrepresented groups is clearly one of the most important implications of LCM" (Avidad, 2014. p. 35). In this study, we use the egalitarian framework to meaning-making as it refers to the experiences of women in bilingual STEM. Drawing from the understanding that all people are equal and deserve equal rights and opportunities, we focus on the sacred knowledge that many future bilingual STEM students do not get when in a credential program.

Thus, the *Nepohualtzintzin* uses the notion of sacred sciences from an indigenous philosophy in which all creation is considered sacred and, as such, requires that we maintain a harmonious balance with the cosmos. According to Prieto, Claeys and Lara, the "*Nepohualtzintzin* is an important contemporary mathematical tool. The design and development of *Nepohualtzintzin* Ethnomathematics Clubs (NECs) in predominantly Latina/o and low-income schools is also presented. NECs provide informal learning opportunities to develop and strengthen cultural connections to and abilities in mathematics for bicultural bilingual learners, their parents, and teacher candidates" (Prieto, Claeys and Lara, 2015, p. 125). Indigenous scientific thought was born out of observation and exploration of the cosmos. The Nahuas used mathematics to explain the connection among humankind, nature, and the cosmos. Specifically, in the case of the *Nepo*, while a tool for numerical computation, it symbolizes the

Nahua cosmovision with its use of sacred numbers synchronizing humankind, nature, and the cosmos (Prieto, Claeys and Lara, 2015). For example, a base of 20 is used because as human beings we have twenty digits (fingers and toes); it uses the sacred number 13 because it reflects the phases of the moon as well as the major joints in the human body. The Nepo is held in a vertical manner to acknowledge transcendence of thought and mind towards the cosmos (Prieto, Claeys and Lara, 2015). Exposing future bilingual teachers to the Mesoamerican pedagogies and allowing them to connect with STEM practices, but also their culture, poses a new approach of looking at and working with STEM.

Data collection and analysis

For this study we used qualitative survey (Knobel & Lankshear, 1999) to examine our case study of one bilingual teacher candidate (BTC) cohort in an informal educational setting—a weekend training session. Qualitative survey designs maximize data collection within a minimum amount of time and thus allows qualitative data to be efficiently gathered and analyzed (Marsland, Wilson, Abeyasekera & Kleth, 1999). Using field-based observations, in-class discussions, and artifact collection, a team of researchers gathered data from the STEM related activities students engaged in during this time. Out of those encounters a series of questions was shared with students that shed light on the ways women of color, in this case mostly Latinas, felt about the exposure to STEM and the ways they were discriminated against—willingly or unwillingly via institutional practices they experienced.

Setting

As part of a bilingual teacher preparation program in CA, teachers took part in a STEM related seminar, a follow up questionnaire, and activities that analyzed their views on STEM, but also shed light on the ways in which schools have not promoted STEM related activities. 35 teacher candidates took part in a

training on the *Nepohualitzin* Ethnomathematics Club (NEC), which is one of three Academy for Teacher Excellence research-based after-school programs under the umbrella of La Clase Mágica (LCM) (Prieto, Claeys and Lara, 2015). LCM@UTSA, modeled after Vasquez' (2003) California community-based LCM after-school programs, promotes bilingualism and cultural revitalization through the integration of technology among young learners, teacher candidates, undergraduate student-mentors and club sponsors-teachers. These clubs "provide bilingual and culturally diverse learners (protégés) with playful informal learning opportunities that promote creativity, mathematical, and scientific skills along with other forms of literacy" (Schuetze, Claeys, Flores & Sczech, 2015, p. 28).

Bilingual teacher candidates took part in a two-day training around the use of the *Nepohualitzin* Ethnomathematics Club. The training included a socio-historical approach to the role of Mesoamerican in STEM and how it involves cultural facts and hands-on activities related to culture and STEM but were also followed by digital discussions and post surveys. During this two-day training bilingual teacher candidates shared their experiences in relation to the STEM field and addressed the need for schools to provide these types of activities at the university level.

Participants

Because the study sought to focus on the relationship between STEM and pedagogy, and STEM believes that is how pedagogy is translated into action and expectations, we studied 35 participants that took part on the *Nepohualitzin* Ethnomathematics Club training as part of an informal training opportunity while in their bilingual teacher education program. Participants were overwhelmingly female, first-generation college students, ranging in ages from their early 20's to 50's. All of them were in the second semester of their teacher preparation program. Many were of Mexican origin with varying levels of Spanish/

English bilingualism and STEM experience. Out of the 35 students, about half addressed STEM and five agreed on completing more in-depth questions.

Data collection

Because the goal was to document BTCs growth in their development as future teachers, data was collected in several different ways and at different times. Data collection occurred during training with follow up dialogue during the semester.

Pre and post surveys

BTCs were administered a pre and post survey that explored their ideas and thoughts about math, culture, and the use of a “manipulative” type tool to teach in formal and informal settings. According to the Hanover Research Institute (2013), “research on the use of student perception surveys in K-12 education has not been extensive; however, studies consistently suggest that student surveys are a reliable measure of teacher effectiveness” (2013, p. 3). Surveys were not graded and therefore were not a factor in the determination of final grades. However, the students in all sections were told that they had to take both surveys and answer the questions in a conscientious manner to complete the training or any of the courses for their teacher credential program.

Sacred STEM reflections

BTCs documented their experiences in the Nepo training right after they got it. And later engaged in what we called “sacred STEM reflections”, as they were more personal reflections of their past and present experiences with STEM. Participants completed their sacred STEM reflections on a biweekly basis. Through this activity, they were asked to become researchers and observers of the development math and cultural skills, but also to engage in critical dialogue and inquiry about what being women in STEM fields mean, personal reflections about STEM, and how the experience of an information learning activity can

serve as a way to motivate and help those in need to seek STEM related fields. They were asked to record, write, and upload their biweekly sacred STEM reflections on an online course platform. Work within the tradition of ethnomathematics has shown that very sophisticated mathematical practices exist in essentially all cultures (Bishop, 1988).

Grounded in interpretive hermeneutics and phenomenology, it is a hybrid form of qualitative research that involves the gathering of reflections—focusing on the meanings that people ascribe to their experiences, seeking to provide “insight that [befits] the complexity of human lives” (Josselson, 2006, p. 4). This ongoing reflective practice serves as a way for BTCs to purposely focus on the effects of the pedagogical tool (the Nepo), their pedagogical practice, and content based (in this case math) practices, and their lived experiences.

Findings

The after-school Nepo project provided a tool for practical application of math and cultural skills for BTCs to engage in meaningful and purposeful pedagogy—which they will someday use in their own classrooms (Machado-Casas & Alanís, 2015). BTCs perceived the Nepo as a significant activity that provided them with important tools for learning and teaching because it facilitated a social construction of knowledge and afforded customized learning experiences (Machado-Casas, Alanís & Ruiz, 2017).

BTCs used the Nepo as they reflected on their own math and cultural bilingual STEM considerations. BTCs were asked to view each other’s experiences and explore similarities in the development of their collective identity as teachers, and finally they were asked to explain how the use of the Nepo to explore social issues and identity had enabled them to express and connect with their practice in an innovative way. Finally, they were also asked to reflect on how STEM was introduced to them prior to starting their teacher credential program.

Findings reveal the significance of the activity for helping BTCs to understand how activities such as the Nepo can be used as a pedagogical tool in teacher education programs to transform the way we teach future bilingual teachers (Machado-Casas, Alanís, & Ruiz, 2017). We focus on how exposing them to the informal learning activity led to a multi-situational dialogue, opportunities to teach, connect, and transform learning for BTCs.

Pipeline of gender and subject bias messages in teacher education: STEM is not for women

One of the highlighted findings from this study was the idea that just as there is now a move to “pipeline” (to increase the number of teachers in areas of high need), there is also the reality that has resulted in the traditionally low numbers of bilingual STEM female teachers -the discouragement of women in bilingual STEM professions. This pipelining begins early on in elementary school and is fueled by a socio-historical and gender biased reality that discourages girls (women) from entering STEM fields (Machado-Casas & Alanís, 2015). This treatment leads to a pipeline against promoting the capacity of bilingual women to enter STEM related fields. One participant had this to say:

As a child I was made to believe that I was bad at math. I liked it but my teacher did not encourage me to pursue it. This continued until the university level.

Another participant shared:

I remember when I used to tell my teachers that I wanted to do something on math and science -most would tell me “that’s nice”, but then proceed with other comments such as “leave that for the

boys,” or “not sure you need to do that - becoming an English teacher or a bilingual teacher is easier”. Always making me feel that I had to take the “easy” route, when in reality bilingual education is anything but easy. But also, just discouraging me from doing anything STEM related. I still think about this after all these years -it has not gotten away.

The quotes from the above participants reveals their own self-doubt about their mathematical abilities, she says “I was made to believe I was bad at math”. Koch, Polnick and Irby (2014, p. vii) describe the struggle to find representation of girls and women in STEM as “a never-ending story”. They provide a historical account for the lack of opportunities offered to women to enter STEM fields as a national problem that dates back as far as the 1970s. In the first example the participant situates math as a problem. She describes herself as being “bad” at math because she was made to believe she did not have the appropriate skills to excel in this content area. As a child, this participant felt like she “liked it but my teacher did not encourage me to pursue it”. The first participant revealed that the ideologies imposed about math from an elementary teacher affected her own overall perceptions of what she could achieve in this area. The second participant noted that she was told that it was nice to like math and science, but “leave that for the boys” and pursue a career as an English teacher or bilingual educator because it was “easier”. This example places an emphasis on the role of educators to nurture and foster students’ desire to engage in specific academic areas, in this case, math. As a result of the child feeling that her teacher was not interested, she in turn decided to no longer excel in math. Not only did this affect her as a child in the beginning stages of her education, but the effects continued to impose problems throughout her educational trajectory and even in college. This example from one BTC provides insight as to how

the pervasive problem with girls feeling the lack of competence in STEM fields is a result of societal conditioning: When math class at the university the professor said, "You girls don't worry about it, we will explain everything slower for you girls".

The roles of parents and teachers and their contribution to the stereotype threat of girls in STEM has also been accounted for (Inzlicht & Ben-Zeev, 2000; Sekaquapetewa & Thompson, 2003). Similarly, the second participant reveals that a university professor labeled her and the other female students in her math class as "slow" and not up to par with their male peers. In this instance the professor enacted a male driven savior mentality in which he would in essence rescue the girls by presenting the content information at a slower pace to accommodate their lack of skills. In essence, the university professor was perpetuating the stigma ascribed to girls in math, oftentimes women have to fight and confront these societal positionings of themselves.

However, this in and of itself can be problematic when these same women and girls have been subjected to discrimination in schools in STEM areas. Therefore, what ensues is an internal struggle they must confront to emancipate and liberate themselves. The repercussions of negatively relating girls' abilities in math and science have lasting effects on their self-esteem. Girls are left in a vulnerable position. Because they are told they lack the skills necessary to succeed in these areas, they are less willing to participate and take risks when engaging in math and science activities.

I grew up in an era where girls were not expected to do anything but marry. I wanted to study science and I was not allowed because I was a girl. Today as a woman of advanced age, I want to connect with my mathematical side. I came back to school to become a teacher but realized that not much has changed. The reality is that people talk about promoting STEM

for girls and women, but it is not fomented at the university level. Not once before this time did I hear, "Hey, let's learn about STEM". On the contrary, instead I have heard, "Don't worry about it, that is not for you".

When considering opportunities afforded to children of color, numbers are scant. Hill, Corbett and St. Rose (2010) describe this lack of presence of girls of color in STEM as a disinterest because the tendency of STEM is to be based on the experiences of white women. Even as a child, this participant recalls not being afforded the opportunities to learn about STEM related fields in her K-12 experience. Her revelation that upon entering a preservice teacher preparation program there were still no opportunities to learn or work in STEM related areas is a pervasive problem facing educator preparation programs. Several scholars attest to the need and challenging goals that face schools in engaging students of color in more meaningful and supportive ways in STEM education (McGee and Bentley, 2017; Brotman and Moore, 2008; Blickenstaff, 2006). Furthermore, this example illustrates how educators both in K-12 schools as well as colleges continue to perpetuate the myth that girls are not good at math and science.

