TEACHER EDUCATORS AND INDIGENOUS LANGUAGE RIGHTS REFORM IN
SOUTHERN MEXICO

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ABSTRACT

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Nations throughout the world have increasingly looked at teacher education policy as a vehicle for reform of both the educational system and the society at large, and teacher quality is often positively associated with the quality of the overall educational system. Although such reforms often target pre-service teacher education, little is known about the teacher educators who play a central role in such reforms. While some studies have examined teachers as policy actors, little work has been done in the area of teacher educators as policy actors who interpret and implement education policy. This study fills that void by exploring the interaction between teacher educators' beliefs and values and a federal education policy in Mexico.

One example of an attempt to engage in social reform by targeting teacher education is Mexico's General Law on the Linguistic Rights of Indigenous Peoples (2003), a measure aimed at improving educational opportunities for Mexico's diverse indigenous population, who suffer high poverty, low literacy, and limited educational opportunity. The law prohibits discrimination based on language in Mexico and gives Mexico's indigenous students the right to a teacher who both writes and speaks the language of their community. It also requires Mexico's teacher education institutions to establish programs in Intercultural, Bilingual Education (IBE) and to include indigenous culture and languages in the curriculum.

This study uses Spillane's (2006) cognitive sense-making framework to investigate how teacher educators in two southern Mexican states with large indigenous populations make sense of the reform. Employing a mixed-methods approach with 209 surveys and 90 interviews, I

examined teacher educator attitudes and beliefs as both a catalyst for and an impediment to indigenous educational reform. I further considered whether or not such attitudes and beliefs are affected by the institutional and geographic contexts of the teacher educators and I looked at how the personal backgrounds of the teacher educators affected their beliefs and attitudes. I also analyzed the sources of policy information they found most useful in keeping current on recent educational policies.

The study suggests that there is a mixed political climate for implementation of the teacher educator-related provisions in the General Law on the Linguistic Rights of Indigenous Peoples. Many institutions possess a strong core of indigenous-oriented teacher educators with positive orientations, and teacher educator backgrounds are diverse, often leading to a strong identification with and empathy for the indigenous populations. In spite of this, however, the implementation of the law has been a challenge due to a lack of linguistic capacity of both the government and teacher education institutions, attitudes among some members of the faculty that are inconsistent with the spirit of the law, poor leadership at the institutional level, political divisions of the faculty members, and insufficient information for faculty. Through better understanding of how policy is transmitted through the teacher training process, educational reforms can be improved, and actions can be taken to increase the probability of success for future initiatives. The study has broad implications for the fields of education, political science, and international development.

Dedication

To my wonderful family: my loving parents Paul and Linda, my lovely and always supportive wife Gaby, and the two beautiful girls, Maya and Ximena, who gave me the inspiration not only to finish, but to strive to make the world a better place for our next generation.

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Mexico's Indigenous Rights Reform

Realizing the need for teachers able to prepare students to compete in the new global economy, countries throughout the world have given increasing attention to teacher education policy. In many nations, teacher quality has become synonymous with educational quality, and there have been a number of educational and political reforms aimed at improving marginalized populations' access to quality teachers as a vehicle for educational and social change (Tatto, 2007). Yet the challenge remains to create a teaching force able to educate disenfranchised students for increased economic, political, and social opportunity while allowing them to maintain their identity.

In 2002, 29.8% of Mexico's indigenous lived on less than one dollar US per day, and another 67.1% lived on less than two dollars a day. Over 87% of Mexico's indigenous population live in extreme or moderate poverty (Hall & Patrinos, 2006). In Mexico, where indigenous populations face widespread discrimination, high poverty, and limited educational opportunities, improving teacher education has been a high priority of reformers.

On June 3, 2000, Vicente Fox became Mexico's first leader in over 70 years who was not a member of the Institutional Revolution Party. Fox, who had made the inclusion of indigenous citizens a cornerstone of his campaign, immediately found himself under pressure from indigenous rights groups to enact reforms, with the objective of improving opportunities for Mexico's indigenous populations. On December 12, 2002, Fox signed The General Law on the Linguistic Rights of Indigenous People (*Ley General de Derechos Linguisticos de los Pueblos Indigenas*). Though ostensibly a law aimed at guaranteeing the linguistic rights of Mexico's

minorities, the comprehensive new indigenous rights law contained several clauses intended to change radically the teacher education model in Mexico. The key portions of the law included:

➢ Includes the "origin and evolution of the national indigenous languages" as a required part of all normal school curriculums

➢ Guarantees that teachers who work in bilingual programs in indigenous communities speak and write the language of the population spoken in the communities they serve

➢ Requires educational materials to be available in indigenous languages in areas with a high number of indigenous residents

➢ Mandates teachers to include indigenous rights issues in their curriculums at all schools nationwide, both private and public

➢ Requires normal schools[1] to develop a specialization in indigenous education

➢ Increases the number of libraries and cultural centers dedicated to indigenous languages and cultures

➢ Prohibits discrimination on the basis of language[2]

➢ Promises increased access to indigenous-speaking officials at government offices and during legal proceedings

➢ Encourages ethnography-based research on indigenous peoples

➢ Creates a new National Institute of Indigenous Languages to promote the preservation of minority languages

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[1] Mexico's system of teacher education is comprised of teacher training institutes that are separate from traditional universities. I use the term "normal school" interchangeably with the terms "teacher's college" or "teacher training institute." Though it has fallen out of use in the US today, it is a direct translation of what is still the most used terms in Mexico today, "*escuela normal*" or "*normal superior*", often shortened in vernacular to "*La normal*."

[2] This is the first time in Mexico that federal law specifically prohibited discrimination based on language spoken, something long advocated by the country's indigenous activists.

(General Law of the Linguistic Rights of Indigenous Peoples, 2003)

Problem Statement and Purpose of Study

The Mexico case represents an example of legislators looking to teacher educators to change educational outcomes. In this case, the effort to change educational outcomes also represents an ambitious measure to reform societal values through teacher education, though few have researched how teacher educators act as policy actors who are influenced by their own values, beliefs, and information sources. Certainly there is a wide body of literature on how teachers often interpret policies in ways different from their original intent, but little is written on teacher educators.

This study addresses this gap in the literature by examining teacher educators' interpretations of the General Law on the Linguistic Rights of Indigenous Peoples and how their interpretations might be affected by their own values and beliefs and access to information. This is not a policy implementation study. Rather, it is an effort to assess and understand how teacher educators think about a broad continuum of factors related to the law, including indigenous education, how they perceive the role of their institution in society relative to indigenous rights, the law itself, and their own self-efficacy. By improving our understanding of how teacher educators are informed of, interpret, and make sense of new laws designed for working with marginalized populations, we can inform both the academic and public policy community of ways to improve the possibility of success for new waves of educational reforms targeting teacher educators.

Research Design and Methodological Overview

This dissertation combined both survey research and ethnographically-influenced open-ended interviews to examine the understandings of Mexico's new law by faculty members at teacher training institutions in the heavily indigenous states of Yucatan and Chiapas. I examined what happens to a major federal educational policy when it finally reaches the desk of teacher educators and the classrooms of future teachers. The study provides insight into how educational reform is understood on the ground, and highlights previously unexplored impediments to creating successful educational policies and quality teachers. Teacher educators play a key role in any educational reform movement, yet they are not sufficiently studied in the policy realm. Their role in training future teachers makes them critical conduits of educational equality, accountability, and understanding of reforms. In short, the dissertation highlights issues of policy interpretation and understanding that affect the formation of any educational system's most valuable assets: its teachers.

Utilizing 90 interviews and 209 surveys, I provide an in-depth look at the world of Mexican teacher educators ("Las Normalistas") in southern Mexico and their effort to create future teachers. Studies of indigenous peoples have traditionally relied on small-scale ethnography, while policy researchers, particularly those affiliated with national governments and international organizations, have favored larger-scale, quantitative research. This work helps bridge the gap between the two approaches by using in-depth interviews, observations, local periodicals, and policy document analysis to inform my survey research.