When I began looking for teacher education programs I went to several fairs. I noticed how men were immediately offered math positions. Even when they were not looking for them. I, on the other hand, would be offered to apply for a STEM position only after I highlighted my interest in doing it and the fact that I had worked as a tutor and aid in schools. Even without any previous experiences, these programs pre-screened me to teach English or social studies... Fields I really don't like at all.

Given our current socio-political context, there are several stereotypes that pose threats to girls' and women's perceptions of themselves when entering STEM fields. Shapiro & Williams (2012) identify and attribute these threats to the underrepresentation of girls and women in STEM to the ways their performance and interest can be undermined by others. One of these threats has been identified as a "stereotype threat" (Shapiro & Neuberg, 2007, p. 107). A "stereotype threat" can affect girls' and women in STEM in various ways including their performance on task and their career aspirations (Shapiro, 2011). This participant reveals that in her case, she came to the

realization that men were perceived as more capable than women to teach math. She reveals the reality that women have to work harder and apply to teach in STEM related areas while men are given the positions even when "they were not looking for them".

Often times the situational nature of stereotype threats in STEM related activities are identified as environmental factors and ideologies held that exclude women and girls from STEM fields (Gunderson et al., 2011). This participant's account provides an example of how women are funneled and tracked into teaching areas such as English and social studies.



Eva Isaksen
"Together"
Xilografía, grabado
57 x 76.2
2017
Seattle

STEM related women empowerment: Addressing the lack of STEM related programing for women in teacher education programs

The teacher education field continues to be predominantly represented by women. Of these, a very small number focus on teachers of color. The work of Kohli reveals that, "teacher education programs often lack strategies and curriculum that speak to the needs of Teachers of Color" (Kohli, 2008, p. 187). Further research by Flores (2011) explains that Latina preservice teachers become "racialized tokens" who must learn how to navigate their way through a traditionally white woman's profession. Hernandez-Sheets argues that "teachers of color must be provided opportunities to transfer their prior knowledge of culture to pedagogical content knowledge" (Hernandez-Sheets, 2005, p. 166). This is what one of the BTC has to say about this:

I cannot think of any time I had a Latina woman as a STEM teacher. It was always a male dominated field. That always made me feel like I did not belong.

Another participant stated:

Although the field of teacher education is dominated by "women", it is really a space for men when it comes to STEM. It is exclusive.

To date, the majority of research on STEM education surrounds areas related to standards, principals, and practice while failing to account for the experiences of preservice women teachers of color. The work of Windschitl (2002) illuminates that the majority of teacher preparation programs train their teacher candidates to enter into the field ready to fully engage their students in science learning. Research and discussion regarding the need for improved quality in

STEM related fields in teacher preparation programs initially began in 1996. The National Commission on Teaching and America's Future stated that, "recruiting, preparing and retaining good teachers is the central strategy for improving our schools" (1996, p. 1). Luehmann (2007) argues that teacher preparation programs must provide their students with the knowledge and skills necessary to develop their own identities as science educators. Darling-Hammond (2006a) and Darling-Hammond & Bransford (2005) present that powerful teacher preparation education programs equip their candidates with the skills and field experiences necessary to enter their future classrooms and serve their future students in high needs areas. Capraro, Capraro and Lewis challenge us "to consider the issues of STEM equity not in the common terms such as gender, ethnicity, or race but also in terms of identity, technology, opportunity, commitment, and challenge" (2013, p. 2). The work on preservice teacher preparation by Grossman (2010) identifies the importance of designing clinical teaching experiences where teacher candidates learn through multiple opportunities to practice, thus connecting the pedagogical knowledge they learn in their classrooms to their practicum experiences with students and cooperating teachers in the field.

I used to think that I was bad at math until I took this training. I really feel that the way I looked at math with fear stems from not having opportunities to explore these activities with other women -doing this activity with other women who felt the same way has been refreshing and invigorating -we are not alone. We can do this!

As noted above, there is great value in exposing BTCs to culturally relevant STEM activities such as the *Nepohualtzin*. The work of Bravo, Mosqueda, Solis and Stoddart reveals that "preservice teachers strengthen

their beliefs about diversity pedagogy in science when these practices are explicitly labeled, modeled and they receive feedback on their enactment of these practices" (2014, p. 617). Similarly, Ballanyte, Sanderman and Levy (2008) connect the experiences of preservice teachers in science courses to their ability to connect with and serve English language learner students. Tolbert, Stoddart, Lyon and Solis argue that "the challenge for teacher educators is to prepare teachers to teach ELs by integrating rigorous science instruction with the development of English language and literacy" (2014, p. 69). They add that in preparing preservice teachers, it is critical for programs to teach candidates how to promote the understanding of language skills in STEM fields. Providing BTCs these opportunities is critical in making sure that we are helping counter the gender, cultural, and professional bias that they are exposed to. When they enter teacher credential programs, universities need to do a better job at countering past experiences and exposing BTCs with opportunities that encourage them to enter the field.

Conclusion

Hold up, you belong: Debunking the impostor syndrome as a form of resistance

The "impostor syndrome" or feelings of self-doubt, especially for anyone who has just stepped into a new role (Clance, Dingman, Reviere & Stober, 1995) was taking an effect on me. The impostor phenomenon has been studied since at least the 1970s when Pauline Clance and Suzanne Imes, two female clinical psychologists from Georgia State University, coined the term to describe "successful women who, despite reaching significant intellectual milestones ranging from advanced degrees to professional awards, cannot internalize their success or convince themselves they deserve it" (Kaplan & Leckie, 2009,

p. 468). Since then other researchers (e.g., Brems, Baldwin, Davis & Namyniuk, 1994; Jarrett, 2010) have acknowledged such fears in adolescents and adults of all ages. Participants in this study noted that they felt like impostors, as if they did not belong. They also noted that this feeling was perpetuated from the time they were young and only grew as they moved from one level of educational schooling to another.

Teacher credential programs need to make a purposeful attempt to expose BTCs to culturally relevant STEM related activities that would allow BTCs interested in STEM related fields to pursue those fields. Given the trauma they have encountered, it is important that teacher education programs do as much as possible to counter these and reverse the feeling of being an "impostor". In purposely doing so, BTCs can have a tool to combat when the impostor syndrome creeps in, so they can remember that they belong there, and that they are not a phony or an impostor, but rather a consequence of socio-historical pipelining against women of color interested in STEM related fields.

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Gene Gentry McMahon
 "A Peaceful Crossing"
 Acuarela, monograbado
 56.3 x 76.3 cm
 2018
 Seattle



Anna McKee
"Broken Cordillera"
Colografía, ink jet y chine
collé
58.4 x 45.8 cm
2019
Seattle



Enrique Gijón
 "Tercera raíz"
 Grabado sobre zinc
 42.5 x 38.7 cm
 2019
 Oaxaca



Fulgencio Lazo
 "Viviendo en común"
 Grabado en metal
 57.2 x 71.7 cm
 2017
 Oaxaca

Engaging in *Testimonio* as a walk through el laberinto (the labyrinth) of higher education: Releasing, receiving and returning to the field with deeper purpose

Farima Pour-Khorshid,¹ Margarita Machado-Casas,² Katherine Talati,³ Diana Gomez⁴
& Guillermo Castillo⁵

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Abstract

Latinx first-generation college graduates often experience a myriad of structural, emotional, financial and academic barriers while navigating higher education as undergraduate and graduate students and later, if they become faculty members. While many studies have documented these struggles within the field, the political, methodological and pedagogical praxis of *testimonio* has been used to reflect on and document these struggles in ways that give the authors agency in retelling and reclaiming their experiences of marginalization and resistance. In this paper, the authors build on the metaphor of a labyrinth to describe how higher education can often feel similar to a maze-like path to navigate, yet, the spiritual and reflective practice of labyrinth- walking involves three stages of soul development which can also be experienced through *testimonio*: releasing, receiving and returning to oneself



Keywords:

Higher education, faculty of color, students of color, resilience, *testimonio*, social justice.

¹ University of San Francisco. ORCID: 0000-0002-9576-8631

² San Diego State University. ORCID: 0000-0003-2051-2444

³ A&M San Antonio. Número. Correo electrónico: espinozaka@utexas.edu. ORCID: 0000-0001-6939-3509

⁴ San Diego State University. ORCID: 0000-0001-8936-414X

⁵ San Diego State University. ORCID: 0000-0002-7945-4499

Introduction

The number of Latinx⁶ students in higher education continues to be low across the US, which has led to the emergence of the Hispanic Serving Institutions (HSI) intended to recruit, admit and support their success within universities (Santiago & Andrade, 2010).

Rodriguez and Osegueras found that, in higher education, Latinx students struggle with a plethora of institutional and interpersonal barriers such as “financial aid challenges, retention, (low) expectations, and mentorship options from faculty and other leadership who recognize their specific challenges, strengths, and potential to thrive as college-level students” (2015, p. 2).

Rodríguez, Mosqueda, Nava and Conchas (2013) argue that there are many issues that impact the opportunity landscape available to Latinx students, and that transformation is needed across the educational pipeline. While Hispanic Serving Institutions (HSIs) are intentionally designed to diversify undergraduate and graduate student bodies across universities in the country, there continues to be a diversity gap when it concerns university faculty. The National Center for Education Statistics reported the racial demographics of higher education faculty which remains disproportionately white regardless of gender:

Of all full-time faculty in degree-granting postsecondary institutions in fall 2017, 41 percent were White males; 35 percent were White females; 6 percent were Asian/Pacific Islander males; 5 percent were Asian/Pacific Islander females; and 3 percent each

were Black males, Black females, Hispanic males, and Hispanic females (McFarland, Hussar, Zhang, Wang, Wang, Hein *et al.*, 2019, p. 228)

The racial demographics of higher education institutions is important to consider in relation to the academic and social experiences of students of color. The presence and pedagogies of a faculty of color have positive implications on the success and retention of students of color (Umbach, 2006). Hurtado, Ruiz & Whang (2012) specifically address how microaggressions⁷ experienced by students and faculty of color also affect campus climate and lead to higher rates of attrition. When people of color are subjected to constant microaggressions on their college campuses the entire culture of the school impacts individuals' sense of emotional safety and wellbeing. When considering the power dynamics related to People of Color (POC) thriving as tenure-track faculty in higher education, the relationship between the higher education institution and individuals matters (Mawdsley, 1999).

The necessity to diversify student and faculty racial demographics in higher education

The faculty of color who have overcome institutional barriers, to make it into academia are still faced with “a state of de facto racial and gender segregation” where they are “stratified along institutional type, academic ranks, and departments” (Delgado Bernal & Villalpando, 2002, p. 170).

Astin, Antonio, Cress & Astin found that, “at least 60% or more of the faculty of color reported ‘somewhat extensive’ to ‘extensive’ stress about

⁶ We utilize the term Latinx as a gender-neutral alternative to “Hispanic” and “Latino/a” which is grounded in the politics of race, ethnicity and gender (Morales, 2018). The term Latinx intentionally reframes Anglo- American paradigms of Latinidad by also including Afro-Latinx, biracial Latinx, gender nonconforming Latinx, and other groups that are often at the margins of dominant Latino/a identities.

⁷ The term microaggression refers to (a) subtle verbal and non-verbal insults/assaults directed toward People of Color, often carried out automatically or unconsciously; (b) layered insults/assaults, based on one's race, gender, class, sexuality, language, immigration status, phenotype, accent, or name; and (c) cumulative insults/assaults that take their toll on People of Color. In isolation, racial microaggressions may not have much meaning or impact; however, as repeated slights, the effects can be profound (Kohli & Solórzano, 2012, as cited in Kohli, 2008, p. 13).

the review/promotion process compared to only 44% of white faculty" (1997, p. 81). Rhoades-Catanach and Stout (2000) noted that tenure-track decisions have long-term consequences not only for the institution but also for the candidate. Urrieta, Méndez and Rodríguez's (2015) study found that Latinx faculty members navigating the tenure and promotion process experienced it as "a tool of fear", a nebulous process, like "a moving target", receiving tenure gained limited forms of respect but not full membership, and Latina/o faculty's *supervivencia* (Galvan, 2011, p. 552-557) helped them to cope with the negative issues and environments they sometimes felt they were in (p. 1150).

Guarino and Borden (2017) relied on a large national survey of faculty members at more than 140 institutions and found large discrepancies between faculty service loads reporting that women carry a significantly heavier load of service compared to men in academia, even when controlling for rank, race/ethnicity, and field or department. When tenure track faculty are expected to excel in publishing and teaching, while also contributing internal service (e.g., departmental/university labor related to faculty governance, evaluation, promotion, student admissions, scholarships, program supervision, etcetera) as well as external service (e.g., service to the profession outside of the university and to local, state, regional, national, international communities, etcetera) the discrepancies in workload make a huge difference in terms of faculty experience (Guarino & Borden, 2017). However, other studies have pointed to the difficulties that women of color particularly face in higher education, compared to their white female counterparts due to multiple marginality that they experience and embody (Turner, 2002; Rains, 1999).

The role of mentorship in navigating higher education

Mentorship matters for students and faculty of color when navigating higher education. Traditionally,

mentorship in doctoral education has been described as a relationship established to support professional growth that does not typically extend beyond the institutional academic setting (Anderson & Shore, 2008; Rich & Davis, 2007; Forehand, 2008; Hu, Thomas & Lance, 2008; Paglis, Green & Bauer, 2006). Scholarship in this area emphasizes the mentorship role in the induction of a mentee into the academic community, providing them with necessary tools to network and engage with other scholars in the field. The depth of mentoring varies and may not always serve the mentee in effective ways, for example, faculty members who are not awarded tenure express disdain for being insufficiently mentored through the process (Fish, 2002).

Conventional and professional forms of mentorship do not always adequately meet the needs of students and faculty of color if and when there is a cultural and social disconnect rooted in power and privilege, which leads to people of color creating their own mentoring support groups (Ek, Cerecer, Quijadada Cerecer, Alanís & Rodríguez, 2010). More holistic approaches to mentoring should address the whole person which can allow for mentees to assuage feelings of isolation, and emotional trauma (Ponjuan, 2011). Mentorship plays a critical role particularly in the experiences of students of color and faculty in higher education, therefore findings ways for students and faculty to connect to people who can serve as mentors is critical in the experience and a measure students and faculty may have.

Purpose of the study

In this article, we rely on the methodological practice of *testimonio* (Bernal, Burciaga & Carmona, 2017; Fuentes & Pérez, 2016; Pour-Khorshid, 2016) to explore the ways in which a range of Latinx people navigating higher education across various positionalities (graduate student, assistant professor, full professor and department chair)

experienced challenges and resiliency throughout their higher education journeys. The experience of writing and sharing their *testimonios* led to spiritual and emotional clarity when reflecting back on and reclaiming their stories. More specifically, we draw on our own experiences as five self-identified Latinx people (four cisgender⁸ women and one cisgender male), that embody a range of positionalities as we reflect on navigating different milestones in academia. The authors share the ways in which they had to negotiate the struggles of being Latinx in academia through their respective roles which informed their purpose, practice and future directions within the field. We build on Machado-Casas, Ruiz & Cantú's metaphor of navigating higher education as a "*laberinto*", a labyrinth, which can make students and faculty of color feel "an overpowering sense of loss and lack of direction as they enter [...] the labyrinth of academic structures, a place that can be dark, lonely, and without much direction" (Machado-Casas, Ruiz & Cantú, 2013, p. 4).

While a labyrinth is essentially a maze-like path that can be difficult to walk through, when the practice of walking through is taken up as a spiritual practice, the experience becomes a meditative act to get more in touch with one's soul and deeper existential purpose (Artress, 1996). We posit that the practice of *testimonio* writing offers students and faculty of color in higher education a spiritually grounded labyrinth walk-like experience that allows the writer space to engage in the three stages of a physical labyrinth walk: releasing, receiving and returning (García & Curry-Rodríguez, 2000). In essence, we argue that engaging with critical race, feminist theory and praxis like *testimonio* serve as a healing-entered practice that also offers future generations paths of possibility to navigate higher education at any level.

Conceptual frame: Engaging in *testimonio* as a metaphorical walk through the *laberinto* of higher education

In this article we borrow from Ruiz & Machado-Casas the notion of the *laberinto* of higher education to conceptualize the experiences that students and faculty of color have when attempting to navigate higher education:

A *laberinto* contains places that are complicated and uncertain. When you enter a *laberinto* you don't really know the way or how you will get to the end. There is some uncertainty as to which way to go, or if the path that you have chosen is the "right" way. As one goes through the *laberinto* one feels overwhelmed because of the uncertainty of where to go. The one thing we do know about this *laberinto* is that one needs to figure out the road(s) that lead to the exit (Ruiz & Machado-Casas, 2013, p. 52).

While Ruiz & Machado-Casas (2013) use this metaphor to describe the overwhelming uncertainty within the complicated path of higher education, we revisit this concept with a renewed lens with which to understand walking through this metaphorical labyrinth through the process of writing one's *testimonio*. To elaborate, the view of walking a labyrinth is in fact complicated and filled with maze-like barriers just like higher education is, however, when walking a labyrinth with spiritual grounding and connectedness, just like engaging in *testimonio*, the experience can feel quite the contrary. For example, according to Sandor and Froman, walking a labyrinth as a spiritual and healing centered practice involves three particular phases in one's experiences:

⁸ We utilize the term cisgender to describe a person who identifies as the gender that they were assigned at birth.

The first phase, releasing, occurs during the walk to the center at a normal walking speed. Walkers are encouraged to empty their minds; repeat a chant, word, or prayer; pose a problem to be solved; or recall a dream to reflect on. When in the center, walkers engage in receiving and may sit or stand while inviting an opening to personal healing, solace, connection, renewal, and wholeness. The third phase of the walk, returning, involves retracing one's steps in the opposite direction. Walkers return to the day-to-day world with each step, and while doing this often experience a change of energy in mind, body, and spirit. The intent of the labyrinth walk is to evoke physiological, affective, and spiritual outcomes similar to a sitting meditation (Sandor and Froman, 2006, p. 104).

As such, engaging in *testimonio* is a deeply personal and spiritual act and experience when processing and reclaiming our struggles as people of color navigating oppression in the world. In the following section, we describe *testimonio* and our methodological approach to this study.

Methodology

We engage in a narrative research rooted in *testimonio* as our methodological approach to explore the experiences of navigating higher education from the vantage points of four women and one man whom all identify as Latinx. *Testimonio* has served as a powerful tool for women identified as Chicanas/Latinas to share their stories about navigating marginalization and more importantly, to stand in solidarity with others who share similar experiences and struggles (Moraga & Anzaldúa, 1981; Anzaldúa,

1987; Castillo, 1994; Elenes, 2000; Flores & Garcia, 2009; Saldivar-Hull, 2000).

Testimonio offers women of color a liberating space to reflect on their lived experiences and positionalities in the world through critical race and feminist theory and reclaim their stories with agency (The Latina Feminist Group, 2001). Perez Huber and Cueva assert that, "*testimonio* allows Chicana/Latina researchers to document and inscribe into existence a social witness account reflective of collective experiences, political injustices, and human struggles that are often erased by dominant discourses" (Pérez & Cueva, 2012, p. 393).

While *testimonio* has been developed for and by Chicana/Latina women, it has also been taken up by people of color more broadly in order to reflect on, share and witness one another's racialized, gendered and intersectional struggles and lived experiences as a means of consciousness-raising, healing and solidarity (Pour-Khorshid, 2018a, 2018b). Stories of resilience and resistance to subordination often emerge from *testimonio* research which lead to transformative experiences for participants. The very process of *testimoniando* is homemade theory for the generation of knowledge that is often delegitimized in institutional spaces (Nuñez-Janes & Robledo, 2009). In keeping with *testimonio* practice, these authors integrate non-standard English and Spanish words within their manuscript and throughout their narratives, because in doing so, it allows their authentic voices to highlight how a language choice also embodies a political stance in centering non-dominant identities and cultures as a form of reclamation.

This study, therefore, allows for each of us, as Latinx identified scholars in the realm of academia, to reflect on and heal from our own experiences navigating higher education through the act of testifying about our resilience in the midst of navigating structural oppression. We engage in this labor of love with the hope that other Latinx students

and faculty can not only relate to our stories, but also find inspiration to engage in a similar process as a form of resistance and sustainability in the field and in the world more broadly.

Participants

The participants in this study are self-identified Latinx individuals who range in experience and roles in their professional career within higher education. Katherine is a mixed-race Iranian and Mexican assistant professor at an HSI in her first year as a tenure-track faculty in the US South. Farima is a mixed-race Iranian and Nicaraguan assistant professor in her second year at a private Jesuit university in California. Margarita Machado-Casas is a full professor and administrator for a bilingual education department at a Hispanic Serving Institution (HSI) in California. Guillermo Castillo is a graduate student, university instructor and also coordinates a teacher pipeline program for students of color with Margarita at the same HSI. Diana is a graduate student and instructor at an HSI in California. In the following section, participants share their *testimonios* related to their experiences navigating their respective locales and roles within higher education. Beginning with Katherine's "'I ate beans and rice in grad school too': Overcoming the pain of microaggressions in a doctoral program"; following with Farima's, "From research to 'me-search': Finding purpose in my pain and power"; next, Guillermo's "Fighting gatekeeping practices: Pathways as *laberintos* in higher education"; then, Diana with "Dismantling invisible labels while creating visible pathways"; and Lastly, Margarita with "The revolution is real and continues: The fight for institutional access for students of color".

OUR TESTIMONIOS: NAVIGATING HIGHER EDUCATION WHILE LATINX

"I ate beans and rice in grad school too": Overcoming the pain of microaggressions in a doctoral program

Katherine Talati

As a student of color at a Tier I institution, I almost immediately felt a sense of alienation, like I was in a foreign place. Hailing from a Hispanic Serving Institution for my bachelor's and master's degrees, my initial conceptualizations of college life were completely different from what I experienced on my first few days in my doctoral program. Little did I know these feelings of being an outsider were only the beginning. This narrative serves as a *testimonio*, my truth, to the experiences I was subjected to and how I overcame such obstacles. Communities of color have bonded together to examine the discriminatory and exclusionary practices they are oftentimes subjected to through the use of a microaggressions perspective (Sue, Capodilupo, Torino, Bucceri, Holder, Nadal and Esquilin, 2007). The field of microaggressions originally derived from an understanding of racism encountered on a daily basis by people of color. Smith, Mao and Desphande explain that "microaggressions refer to the daily indignities, invalidations, and slights that are experienced by people of color (even when the perpetrators are not aware of having done so)" (2015, p. 127).

La verdad: Understanding the important role of hermandad in times of trouble

It was the spring of 2015 and I was finishing my second year of course work and I was excited to enter into the next phase of my graduate studies. I was not a traditional graduate student, as I continued working as an elementary bilingual teacher out of not only financial necessities, but also passion. As a result, one of my professors (a white woman) became concerned about my dedication to the doctoral program. She

went as far as requesting a meeting with me towards the end of the semester. I remember walking into her office and feeling a huge knot in my throat. She began by mentioning that she felt it odd that I was not forthcoming with the information that I was working additional hours while attending school. I told her that I did not feel comfortable discussing my personal struggles with her because I did not feel like she knew me. I told her that I did not feel comfortable having this conversation because I knew of other doctoral students who worked outside of school too. I asked her if they had been questioned, or if they were going to be in the same manner, and she said no. I asked her why she was concerned about me, and she told me that she did not want me to lose momentum. I told her that I felt like I had balance in my school, work, and life and that I did not fear falling behind.