Teachers and their Education in Mexico

The public school system of Mexico employed over 1.8 million teachers during the 2010-2011 school year. Of these, over 222,422 were preschool teachers, 571,389 were primary school

teachers, and 381,724 were early secondary teachers (SEP, 2011a). Nationwide, 57.3% of

primary school educators had a bachelor's degree, while 5.5% had a graduate degree. Despite

official requirements that teachers obtain a bachelor's degree, 32.6% of Mexico's teachers have

only a credential that is the equivalent of a high school diploma (from the recent era when no

college degree was required to teach), and 1.6% have an education equivalent to lower secondary

or below. The picture is comparable at the lower secondary level, where 50.4% had a bachelor's

degree and 9.4% had a graduate degree. 21.7% were teaching with a high-school level teaching

certificate, while 7.4% had a lower secondary education or less (SEP, 2011a). With one small

exception (which I describe below), all secondary teachers in Mexico must be graduates of

teacher training institutions, which are frequently referred to as "normal schools."

Normal schools are teacher training institutions that are under the control of the federal

Secretary of Public Education. They are independent of universities and offer only degrees in

education. Historically, they were considered technical schools at the upper secondary, level.

One entered them directly following lower secondary school. The first normal schools began in

the nineteenth century, and most were originally found principally in the federal and state

capitals. In the 1920's, following the Mexican revolution, a number of rural normal schools

were created with a mission to produce teachers who not only could read and write Spanish, but

also who could teach methods of improving agricultural output among the *campesino*[3]

population (Padilla, 2009). They were not considered university equivalents and in fact could not

grant bachelor's degrees until teacher reform legislation was passed in 1984 (Tatto, 2004). My

own interviews with faculty members in university departments of education indicate that

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[3] A poor, rural worker usually a farmer or farm worker. Sometimes, this term is rather harshly
translated as "peasant" but the Spanish lacks the negative connotation and was a term some
teacher educators often used in describing their background.

universities are not interested in teacher training because if they were to train teachers they would have to agree to follow strictly the national curriculum handed down by the Secretary of Education. "It would be suicide," said one university education faculty member who had previously spent many years teaching in a normal school. He noted that the strong emphasis on autonomy in the public university would be undermined by agreeing to such a proposition. He said he believes, as do many of his colleagues, that if they agreed to let the federal government dictate the course of study in education at the university, then centralization and standardization of other fields would surely follow.

Mexico's normal schools enrolled 130,713 students during the 2011-2012 school year, with 3,305 in the Yucatan and 4,557 in Chiapas. There are a total of 13,354 full and part-time normal school teaching[4] faculty nationwide, including 324 in Yucatan and 397 in Chiapas. There are also an additional 1582 "academic support" faculty throughout the country who perform a variety of non-classroom support such as thesis advising. The majority of the teacher education faculty, however, are part-time or hourly and are likely not active at the same time—i.e., they may teach one course this year, none next year, etc. In Chiapas only 17.5% of normal school personnel were full-time; 15.6% were full-time in Yucatan. Both these numbers are substantially lower than the nationwide rate of 34.7% (SIBEN, 2011). Many of the faculty members of teacher education institutions who work part-time hold full-time teaching jobs during the day. Administration is particularly top-heavy—throughout Mexico in the 2011-2012 academic year,

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[4] Statistically, Mexico distinguishes between faculty members who teach "in front of a group" (i.e., have an actual scheduled class of students) and those who are purely support (and may do advising, etc.)

there were 9,231 non-instructional administrative and support personnel and 13,354 teaching faculty [5](SIBEN, 2011).

One of the advantages of attending the normal school is that in the past, nearly every graduate received a *plaza*. A *plaza* is generally a guarantee of a job for life. It is roughly equivalent to having tenure from the first day of service, and it is nearly impossible to fire a teacher with a *plaza*. Receiving a *plaza* is not a given for recent graduates of the normal schools, and indeed are hard to come by. When once nearly every normal school graduate received a *plaza*, now there is a national system of examinations, and only the highest scoring teachers obtain *plaza*s. The competition is keen—in July of 2012, over 139,704 Mexican teachers (presumably all normal school graduates) took the national exam to compete for only 12,966 *plaza*s nationwide (El Universal, 2012). Though recent educational reforms have established a process for teacher *plaza*s to be assigned through a competitive examination, the National Syndicate of Education Workers (SNTE) still unofficially holds power over a large number of them (Santibañez, 2008).