Then it happened, she began talking about her own experience in grad school. She told me: "I know what it's like to be in grad school. I ate beans and rice during my entire program. Those were my strict vegetarian years." I was shocked, I could not believe these words came out of this woman's mouth. I could not understand it, was she trying to elicit sympathy from me when in my own experience, I have always eaten rice and beans, coming from a modest Mexican-American household? That's what we ate because of our own limited means—not because we were vegetarians. These were the unexpressed thoughts in my head, and I told her that my choice to work was not only for myself, but that I have always been there to help my family financially, too. She concluded the meeting by stating she just wanted to make sure I was making good financial choices and that she wanted me to find a good balance in what I was doing, and again, she did not want to see me lose momentum. I then told her again that I did not feel like I was losing momentum, that I felt like I was growing academically. I shared that I had attended my first national conference, that I had gotten A's in all of my classes and that I was working hard this semester to maintain my high GPA.

Findings: The *f*, from failure to future

Then it happened, after checking my final grades, I saw that she had given me an X, which indicates an incomplete course. I emailed her to find out why, and she said that she had found that my final paper was not up to par. I discussed this incident and had a further email exchange with other professors in the department, where I explained that I felt this professor was abusing her power and using this entire situation to reprimand me for the previous events that had taken place this semester.

For the first time in my educational career I felt like a complete failure. I remember walking out of the education building utterly shaken. I was too embarrassed to tell my family and friends. I did the only thing I knew I could do—I called my professor from my undergrad and master's program.

Dr. MMC had always been my mentor, however this was the first time she literally became my *ángel de la guardia*, my guardian angel. It was through this hour-long conversation that I learned what microaggressions were, and that what had happened to me was not my fault. More importantly, I learned that I was not alone and that although she had no power at the university I attended, she possessed the *poder de hermandad*. Bettez, Lopez and Machado-Casas (2009) explain that women of color come together to form a sisterhood of support to navigate struggles, they define this as *hermandad*, the Spanish word for "sisterhood." Their research focuses on how faculty women of color bond together to support each other.

Bettez, Lopez and Machado-Casas (2009) established that *hermandad* is a relationship created and cultivated by women of color in academia to sustain them throughout their struggles. The guidance that Dr. MMC provided to me during this tumultuous time showed me what *hermandad* relationship was in academia. They explain,

It is a way to recognize that as women of color in academia we are here together,

and each other's cause is a shared cause for voice, visibility, sustainability, and empowerment in academia. It is the legacy of the struggle of those who came before and paved the way for us, which we will leave here in this world as Latina women (Bettez, Lopez and Machado-Casas, 2009, p. 60-61).

Within days I received emails and contacts from Latina professors in Texas, Arizona, and California, all wanting to help me in this struggle. Dr. MMC used her connections and together we navigated this new terrain. These women took the time to read timelines of events that occurred, and more importantly shared their wisdom with me. I was even invited to share my experiences in grad school on a panel at a national conference. In the end this professor was able to label me and awarded me my first F on my transcript.

The mentorship, *confianza*, and *hermandad* I received from Dr. MMC provided me with the tools and helped me develop my own *conocimiento* about what had really happened to me. Anzaldúa (1987) imparts her wisdom about *conocimiento* and teaches us that through the traumatic experiences we encounter, we develop *conocimientos* to help us reflect on the events we have endured. Once we have taken the necessary time to evaluate what has happened, we can then begin to heal.

The *hermandad* developed between Dr. MMC and I evolved over a decade. At the time I experienced this trauma I was not prepared nor equipped with the necessary tools to begin this healing process. Already a tenured professor, Dr. MMC knew how to navigate spaces and experiences that were new to me. She shared her own stories of struggle in her doctoral program with me, so that I knew that I was neither the first nor the last person this type of microaggression would happen to.

To this day the F still haunts me and triggers flashbacks from this entire experience. I went on to complete my doctoral degree from a different program within the same university. Again, Dr. MMC stepped in

and used her connections to put me in contact with a new advisor. However, it was a constant struggle within me to continue. Days on end of having to engage in self-talk and affirmation that I belonged in this space, that I was deserving and that I could finish this journey.

Conclusion: Sobrevivencia and moving forward

Now that I have finished my doctoral degree, I have had to reposition the F I received on my transcript. In some ways I now view it as a badge of honor for what I had to endure to make it to where I am today. Solórzano's (2010) microaggressions model indicates that the ways students respond to these traumatic encounters is of utmost importance. Furthermore, I have learned it serves as a constant reminder, always present, but as a motivating mechanism now to help and serve others. Yúdice (1991) initially presented the *testimonios* as a method for individuals to use their experiences and talk back about their own survival. Prieto describes these feelings as "*sobrevivencia, esperanza, amor, coraje, cariño, y conocimiento*" (2009, p. 134). Machado-Casas et al. (2013) metaphorically conceptualize the process graduate students take in navigating new spaces as a "*laberinto*". The experiences I had at a Tier I institution included dark and isolated spaces where I felt I did not belong. In the beginning I felt like I was walking through this maze with a blindfold over my eyes, walking into dead ends at every turn. García & Curry-Rodríguez (2000) explain that through spiritually grounding ourselves, we engage in a labyrinth walk that allows us to release, receive, and return to ourselves. I was able to release the pain that I associated with what happened to me because of situations that were beyond my control. The help I received through mentorship and the *hermandad* with Dr. MMC allowed me to continue to grow academically. The greatest gift I obtained was the ability to return to myself and to push forward. Through this encounter in my doctoral program I learned and used all of these tools to make it to the end.

Sobrevivencia to hold my head up every day and continue on. *Esperanza* in knowing that I could still dream of the future and that this event did not define me as a student. *Coraje* because I knew what was done to me was truly an injustice and hurt for those who had experienced similar treatment before and after me. *Amor* from the love that was shared with me through the mentorship and *hermandad* with Dr. MMC and other Latina professors who helped me. *Conocimiento*, the awakening of the knowledge that microaggressions exist and we must defend ourselves against them.

From research to “me-search”: Finding purpose in my pain and power

Farima Pour-Khorshid

Two years ago, I left elementary teaching after a decade of service in my community for a tenure-track professorship and I continue to identify and serve as a grassroots local and national educator-organizer. I am currently in my second year as an assistant professor. Since the age of five I have navigated educational systems that have always been perpetual reproduction sites of structural violence and harm since colonization. I know this because I’ve studied the history of US education, but also because I’ve survived schooling as a student *and* as an educator of color navigating inequitable policies and school practices, white-washed curricula, racist peers, colleagues and administrators as well as culturally biased assessment metrics for most of my life. I have experienced first-hand how education institutions, regardless of what level, lack fundamental services, resources, and support for both students *and* educators who are the most marginalized within them. As a PhD student, I began to research how teachers of

color are impacted within the profession and in doing so, I began to come across some of my own experiences reflected within the literature and research that I read. I became engulfed in trying to understand the myriad issues impacting Black, Indigenous and People of Color (BIPOC) via schooling because the more I read, the more I was able to name and understand my own experiences. I wrestled with the complexities of feeling validation that my struggles were documented and simultaneously feeling deep sadness that these realities were and still are so common.

I struggled teaching kindergarten throughout my six-year PhD student journey because I became increasingly frustrated with the unhealthy norms of productivity expected and normalized in both elementary and university institutions, especially in the face of trauma impacting students spanning all ages. In my kindergarten class, my precious five-year-old students carried the weight of poverty, the violence of deportations, of navigating several foster homes, homeless shelters and Child Protective Services, of trying to understand why their parents/loved ones were incarcerated, or how to stay safe in the midst of domestic violence or state sanctioned violence, or how to be healthy while lacking access to healthcare, or any of the endless ways in which the symptoms of structural violence lead to constant fear, stress, anxiety, depression and grief. Meanwhile, within the same week, I’d teach undergraduate sections where some of the most brilliant university students of color were having to live in their cars, survive by eating canned foods while sending money to their family and simultaneously struggling with their own mental health, trauma, impostor syndrome,⁹ racial microaggressions, discrimination and countless systemic barriers to accessing resources, all while trying to stay afloat

⁹ Pauline Clance and Suzanne Imes coined the term “impostor syndrome” in 1978 to describe the phenomenon of high achieving individuals who believe that they do not deserve their success/role believing their achievement/placement is based on luck or timing, not merit. Individuals who struggle with impostor syndrome personalize and internalize mistakes and failures to confirm the feeling that they do not belong (Sherman, 2013). “Impostor syndrome” refers to the internal experiences of individuals who struggle with fitting into academic spaces that were not typically created for individuals of color; see Cope-Watson & Betts (2010).

academically. These undergraduate students were once kindergarteners that carried similar stressors in their childhoods too. It became overwhelming to witness some of my own struggles in the lives of young children and adults, and to be tasked with being their beacon of light through the darkness that they/ we were navigating. The reality is that these dynamics have never been foreign to me—in fact, because they're so familiar I was and still am often triggered by my students' realities. All of these struggles disproportionately impact marginalized people from communities like mine, where the cycles of poverty and the symptoms of structural oppression repeat from generation to generation. Yet still we rise, with all of the brilliance and resilience that we've inherited from our ancestors, family and communities.

My last year in the PhD program I had to take a leave of absence as a student and also as an adjunct instructor for various reasons, so I did not have access to health insurance because I simply could not afford it. During this time, a close mentor, comrade and friend of mine died from suicide, my mother's health declined and she was in and out of the hospital, my Iranian grandmother passed away, I was watching social media videos of loved ones in Nicaragua fighting for their lives as students and elders protesting the Ortega regime were tortured and murdered daily, and I was falling apart as I tried desperately to finish my dissertation and the kindergarten school year. There were moments when I was terrified of being left alone simply because my depression felt so dark and yet, I needed to be alone since writing often required isolation. Luckily, I had close grad school friends that looked out for me, I had family members that stepped in to support (one of which was my cousin who is also a co-author of this piece), and I had a graduate advisor that had my back through every traumatic event that I

experienced. My advisor treated me as if I were part of her family from the very beginning of my PhD journey. My baby brother passed away at age 25, two months before I started my PhD program. I vividly remember needing to walk out of classes or meetings to find refuge in my advisor as she comforted me while I wept in her office grieving, navigating microaggressions, impostor syndrome and struggling to stay afloat in a program that I felt completely disconnected from. Her ability to see and treat me like a human being, and to support me emotionally and academically through so many recurring hardships played a significant role in my sustainability. All of the individuals who supported me emotionally cared about me and saw my humanity rather than pushing and expecting productivity like others in academia did.

The toxic culture of production in higher education often made me feel inferior, disposable and worthless.

The reality is that I have always had to find people and spaces outside of school institutions to help me navigate my mental health struggles, trauma, institutional harm and barriers. As a daughter, sister, aunt and friend, I experienced a lot of shame about my struggles because I didn't want my loved ones to worry about me but I also didn't want to confirm my own negative self-talk within those relationships. As a teacher and graduate student, I felt the same shame because there was never time or space for people of color to feel human, to feel safe to express grief or to engage in self or collective care within education institutions. I have always felt like I was expected to be "professional" by leaving the "drama at the door" which really meant leaving my trauma at the door. I was expected to conform and to be desensitized to the ways I witnessed and was expected to participate in the pathologizing of people of color of all ages. Professionalism, from my experience navigating education institutions, has also

¹⁰ The term *respectability politics* was articulated by Evelyn Brooks Higginbotham (1993) in her book, *Righteous Discontent: The Women's Movement in the Black Baptist Church, 1880-1920*, to describe how in the context of Black American history, some Black people consciously hid or set aside cultural practices and ways of being that were thought to be looked down upon by the dominant society and culture as a way to integrate into it.

been code for deeply rooted respectability politics¹⁰ that often reinforce colonial, capitalist and assimilationist logics, which continue to oppress marginalized people. The more I reflect on my experiences as an educator and student of color, the more I realize how spirit murdering (Love, 2019) is a byproduct of navigating education institutions.

There are punitive practices to penalize people of color who resist dehumanization and there are rewards for our conformity. Throughout my journey I've come to learn that these kinds of expectations and dynamics are colonial in nature and go against all of my ancestors' dreams for me and the generations to come after me. Gloria Anzaldúa taught me that "awareness of our situation must come before inner changes, which in turn come before changes in society. Nothing happens in the 'real' world unless it first happens in the images in our heads" (2009, p. 310). Navigating higher education forced me to confront my own internalized oppression, which was a pivotal epiphany in my journey toward critical consciousness. I learned to master the guise of professionalism by repressing my pain and performing in ways that felt dehumanizing and spirit-draining. For years I maneuvered within and through professional spaces at the expense of sharing my truths and showing up fully as myself, exacerbating impostor syndrome on all fronts of my teaching and graduate student journeys. However, through my graduate studies, I sought out critical mentors who helped me to understand how professional development, at its core, focuses on preparing educators to more effectively take up standards, assessments, curricula and strategies that maintain white supremacy,¹¹ not dismantle or aspire beyond it. These relationships were crucial to repurposing my role and responsibility within this field.

Navigating higher education gave me the language and theory to understand that even with the

various ways that I've been impacted by ideological, interpersonal, internalized and institutional forms of oppression, I simultaneously have a lot of privilege as a first-generation college graduate, a privilege that many people of color in the US are/were not afforded. This privilege is what pushes me to stray away from what is expected of me as a "professional" in the field and instead, utilize my privilege to enact change by committing to the liberation and self-determination of people of color. This kind of political commitment will be what I embody as I mentor other future educators of color now that I am a professor in teacher education, and I hope that will also impact the means in which my students and other educators who know me or have read my scholarship will teach to future generations along the way.

It was in and through my grassroots social justice educator collectives and organizing spaces that I became inspired to cultivate the kind of learning conditions for my students that I needed when I was younger and that I still need now as a woman of color: a humanizing space to feel seen, heard, valued, loved and empowered. These elements nurture conditions for envisioning and aspiring toward liberating possibilities within the realm of education and beyond. For these reasons and more, my doctoral research and "me-search" is rooted in what I've theorized as critical and healing-centered racial affinity spaces. This came from my ethnographic case study of the first racial affinity group that I co-founded with two other women of color comrades within the Teachers 4 Social Justice (T4SJ) grassroots organization. We named the group H.E.L.L.A. Educators of Color. The name came out of a conversation regarding how the term *hella* proclaims an identity and sense of belonging to the Bay Area and yet, in higher education spaces, the word can simultaneously be perceived as unprofessional. I felt that it would be fitting to center our linguistic capital and Bay Area cultural

¹¹ I utilize the term white supremacy to describe a) the "socio-political economic system of domination based on racial categories that benefit those defined and perceived as White. This system rests on the historical and current accumulation of structural power that privileges, centralizes, and elevates White people as a group"; and b) the assumed superiority of individuals and ways of being that are perceived or identified as White and hence, the societal standard (Sensio & DiAngelo, 2017).

ties by reclaiming the word for our group. H.E.L.L.A. is the acronym for the group's ideological and pedagogical commitments to the following learning tenets: healing, empowerment, love, liberation and action. Considering that only 17% of people in the teaching profession identify as teachers of color, these stats make the name of our group ironic, at times depressing, but ever inspiring. There are not "hella" teachers of color in the quantifiable sense but there absolutely are H.E.L.L.A. teachers of color when it comes to the political stances that we take in and out of the classroom. H.E.L.L.A. educators of color was conceptualized to represent people of color in the field of education who do not ascribe to the dominant culture and who actively resist colonial, neoliberal and white supremacist ideologies that are embedded in the policies, pedagogies and practices paraded as commonsensical approaches to improving education. The educators of color who believe that true education should aim toward self-actualization, determination and world change. The ones who believe that their own learning and development should not be sanitized, standardized or corporatized professional development but instead, a kind of humanizing development centered in healing, empowerment, love, liberation, and action.

So, in essence, my research has been and continues to be "me-search", since I believe that my purpose in this field is to inspire other people of color navigating higher education through sharing my own healing journey and the collective healing that manifests when we create spaces for ourselves to heal collectively. I believe this "loveolutionary" endeavor serves as a catalyst to disrupt these toxic cycles of oppression and reimagine new ways of being in academia and in the world.

Fighting gatekeeping practices: Pathways as laberintos in higher education

Guillermo Castillo

Pathways have always been a part of my life. I remember vividly my mother, who had to learn how

to cook at age 11 after her father's death, answering the phone and trying to communicate using her limited English with Mr. Rucker, who was my water polo coach, a tall lanky redhead who was finishing his credential, had a baby and had a part-time teaching position at my high school. With his broken Spanish, I could hear him tell my mother I could go to college and potentially get a scholarship. My mom had a few exchanges with him, hanged up and turned to my dad. "*Dice el maestro que Memo puede ir al colegio*" (The teacher says Memo can attend college). A few weeks later Mr. Rucker walked me to the counseling center and gave me three-course catalogs of potential institutions I could attend. Without me realizing it at the time, my life had changed forever. Unknowingly, that was the beginning of my first pathway. Mr. Rucker met with my counselor, moved me from consumer math to pre-algebra, and connected me with the upward bound program and helped set up school visits. He used his institutional knowledge to help me navigate through the college application process and ensured I was part of programs which supported my path. My undergraduate work was a struggle, I was not academically prepared for the rigors of academia. I lacked confidence and the academic preparation to excel, I simply survived. Years later, I graduated from Cal State San Bernardino and became a teacher at my former middle school. Determined to make a difference, as I saw on a daily basis the needs of my students and the importance of using access and privilege to help them get ahead. I began coaching the water polo team and built a competitive and successful program.

The local paper, the *San Diego Union-Tribune*, became aware of our team's success and featured my work on the front page of the sports section. I shared my story, specifically about Mr. Rucker. A few days later, Mr. Rucker showed up to practice with the article in hand. "Guillermo, I never knew how much of an impact I had on your life", he said. And I responded, "Mr. Rucker, without your help, I would not have attended college nor would I be the first person in my family to graduate, you changed my life." For those of us who do not

grow up with privilege, we often need a transcender, a life changer with access who opens up doors and possibilities; as better stated by Freire, "knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world, and with each other" (2008, p. 244)

My coach, who was struggling through life, did something to change my life, not because it was in his job description, but because it was the right thing to do. He used his understanding of the system, empathy, and compassion to reinforce and connect me with structures and support mechanism to help me pathway into college. This is only one example that illustrates why I am passionate about creating pathways and providing access to students from minoritized and marginalized communities. For me, this is not only a passion but a call of duty and obligation. As stated by Margaret Wheatley, "there is no power for change greater than a community discovering what it cares about" (cit. en Kaufman & Raphael, 1984, p. 19). Discovering that I can be an agent of change in the life of others and use education as a tool for access and a counter story against oppressive systems has led me to develop and support pathways. I was lucky to have Mr. Rucker in my life, but many people are not as fortunate. As I navigated life these last 25 years in education, I realized pathways are not only beneficial but essential.

The first pathway I developed was as a high school coach. I realized that to be successful in water polo, students had to start early, especially in South San Diego where many youths do not have access to pools or swimming lessons. The structure was not there for low-income students to become water polo players, they had no access to help them compete with the resources available at high-income communities. As a result, I started a youth program, teaching students how to swim at an early age in order to give them a competitive edge —this led to the creation of my first pathway. Paulo Freire is quoted, "no one is fully-formed: it is through self-experience in the world that we

become who we are" (Freire, 2000, p. 129). Pathways provide opportunities for all to potentially be successful, it is not left to chance. My central focus remains working with teacher pathways through a research oriented-lens, one that specifically looks at how to support individuals from disadvantaged backgrounds to enter pathway programs. Many members of our community are marginalized from opportunities by institutions which serve as "gatekeepers" with established policies which consistently limit access. Using a mixed methods approach, more research has to be done in educational pathways mechanisms which have been successful in providing students access to higher education and professionalization and changes or structures which need to be put in place to support the development of educational and career pathways. At the core of my personal and professional goals are social justice, equity, and access.

The experience of teaching high school, middle school and elementary English language learners has afforded me a perspective of our educational system which has informed my thinking around pathways. For many of my students, language and access were closely related. Thinking of my kindergarten students accessing language specifically in a Spanish immersion program at Longfellow Elementary School reinforced the importance of access.

Students who spoke only English were provided structure and programs which helped them learn Spanish, another example of a pathway. The opportunity provided to 5-year-olds to acquire a second language will open doors throughout their life. The passage of Proposition 58 and the elimination of Proposition 227 has provided our communities with an opportunity to engage our immigrants through language. As a bilingual Mexican *fronterizo* immigrant, my commitment to social justice and change through educational pathways access can serve as a way to fight institutionalized racism, discrimination, and inequities which can, in turn, change our state, country, and society. As better stated by Paulo Freire:

[...] Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world (Freire, 2000, p. 129).

Education is the number one equalizer and needs to be accessible to those communities who have been marginalized through policies, economics or historical factors. My father, an adult immigrant who as a child struggled to have enough to eat, shared with a crackling voice after my graduation, *"el trabajo me escogió a mí, pero tú con educación, puedes escoger tu trabajo"* (work chose me, but with an education, you can choose your work). I am privileged now, and what I do with that privilege reflects on my character. Being of service and opening doors for those community members who are struggling or lacking the confidence to move forward is an obligation I assume with determination and vigor. We need to take an interest to change our educational system to provide our communities with sustainable mechanisms which promote social awareness and justice for communities which have struggled to be heard and supported.

I have been developing delineated teacher pathways for Mini-Corps tutors, who are former migrant and first-generation college students, classified employees, and other populations which have struggled or are challenged with entering and completing a credential program. My work revolves around "gatekeepers" which have traditionally left aspiring teachers at the steps of the gate. I have come to understand how entrance exams have limited access, especially to second language learners. I have established online mechanisms to support

with writing, math and reading comprehension for those aspiring to enter a credential program. I have also established partnerships with over 7 counties, 3 community colleges, 2 universities and over 10 districts in the establishment of pathways from high school to PhD. These partnerships have provided opportunities to learn from each other, identifying best practices and avoid working in silos.

I have been collaborating with the Dual Language and English Learner Education Department by co-starting the first online bilingual credential program in all the CSUs. This program was tailored to support the nontraditional student which works full time, has a family and had challenges navigating the system. I am eager to expand my learning on the theoretical frameworks and how these can inform and strengthen theoretical assumptions to help evaluate my work critically. The theoretical framework will help me research existing knowledge guided by a relevant theory and look at a basis for a hypothesis and choice of research methods. Articulating the theoretical assumptions of a research study will force me to address questions of why and how. Now, I begin a new stage of my life as a doctoral student. I'm nervous but also excited and I think about all the students I work with -and without a doubt I see myself in them. The *laberinto* continues. I'm releasing the knowledge I gained after working toward pipeline programs to help students of color and non-traditional students. I realize that a new challenge begins in this *laberinto* called higher education. I realize that, at my age, and this stage of my life, I'm a non-traditional student who will rely on the mentorship of those who have come before me -I will be receiving. I have realized that it is a cycle of growth and we all must contribute to it if we really want change and social justice. We move from mentoring to being mentored in a constant state of flux, that is always returning.