Historically, *plaza*s could be bought and sold as property, and were inherited by one's children in the event of the death of the *plaza* holder (Ornelas, 2008; Santibañez, 2008). Although President Felipe Calderon vowed to end the practice in 2009 after 75% of *plaza* holders failed a basic assessment exam (Aviles, 2009), an investigative study by the newspaper *La Journada* found that three years after the practice was declared illegal, *plaza*s were still frequently being sold for prices between 150,000-300,000 pesos, about $11,500 US-$23,000 US Alfaro Galan, 2011). There are a number of classified ad websites in Mexico where individual

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[5] Neither category reflects the 1,582 support faculty who are "not in front of a group" (see above.).

*plaza*s are openly bought and sold. One such ad seeks a *plaza*, and offers 200,000 Mexican Pesos ($15, 384 US dollars at an August, 2012 exchange rate) in addition to "absolute discretion."

Educationally, of the normal school personnel nationwide, 1.2% have doctorate degrees as their highest level of education, while 19.8% have master's degrees, and 64.6% have bachelor's degrees. Both Yucatan and Chiapas compare favorably to the national average in their normal school personnel's education levels. Yucatan has 1.5% with doctorates, 21.9% with master's degrees, and 70% with bachelor's degrees, while data on Chiapas normal school personnel show 1.4% with doctorates, 21.7% with master's and 64.2% with bachelor's (SIBEN, 2012). Faculty at normal schools are frequently referred to as *normalistas*—"normalists." The lack of doctorates in education is a frequent criticism of Mexico's educational system, and Mexico graduates only 1.4 Ph.D.s in education per million residents, as compared to the U.S. rate of 22 per million residents (Santibañez et al., 2005).

Though the normal schools traditionally trained only primary school teachers, recent reforms have opened programs in both preschool and secondary school education. All normal schools (both public and private) must, by law, follow a national curriculum. The center of the programs are the "plans of study" that spell out the competencies each teacher should know and the "curricular map" which provides a semester-by-semester program for the institutions to follow (SEP, 2011b). Though states now have more administrative control as part of Mexico's decentralization, a RAND analysis of Mexico's educational policy suggests that the decentralization was "mostly administrative" and "did not diminish the centralization of decisionmaking," nor did it increase the independence of teachers and school administrators (Santibañez et al., 2005, p. vii). The normal school system's bachelor's degree programs (in the order of nationwide enrollment) include primary general education (encompassing 30% of all

students nationwide), Secundaria, or lower secondary education, with 29% of all normal school students, and general preschool education, with 24% of all students. A number of other fields enroll fewer students, with physical education enrolling 7%, special education enrolling 6%, and elementary education specializing in intercultural/bilingual education (IBE), previously referred to as indigenous education, with 2% of all enrolled students. Art education and preschool intercultural/bilingual education both enrolled under 1% of all students in the normal schools' bachelor's degree programs. 71% of all normal school students are female (SIBEN, 2012).

There are both public and private normal schools but all must follow the same national curriculum. Though not a major concern of this study, interviews with both directors and faculty in public and private normal schools suggest that graduates of private normal schools have few opportunities to earn a *plaza* upon graduation (perhaps in part due to union support, as Tatto et al. (2007) noted was often the case with graduates from the National Pedagogical University) and have lower completion rates, higher turnover of faculty members, and lower faculty pay.[6] Several private school faculty even suggested that their student population was of a lower socioeconomic standing than those at the public normal schools, and they reported that most of their students had aspired to attend the public normal schools but could not gain admission.