Dismantling invisible labels while creating visible pathways

Diana Gomez

Invisible labels have been a part of my life in education. My earliest memories of school had always been positive. I had caring teachers, although I never really connected with a single educator. I attended my neighborhood school which still is in Southeast San Diego from preschool to sixth grade where I enjoyed reading, writing and listening to stories. I had no idea that I was in a class designated for English learners and that I would be labeled as such for a number of years. That invisible label reinforced a certain stereotype about my ethnicity and my culture. A track had already been designed for me, unbeknownst to me, I was already treated as someone whose language and culture was seen as a deficit. You did not have to tell me that I was different from others, my classroom felt different. As Gershen Kaufman states in his work, "identity is the essential core of who we are as individuals, the conscious experience of the self-inside" (Kaufman & Raphael, 1984, p. 35). The goal was to take away my home language so that I would learn English, the language of power. Despite their best efforts, I was able to retain my language as I constantly served as a translator and interpreter for my parents and grandmother. I learned from home about my heritage and identity and outside my home, I learned to hide my culture and identity. As better stated by Gloria Anzaldúa in *The New Mestiza* when speaking about language and culture as a site of terrorism and oppression, "like all people, we perceive the version of reality that our culture communicates. Like others having or living in more than one culture, we get multiple, often opposing messages. The coming together of two self-consistent but habitually incomparable frames of reference causes un choque, a cultural collision" (1987, p.) I was taught from a very scripted curriculum that did not allow for flexibility in addressing my needs as a student. There

was no mention of my identity or culture and there was certainly no celebrating who I was and where I came from. There must not have been any heroes or contributions made by people like me. As I progressed through my schooling I became more aware that I was at a disadvantage and set up for failure from the very beginning. I lived in a stage of *Nepantla* in between the system that had already set me and my classmates to fail, and sadly, I witnessed many failures. My language and culture had been tamed, oppressed, and tracked. I was on a particular path for students that spoke Spanish, just like me and that was seen as a problem that had to be dealt with. What better way than to move away from my core culture to the other side of the tracks. I was encouraged to leave my neighborhood when I reached middle school and high school and was eventually bussed 30 minutes away from my home to be integrated with youth that was vastly different from me. As noted by Murillo (2002), Latino is often seen as "the problem". One that can only be addressed by a removal that leads to complete alienation from one's culture and directs to assimilation. In the process, I experienced a culture shock as I felt more pressure than ever to blend into a community that was so unattainable for me in a number of ways, specifically economically and socially. Leaving me feeling like an imposter just the same way Maya Angelou described it, within an educational system that was supposed to protect me. That lonely feeling of non-belonging and inadequacy. During the day, I experienced ocean views from the windows of my classrooms and then by dismissal time I was transported back to where I belonged, literally the undesirable south side of town. My community was plagued with gangs, constant police raids, and the ever-present drug deals. It was as if I was living in two worlds and did not fit into either. *Nepantla* was my reality, and I was a walking contradiction ready to find belonging. For the duration of my entire K-12 career, my teachers did not look like me, speak like me or exposed me to curriculum that connected with me as a Mexican girl. This was normal to me.

I am the daughter of immigrant parents who also happen to have been teenage parents. Along with these dynamics, there were issues of abuse, alcoholism, domestic violence, and cultural roles that were to be adhered to. Being initially undocumented, inexperienced and with highly limited English skills, my parents were confined to very few options for employment. My parents insisted that the sole opportunities for a better life would only be attained with an education. My mother became a waitress and my father played the guitar at the local Mexican restaurant. The pay was minimal, but all of our basic needs were provided for. They both worked demanding hours and were always too exhausted to attend school events, much less to check our homework or read to us. I have often heard that parents such as mine do not care about education and the truth is that they are just like other undocumented working people, too preoccupied with keeping a roof over their children's head and food on the table, that attending back to school night is not their priority. Unable to explain social and economic inequities to my teachers, my parents were framed as "uncaring". They too were tracked. However, the reality at home was different, my parents instilled the value of education and always used themselves as examples of missed opportunities and access. My father is one of thirteen siblings from rural Mexico and had always lived in poverty. He attended school up to second grade and then had to begin working to help support the rest of the family. My mother who was born in Sinaloa, she is the youngest of six and had the unique opportunity to finish middle school. Eventually, my maternal grandmother moved into our home and took on the role of mother for everyone in the household. She served as a symbol of strength that would guide us with her *consejos* (advice) even after her death. I remember that although I was not a child that received academic support at home, I had to figure out a way to maintain the best grades and always make my parents proud. They always wanted my sister and me to succeed and believed education was the only way

to make it in this country. The track that was set out for us at home could not be more different from the one set out for us in school. Interestingly enough, no one ever monitored my academic progress, yet I was able to navigate the educational system. I did not end up in jail or, like many of my childhood friends, a teenage mother, even though all odds had been stacked against me. As a result, I was seen as a rarity and was beginning to find my voice as a Latina female, living the balance of two worlds and the double standards that came along with it. I knew that there existed a lack of educated Latina women, so I vowed to support as many people as I could that have had similar struggles. Getting people out of predetermined tracks and removing all labels has been my mission and mentoring them into pathways, my goal. One of the ways that I empower women and support the education of underrepresented students is through education courses that I teach at the community college level. I am privileged to be able to reach out to a population that faces similar struggles and are working to have their voices heard through education. I am now a first-hand witness on how they struggle as mothers, wives, students and aspire to bridge that gap by being responsive and flexible with their needs.

Education has opened my eyes in positive ways but also has shed light on the system that has been set up to perpetuate inequities and the oppression of minorities. I am now becoming a transforming voice for my community; I concentrate on issues of social justice and pedagogies that liberate the mind. Issues of equity and diversity that were not always available for "someone like me" drive that passion for institutional change. Classrooms are more diverse than ever, and educators must be able to meet the demands of their student population and communities in order for students to know their true identities. I want to ensure that, in education, we stay away from deficit models and serve our students in a manner where we recognize that all students bring knowledge and curiosity, and where students recognize that their ancestors left a legacy filled with admirable contributions and that they

may continue to thrive with pride. I have learned first-hand how the system oppresses people like me. Those invisible labels continue to determine something that we can all see, the lack of success for people of color. Structures that are built to educate continue to exclude and prevent my people from getting through their gates. We must have a commitment to our communities to bring what we have access to and share and create a path for change. We must commit to live our realities and use those experiences to create that necessary dialogue where norms will be challenged. Only then will we transform and become visible.

The revolution is real and continues: The fight for institutional access for students of color

Margarita Machado-Casas

Civil unrest and political instability brought me to the United States at the age of fourteen. Originally from Nicaragua, my family migrated once before to Panama, before coming to the United States. My life today remains closely tied to my lived experiences as an immigrant navigating this country. As an English language learner, and Afro-Latina I did not fit in schools. I was an outsider not only culturally, but also academically. I struggled to learn the dominant language, but quickly realized that roads are not available for those of us who are unwanted. So, I began to learn how to create my own path. After arriving in the US, my family settled in California where I earned a bachelor's and master's degrees. At some point I came to the realization that higher education was not made for people like me. In California, I worked as a bilingual teacher and I was a community activist who toiled to improve the lives of my students and their families. Teaching gave me insight into the disproportionately lower rates of graduation and lack of resources that were part of the realities my students were destined for, realizing how the system did not provide them with a chance. I began to question, what can I do about

this? What can I do to eradicate the marginalization and destruction of our communities? During that time, I met Dr. Barbara Flores and others like Dr. Enrique Murillo who shed a light on the possibility of what my future could look like. Through mentorships I clung to, I began to release the stress and fear I was carrying because they provided me with a sense of security and hope. All of the dreams I shared with them, they received and returned them back to me with newfound possibilities -that is, mentorship on how to access higher education. I then took that knowledge and moved across the country to begin a doctoral degree, which I obtained at the University of North Carolina at Chapel Hill where I worked with newly arrived Latino immigrant families and was actively engaged with the community. I was one of two Latinas on my doctoral cohort and the only Afro-Latina. The experience was traumatic to say the least. I was devalued, discriminated against, and academically attacked. There I realized that racism was alive and well. That the very reason of my existence in the South and in a doctoral program was problematic and reason enough to hate me and take every possible step to make my experience miserable. So rather than the "impostor syndrome" this experience led me to feel the "robber syndrome" (Machado-Casas, 2015, p. 25), the way I was treated as if I was robbing the system. Every time I passed a class, there was another reason to marginalize or penalize me. As if I was taking away from those whom this higher education was really meant for. This led to trauma -which I had to release. But also learned that allies are important. My advisor Dr. George Noblit played a crucial role in making sure I stayed. He reminded me daily that I belonged there, that I had to release all I was carrying in order to receive and help my community as I always imagined. I graduated top of my class and got several awards for the impact of my research on immigration and education in the South. I then completed a post-doctoral fellowship in Latino education and mixed methodology, also at UNC-Chapel Hill. After contemplating many options, I decided to move to Texas because I wanted to teach in an HSI in

order to work in a place where I could motivate minority students and mentor them in the process of becoming professionals. A planned short stay turned into twelve years teaching in Texas. To my surprise, Texas became home. I was able to find after several years a community of people outside of academia that helped me in transitioning the difficulties I encountered. Being a new tenure-track faculty member in a higher education institution is like entering a *laberinto* because the need to figure out the road(s) to get tenure is evident, but the way to get there is uncertain. New tenure-track "faculty of color are less likely to be fully integrated into the academic culture at higher education institutions" (Barret, 2005, p. 1) and thus, they may not be as likely to earn tenure or promotions at the same rate as their white colleagues. Latina academics often experience overt and covert forms of marginalization. For example, they may encounter racism, sexism, and classism, as well as self-doubt, the impostor syndrome, isolation, and invisibility (Achor & Morales, 1990; De la Luz Reyes & Halcon, 1988; Solórzano & Yosso, 2001; Turner, 2002; Turner & Myers, 2000). There I was able to get tenured and then a full professorship, I soon realized that many HSI enrolled students but did not serve students. It was often a conversation my colleagues and I had. I also realized the importance of working in a department that was committed to fighting institutional racism.

At that bilingual education department, I was able to revive Bilingual Education Student Organization (BESO). A group that was started by two women who became mentors, Dr. Ellen Riojas-Clark and Dr. Belinda Flores. Both of them played different roles in my life while in Texas. They released, received, returned to me and others so much knowledge, and I in turn did the same for others. BESO gave me life and purpose. I fought for my students and often became a defender for them. It was during this time that I realized that I had to release the truth to our students of color, release empowerment and hope. In order to receive the blessings of making pathways and helping others and returning this to our students and communities,

I worked toward creating pathways for our students of color and making access visible and possible. But I knew that so as to make institutional change within an oppressive system, I had to be present on the decision table. Going into administration was not something I was eager to do. Quite honestly, I was scared and even though I knew I could do it, and others encouraged me to take the leap, fear got in the way. But we cannot preach what we are not able to try and do. So remember that higher education was not made for us, in every sense of the word. And this was a revolution to create pathways for our students to gain access. That we need people at all levels. That leaders who fight for social justice, who can say "I have been there," who can give hope, who can serve as models are needed on the decision table in order for our students to make in this revolution towards access and social justice in the *laberinto* called higher education. With the intention of making an institutional change, we must act at all levels as we are fighting the very distance of oppression that led to our exclusion as communities of color, we are fighting systems that were not made for us. Now as a department chair I helped create a pathway program at the university level and I work daily on bringing awareness of the need to continue to work for access for bilingual, multilingual communities of color and in areas of high need. In this process, I'm in constant flux as I release truth and access. I also receive many things, from love to attacks, and I continue giving back to our communities the knowledge that I have gained and the power I have to create access for other students. It's critical to know that as educators, leaders, and people who have had the privilege to make it through the *laberinto* of higher education, graduation is not the end goal. And in reality, there may not ever be an end goal but rather a progression. We have to understand that in order for change to happen, we have to get to the decision table but also help others get there. As educational leaders that is part of the battle against institutional inequities and marginalization toward our students.

We have to fight at all levels, as all levels have their own *laberintos*. Only by doing so, and making sure others get through the labyrinth, we release the truths about places that were not made for us, we receive and give back to our communities what was stolen from them: access. We all become fighters, and critical components in dismantling the labyrinth of higher education in order to hold the door open for others.

Findings

In this paper, we explore how the practice of *testimonio* writing offered us, as Latinx people navigating higher education, a spiritual labyrinth-like journey to reflect on our experiences. *Testimoniando* allowed each author to bear witness to their own and one another's experience releasing, receiving and returning to higher education with deeper purpose for sustainability in the field. Just as physically walking a labyrinth can lead to personal revelations, *testimoniando* through the metaphorical labyrinth of higher education offered deeper internal reflections and connections to the larger meanings of our struggles and our resiliency.

The first phase of *testimoniando* through *el laberinto* of higher education was releasing. For each participant, releasing painful memories and traumas related to higher education was important in order to reclaim our own narrative and sense of self. Before releasing, however, our painful truths needed to be centered in order to spiritually and emotionally release them to the earth, the universe or whatever higher power one ascribes to believing in via their personal spiritual practice. Centering these painful truths can often feel overwhelming, which makes acknowledging negative experiences, memories of discrimination or self-defeating thought, so difficult. However, if and when we do not face that pain, the stories are internalized and often morph into shame, guilt, inferiority complexes and impostor syndrome. Therefore, engaging in *testimonio* offered each of the authors the space to reflect back, name their struggles

and reclaim their power, identities and experiences. The practice of releasing painful memories is a critical stage necessary for transformation and for communities of color to move beyond racialized, gendered and other forms of social traumas through conscientization (Freire, 2000) an in-depth understanding of the world, allowing us to understand social systems of oppression which lead to action.

After passing through the first stage of releasing by *testimoniando* through *el laberinto* of higher education, each participant was able to receive the larger lessons, epiphanies, guidance and clarity from their painful experiences. For example, receiving the larger lessons about the importance of critical mentorship, community, solidarity or emotional/physical/spiritual wellness led to clarity in relation to sustainability in higher education. These forms of clarity sometimes showed up as guidance in the symbolic form of *salvavidas* (lifeguards) while navigating the *laberinto* of higher education. For some, finding an organization that supported them was critical, for others it was people that encouraged them to keep moving forward. What all participants had in common was that receiving guidance or *salvavidas* in whatever form it manifested in, led to clarity, purpose, revival and empowerment.

In the third phase, returning from *testimoniando* through *el laberinto* of higher education, each author experienced a renewed sense of urgency and spiritual connection to their purpose within higher education. *Testimoniando* about navigating the *laberinto* of higher education allowed each of us to go back to ourselves, our communities, our students, our research and our respective positions as renewed, revived and re-inspired to thrive as a form of resistance. From returning and creating pathways, to practicing self/collective care, to holding leadership positions in academia, each of these responses to oppression required a deep sense of connection to their labor that resisted capitalist logics. In essence, higher education is designed to pit people against one another in the form of competition and ego-driven accolades, which is why navigating

these spaces necessitates critical race and feminists praxis like *testimonio* in order to resist these logics and reimagine more liberating ways of being.

Conclusion

The diversity gap in higher education remains just as wide today as it has been for decades, so it is critical that people of color find pathways of support for themselves and future generations. Considering the uncertainties that first-generation academics experience when trying to navigate the *laberinto* of higher education, engaging in and with spiritual practices and spaces transform uncertainty into deeper purpose and clarity within the field. In essence, making it into higher education and sustaining oneself in academia has less to do with the mere representation of faculty of color and more to do with reclaiming and utilizing power to redistribute resources to communities of color that have been kept from them.

Feelings of incompetence within our respective disciplines and positions in the field are a byproduct of colonial standards and symptomatic of white supremacy which shapes the "ivory tower" and creates continual barriers for communities of color. Knowing this, engaging in *testimonio* allows for the political, ideological and spiritual clarity needed to resist the very tactics, practices, policies and structures that have and continue to perpetuate oppression.

Knowing how to navigate el *laberinto* of higher education is necessary, every barrier serves its purpose in our journeys of conscientization. Every emotional and visceral response we experience in higher education is also necessary to center as a place of inquiry even though, "emotion is not and rarely has been valued in academic life... [and] academics have been trained to ignore, mistrust and devalue emotion" (Brockbank & McGill, 2007, p. 53).

The praxis of *testimonio* allows for the centering and release of social trauma experienced from

navigating structural violence via higher education. It also allows for the receiving of guidance and clarity in myriad forms. Most importantly, *testimonio* allows for people of color at the margins of university institutions and academia to return empowered and reinvigorated to push a change. The toxic culture of production and competition in higher education can often leave little time for critical self and collective reflection, so *testimonio* in its very essence detoxes us from the harmful symptoms of academic life. Releasing that which has harmed us, receiving that which helps to heal us, and returning to the same positions with deeper purpose to reimagine what higher education *can* be is not only necessary, it is in fact, revolutionary.

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Amanda Knoweles
"Framework V"
Serigrafía, grafito y acrílico
41.9 x 36.8 cm
2017
Seattle



Misayo Tsutsui
 "Domingo en Tlaxcala"
 Linografía
 56 x 37.8 cm
 2017
 Oaxaca



hiding / SEEKING



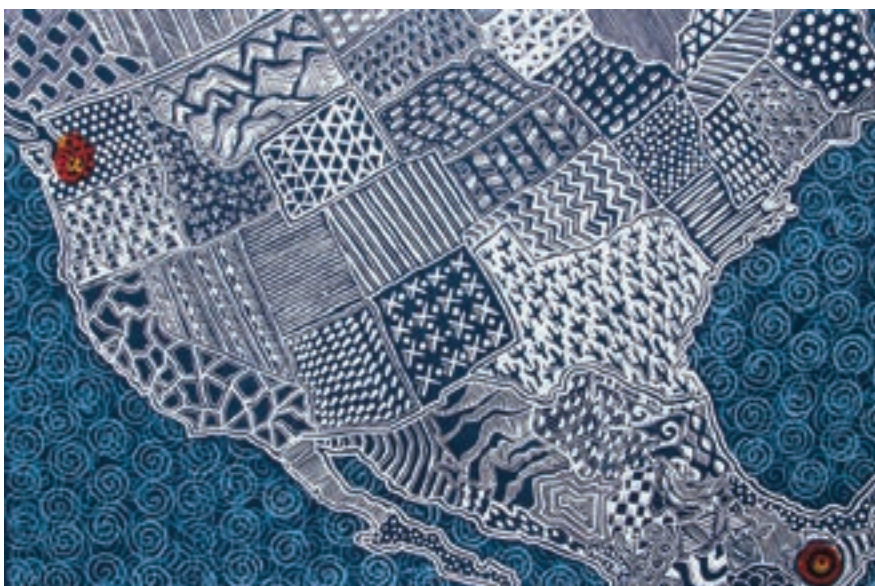
Brian Lane
 "Hiding/Seeking"
 Serigrafía (CMYK)
 61 x 40.6 cm
 2018
 Seattle



Fay Jones
 "Woman in Container"
 Monograbado
 67.5 x 48.3 cm
 2008
 Seattle



Elizabeth Sandvig
 "La cucaracha"
 Xilografía, gouache
 66 x 50.3 cm
 2018
 Seattle



Laurie D Brown
 "Beyond Borders"
 Linografía, chine collé
 38.1 x 57.1 cm
 2018
 Seattle



Michael C Spafford
 "Leda and the Swan"
 Xilografía
 66 x 50.3 cm
 1998
 Seattle



Jason Pfohl
 "Camino"
 Monotipo
 56 x 37.8 cm
 2014
 Oaxaca

Conexión Oaxaca-Seattle

Justina Fuentes
"Una noche más!"
aguafuerte, aguatinata a la
poupé con acuarela
59.6 x 45.7 cm
1997
Oaxaca



Por muchas décadas, Seattle y Oaxaca han tenido una conexión en el arte del grabado, la cual comenzó hace más de 30 años, cuando Juan Alcázar, un maestro del grabado de Oaxaca y quien había sido pupilo de Rufino Tamayo, vino a Seattle para aprender litografía con Kent Lovelace, de Stone Press Editions. Alcázar y su esposa Justina Fuentes, otra muy respetada artista oaxaqueña y con talento propio, fueron presentados a Lovelace por Monte Dolack y Marty Baker, una pareja de artistas con base en Montana. Poco después, Alcázar contactó a Sam Davidson, el dueño de la Davidson Galleries en Seattle, para mostrarle su trabajo. Al principio, Davidson dudó, pero cuando uno de sus clientes tuvo una reacción muy positiva al portafolio de Alcázar, Davidson decidió darle una oportunidad. Y así comenzó la conexión entre artistas y galeristas de Seattle y Oaxaca.

A finales de los 80, Guillermo Olguín, de la Ciudad de México, fue el responsable de presentar en Seattle a Shinzaburo Takeda, profesor de la Universidad Autónoma "Benito Juárez" de Oaxaca (UABJO). Olguín y su esposa, del Estado de Washington, tenían nexos con Davidson y El Centro de la Raza, una organización comunitaria en Seattle. A través de Olguín, El Centro de la Raza invitó a Takeda a dar una presentación en Cornish College of the Arts, lo que resultó en que le ofrecieron una beca para uno de sus estudiantes. Este estudiante fue Fulgencio Lazo, quien cursó litografía en Cornish. Lazo se quedó en Seattle, ya que se había enamorado de Erin Fanning, y de esta manera se extendería la conexión entre Seattle y Oaxaca. Tiempo después, los dos hijos de Olguín, Guillermo Jr. y Santiago, fueron a la preparatoria en Seattle; y un poco más tarde Guillermo Jr. estudió en Cornish College.

En los 90 y a principios de los 2000, Juan Alcázar y Shinzaburo Takeda enseñaron talleres en Seattle, en el Pratt Fine Arts Center. Al mismo tiempo, artistas de Seattle fueron a Oaxaca y aprendieron nuevas técnicas bajo la tutela de maestros del grabado de esa localidad. En 2013, Enrique Flores enseñó un taller en Pratt y luego Pratt invitó a artistas del grabado de Oaxaca para trabajar en su taller por varios años.

A comienzos de este nuevo siglo, Fulgencio Lazo, quien para entonces ya era un artista establecido en Seattle y Oaxaca, quería reforzar los lazos artísticos entre las dos ciudades. Como miembro del Seattle Print Arts, en 2002-2003 Lazo organizó una exposición en estas dos ciudades, en la que participaron artistas de ambas. A solicitud de Takeda y con el apoyo institucional de la UABJO, artistas oaxaqueños continuaron yendo a Seattle para hacer residencias artísticas, participar en exposiciones e impartir talleres en instituciones como Sev Shoon, Pratt Fine Arts Center, North Seattle Community College, Seattle Community College, Cascadia College y la University of Washington.

Nuestra exposición, *Más allá de las fronteras*, presenta a muchos de los mismos artistas que participaron en una muestra anterior de Lazo. Con más de tres décadas de continuo esfuerzo para construir lazos, muchos de los artistas incluidos en esta muestra

han establecido ahora sus propias conexiones. A ellos se ha unido una nueva generación de talentosos artistas que continúan reforzando los nexos entre estas dos vibrantes comunidades del arte del grabado. Mediante la muestra de este trabajo conjunto intentamos demostrar las maneras en las que tanto artistas establecidos como nuevos en las dos ciudades se educan, informan e inspiran entre ellos, más allá de cualquier límite nacional, geográfico y lingüístico.