Normal school training is by far the most common path for entry into the teaching field. However, the General Directorate on Indigenous Education also runs a program, in conjunction with CONAFE, that places indigenous language speaking tutors, called *accesorias*, in indigenous areas where there is an insufficient supply of qualified teachers. These tutors undergo an abbreviated three-month training course and continue to study part-time (usually Saturdays and

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[6] Though I did not set out to specifically ask about the differences between public and private normal schools, it frequently came up in the semistructured interviews, since many part-time faculty had taught at both during their careers.

during the summer breaks) at the National Pedagogical University (UPN) until they achieve a

bachelor's degree. There are currently 865 of these tutors in indigenous primary schools and 100

in indigenous preschools (DGEI, 2012). However, not all of these will obtain a *plaza*, even after

graduating with a bachelor's degree from the UPN. This may be in part due to fact that the

teacher's union has tight control of the *plaza*s; the observation of some scholars is that the

normal schools typically have a very close relationship with the teachers' union (Sandoval

Flores, 2001), and the union has traditionally resisted offering jobs to UPN graduates (Tatto et

al., 2007).

Dissertation Structure

In the remaining chapters, I explore the perspectives of *normalistas* in two states relative

to the General Law on the Linguistic Rights of Indigenous Peoples. Chapter Two provides a brief

overview of relevant literature and a policy backdrop. The literature review is divided into two

sections, each containing multiple subsections. The first section is background information

designed to give the reader historical, political, and social context of the new law and Mexico's

indigenous populations. In the second part, I bring in the literature of education policy and

reform, the literature of teacher education, and some major literature on indigenous education in

Mexico. I also provide an overview of the Mexican educational system.

In Chapter Three, I describe the methodology of the study. This includes the study

design, the process of data collection, limitations and delimitations, the research questions, the

sampling (including information on the specific institutions), and my data analysis. I discuss

issues of researcher bias and positionality, and reflect on the learning experiences surrounding

my methodology and item construction.

Chapter Four looks at a number of teacher educators who display orientations that can be considered indigenous-oriented. I look at what beliefs and attitudes are common in the analyses of interview data in order to highlight some teacher educators with particularly strong orientations towards indigenous education, and to compare and contrast these findings with the findings of the larger population in the survey. The emphasis here is on individual values and beliefs.

Chapter Five analyzes how context affects the attitudes and beliefs of teacher educators in regards to their beliefs surrounding the policy. Specifically, I begin by looking at overall patterns in teacher educator's opinions and attitudes toward their institutions. Then, I examine how attitudes and beliefs compare between the faculties of institutions that have an indigenous education program and those that do not have indigenous education programs, as well as looking at the two different states of Yucatan and Chiapas.

Chapter Six summarizes and discusses my final results. I consider both the challenges and opportunities the data suggests for the General Law on the Linguistic Rights of Indigenous People. The chapter also provides suggestions for further research based on the questions this study raises.

CHAPTER TWO

THE INDIGENOUS PEOPLES OF MEXICO AND THEIR EDUCATION

Context: The Indigenous of Mexico

According to UNESCO (2005), although Mexico's indigenous people represent just over

10% of the Mexican population, Mexico contains Latin America's second largest indigenous

population in total numbers (as opposed to a percentage of the population.) Indigenous

populations, however, have been rapidly shrinking as a percentage of the population for nearly a

century. When the Mexican Revolution ended in 1920, nearly half of Mexico's population spoke

an indigenous language, almost five times today's number (UNESCO, 2005). Mexico's

indigenous people are highly diverse: INALI, Mexico's National Institute for Indigenous

Languages (2008) officially identifies 68 indigenous language "groups" in 11 language