Laurie D Brown

Curadora

Abril de 2019, Seattle, Washington

El urgente afán de diluir muros y fronteras: Oaxaca-Seattle

Sin duda, Oaxaca se ha convertido en un epicentro para la cultura y las artes en México. La producción y difusión de la gráfica se ha concentrado en la ciudad al existir numerosas prensas y talleres-galerías, activados principalmente en colectividad por los mismos artistas. Pero no se generó de manera espontánea, hay profusas historias, espacios universitarios y autores que han contribuido a la construcción de esta efervescencia de la estampa artística. Quienes hacemos investigación en Oaxaca



Oswaldo Ramírez

"Aves sonoras"

Xilografía

75.7 x 56.3 cm

2018

Oaxaca



Manuel Bernal Flores
 "Aire"
 Aguafuerte, aguafinta
 48.2 x 36 cm
 2018
 Oaxaca

exploramos su complejidad y diversidad, siendo el arte -aún con las contradicciones existentes en este campo- uno de los dispositivos más potentes para mostrar cómo se entretajan temporalidades, técnicas y culturas, mostrándonos en su desbordada vitalidad el urgente afán de diluir muros y fronteras, ampliando nuestro horizonte sensible.

Este proyecto gráfico se inscribe en ese apasionado anhelo, en el que los trazos, *collage* de imágenes y hendiduras artísticas buscan diluir las restrictivas líneas fronterizas, vigorizado por esa experiencia de colectividad implicada en los talleres de grabado. Asimismo, partiendo de la noción de que las artes no pueden ser herméticas ni quedarse en un ensimismamiento localista, sino más bien requieren de diálogos creativos para seguir enriqueciendo su trayecto y sentido. Iniciado en 2002, en un proyecto denominado Seattle-Oaxaca: Arte Gráfica Contemporánea -en la que colaboró Seattle Print Arts con el Instituto de Artes Gráficas de Oaxaca- y después de múltiples experiencias de participación, se ha impulsado nuevamente este entusiasta intercambio. Incluyendo acertadamente en esta versión un mayor número de mujeres artistas, así como nuevas generaciones, con la particularidad de que todos los participantes tienen una vinculación con las dos

ciudades. En su abordaje de técnicas tradicionales y experimentales hacen emerger en esta exposición temáticas contemporáneas e inquietudes estéticas que me permito condensar así: la actualización de las culturas mesoamericanas; la perseverancia de la tradición en la modernidad; la naturaleza, formaciones geológicas y biodiversidad ante la crisis del cambio climático; el maíz y la cosecha como resistencia comunitaria; la fragmentación de la memoria; las ambigüedades en la percepción posmoderna; la manipulación de la verdad; la revaloración de la afrodescendencia en México como tercera raíz; la presencia femenina; los oficios en los mercados tradicionales; la importancia de las construcciones arquitectónicas y del rescate de nuestro pasado.

Este tipo de propuestas abren la posibilidad a los artistas para seguir experimentando técnicas, estilos y temáticas más allá de las fronteras impuestas y, también, de las autoimpuestas: las que pueden romperse con nuevos imaginarios culturales, conceptualizaciones críticas y desafíos estéticos.

Abraham Nahón
 Investigador sobre Arte y Fotografía
 Instituto de Humanidades-UABJO
 Abril de 2019, Oaxaca de Juárez, México



Amanda Knoweles
 "Framework V"
 Serigrafía, grafito y acrílico
 41.9 x 36.8 cm
 2017
 Seattle



Brian Lane
 "Hiding/Seeking"
 Serigrafía (CMYK)
 61 x 40.6 cm
 2018
 Seattle



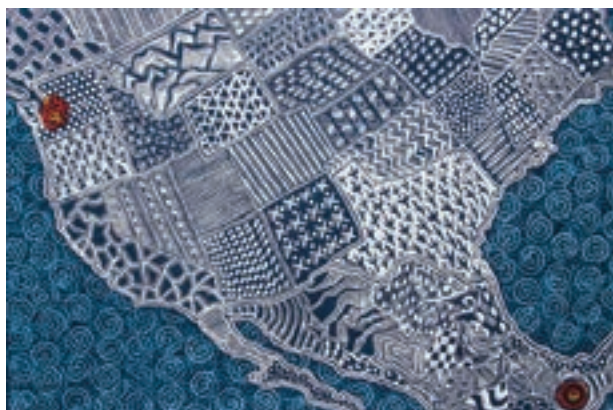
Anna McKee
 "Broken Cordillera"
 Colografía, ink jet y chine collé
 58.4 x 45.8 cm
 2019
 Seattle



Elizabeth Sandvig
 "La cucaracha"
 Xilografía, gouache
 66 x 50.3 cm
 2018
 Seattle



Gene Gentry McMahon
 "A Peaceful Crossing"
 Acuarela, monograbado
 56.3 x 76.3 cm
 2018
 Seattle



Laurie D Brown
 "Beyond Borders"
 Linografía, chine collé
 38.1 x 57.1 cm
 2018
 Seattle



Michael C Spafford
 "Leda and the Swan"
 Xilografía
 66 x 50.3 cm
 1998
 Seattle



Enrique Gijón
 "Tercera raíz"
 Grabado sobre zinc
 42.5 x 38.7 cm
 2019
 Oaxaca



Eric Pozos Vásquez
 "La cosecha"
 Linografía
 76 x 56 cm
 2019
 Oaxaca



Justina Fuentes
 "Una noche más!"
 aguafuerte, aguatinta a la poupé
 con acuarela
 59.6 x 45.7 cm
 1997
 Oaxaca



Manuel Bernal Flores
 "Aire"
 Aguafuerte, aguatinta
 48.2 x 36 cm
 2018
 Oaxaca



Mario Guzmán
 "Mujer en azul"
 Grabado en MDF
 69.5 x 50 cm
 2017
 Oaxaca



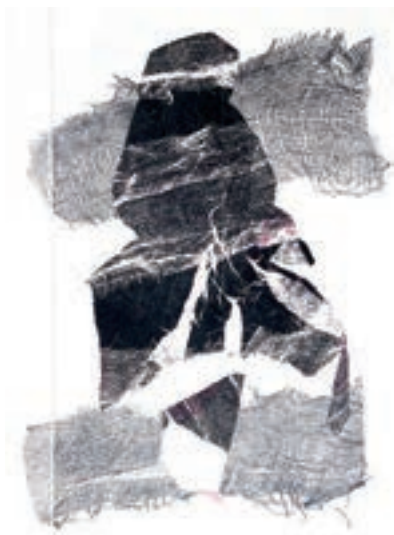
Eva Isaksen
 "Together"
 Xilografía, grabado
 57 x 76.2
 2017
 Seattle



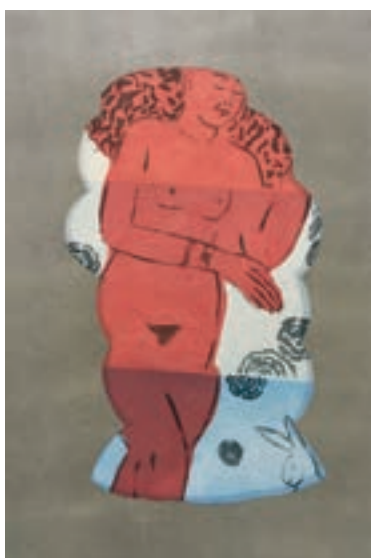
Oswaldo Ramírez
 "Aves sonoras"
 Xilografía
 75.7 x 56.3 cm
 2018
 Oaxaca



Misayo Tsutsui
 "Domingo en Tlacolula"
 Linografía
 56 x 37.8 cm
 2017
 Oaxaca



Jason Pfohl
 "Camino"
 Monotipo
 56 x 37.8 cm
 2014
 Oaxaca



Fay Jones
 "Woman in Container"
 Monograbado
 67.5 x 48.3 cm
 2008
 Seattle



Yoshi Nakagawa
 "Pale Blue Dot"
 Aguafuerte, aguatinta
 105.5 x 37.5 cm
 2013
 Oaxaca



Fulgencio Lazo
 "Viviendo en común"
 Grabado en metal
 57.2 x 71.7 cm
 2017
 Oaxaca



Claire Cowie
 "Remembrances"
 Serigrafía, xilografía, grabado,
 monotipo y acrílico
 61 x 76.3 cm
 2018
 Seattle

Normas editoriales para publicar en **TEQUIO**

TEQUIO. *Revista Interdisciplinaria de Investigación e Innovación* es una publicación cuatrimestral, editada y distribuida por la Universidad Autónoma "Benito Juárez" de Oaxaca.

Objetivo

Ser un espacio para difundir entre la comunidad universitaria y el público en general la investigación, las reflexiones teóricas y el conocimiento científico que se genera en diversas áreas del saber, en contextos regionales, nacionales e internacionales, desde una perspectiva interdisciplinaria de investigación e innovación.

Convocatoria de artículos

La convocatoria está dirigida a investigadores de las diferentes áreas del conocimiento, de la Universidad Autónoma Benito Juárez de Oaxaca y de la comunidad científica de México y el mundo.

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2. Los archivos deberán enviarse en formato Word 97-2013, en hoja tamaño carta, fuente Times New Roman de 12 puntos, con una extensión de 12 a 15 cuartillas (páginas), numeradas, al igual que los renglones. Los márgenes de la página deben ser de 2.5 cm para el superior e inferior, y 3 cm para los lados derecho e izquierdo, con un interlineado de 1.5.

3. En la redacción se respetarán las normas internacionales relativas a las abreviaturas, a los símbolos, a la nomenclatura anatómica, zoológica, botánica, química, a la transliteración terminológica, sistema de unidades, etcétera.

4. Todo trabajo deberá incluir las siguientes secciones, con las características especificadas.

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b. Nombre completo del o los autores, iniciando con el (los) nombre(s), apellido paterno apellido materno ejemplo: Andrés Hernández Scandy, Mariana Tafoya-Parra. El autor de correspondencia debe estar identificado con un asterisco e incluir su correo electrónico.

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4.2 Resumen y abstract con un máximo de 250 palabras. A continuación de cada resumen se anotarán de tres a cinco palabras o frases cortas-clave (Key words), que ayuden a clasificar el artículo.

4.3 Notas a pie de página: a 10 puntos con las mismas características que el cuerpo del texto, deberán ser únicamente aclaratorias o explicativas, sólo servirán para ampliar o ilustrar lo dicho en el cuerpo del texto.

4.4 El trabajo puede incluir fotografías, gráficos, cuadros y mapas que ilustren el contenido, en el texto se debe mencionar dónde se insertarán las mismas y deberán enviarse por separado de manera electrónica y con sus respectivas fuentes de información.

4.5 Se recomienda presentar cada cuadro y figura en hojas separadas; los cuadros deberán estar numerados, tener título o leyenda explicativa, de manera que se comprendan por sí mismos sin necesidad de leer el texto.

a. Se entiende por cuadro al conjunto de nombres, cifras u otros datos presentados ordenadamente en columnas o

renglones, de modo que se advierta la relación existente entre ellos. Deberán ser enviados en archivos individuales, en formato Word, con líneas horizontales y verticales, a fin de que pueda corregirse la ortografía o modificar su tamaño.

b. Las figuras (gráficas, dibujos, etcétera) deberán enviarse en los programas Excell para Windows, Corel Draw o Harvard Graphics, y presentarse en archivos individuales con el número progresivo correspondiente y pie de figura que la explique.

c. Las fotografías deberán ser enviadas en archivos individuales con alta resolución (300 pixeles por pulgada), en formatos gif; tiff, jpg. Se deben especificar los diámetros de aumento en las microfotografías que se incluyan.

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bibliografía, hemerografía, referencias electrónicas, etcétera, en orden alfabético.

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