"families," with 364 linguistic "variants" (dialects). UNESCO (2005) counted 62 different ethnic

groups and over 80 languages. Cummings and Tamayo (1994) stated that linguistics have

classified anywhere from 22 to 91 indigenous languages in Mexico, depending on the

classification system used. However, they find general agreement that a minimum of 56 distinct

indigenous languages are currently spoken. According to the 2010 Census, there are 6.76 million

people over the age of three who principally speak an indigenous language, and another 4.19

million who identified themselves as indigenous on the census but do not speak an indigenous

language (CDI, 2011). Two of the largest indigenous groups are speakers of the various Mayan

languages, principally located in the southern states of Campeche, Chiapas, Quintana Roo and

the Yucatan, and speakers of Nahuatl, descendants of the ancient Aztecs who are concentrated in

central Mexico. However, there are many smaller distinct groups that follow their own customs,

such as the Tarahumara in the northern state of Chihuahua, who still practice their longstanding

tradition of cave dwelling and have been pushed to the brink of extinction by years of drought, unusually cold winters, and malnutrition. It is important to note that statistics from the Mexican government prior to 2000 did not classify the indigenous by census self-identification as they are today; rather, indigenous people were classified by the primary language spoken. However, in 2000, the Mexican census allowed citizens to self-identify themselves as indigenous for the first time (INEGI, n.d).

There is a multitude of problems facing the current indigenous population of Mexico, who are by far the most impoverished segment of the Mexican population. According to Hall and Patrinos (2006), not only do over 87% of the indigenous of Mexico live in extreme or moderate poverty, they are more likely to be victims of employment discrimination (p. 187). Predominantly indigenous towns have, on average, only 26% of the per capita income of non-indigenous towns (p. 169). Also, there is a distinct lack of infrastructure in indigenous areas, and many live without sewage systems, refrigerators, or computers (CDI, 2006).[7]

Mexico's Educational System and Indigenous Education in Mexico

The public education system in Mexico consists of five levels: preschool (*preescolar*—three years of kindergarten, sometimes described as K1-K3), primary school (*primaria*—grades 1-6), lower secondary school (*secundaria*—grades 7, 8, and 9), upper Secondary school (*prepatoria*—grades 10,11,12), and public universities. Public schools enroll 87% of Mexico's students. Some, including the national Secretariat of Education, group preschool, primary, and

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[7] While clearly acknowledging that modernization has often had disastrous impacts on many indigenous cultures, and has regrettably led to a decline in indigenous languages and customs, there are also quality of life issues involved. For example, the government announced that they would order flush toilets for free distribution to indigenous communities. This was engendered by the use of outdoor latrines which were contaminating both drinking water and animals (who would then be eaten), and has lead to a number of fatal outbreaks of cholera and typhoid, which particularly affected children and the elderly.

lower secondary school together as basic education (*educación básic*), since they are the levels

Mexico is required to provide by law to its citizens, and attendance is in theory compulsory

(Diaz de Cossio, 2009; Santibañez, Vernez, & Razquin, 2005). Recent reforms, however, have

made preschool universal and compulsory, a move criticized by some who contend the resources

would be better utilized improving access to upper secondary school (Diaz de Cossio, 2009).

Although attendance through lower secondary school is required by law, nearly half the adult

population of Mexico has not completed the obligatory lower secondary school. Accordingly,

Mexico's National Institute for Adult Education (INEA), created in 1975 to promote and

administer educational programs for adults, runs 1800 community education centers throughout

Mexico, and even in 49 Mexican consulates in the United States (to service Mexicans currently

living in the US). The centers feature a classroom, a library, and free internet access. INEA

offers adults the opportunity to learn basic literacy or earn a primary school or lower secondary

diploma (Schmelkes, 2010).

The Mexican educational system faces a number of challenges, including low completion

rates, low academic achievement, and a limited number of secondary schools. In addition, "At

the national and state levels, problematic issues include teacher training and a lack of research

and evaluation that can inform school improvement efforts" (Santibanez, Vernez, & Razquin,

2005). Still, some improvements have been made in recent years. The number of students who

go on to upper secondary and tertiary schooling in the past 50 years has doubled, although still

only 42% of 25-34 year olds have attended upper secondary schools. Only Turkey has a lower

upper secondary graduation rate among members of the Organization for Economic Cooperation

and Development. While PISA test scores are still low relative to other OECD countries, they

have slowly yet consistently improved over the past decade (OECD, 2011).

As part of Mexico's public education system, there are two principal providers of indigenous education. One is a system of indigenous schools under the control of the General Directorate of Indigenous Education (DGEI), an office within the Secretariat of Public Education (SEP), while the other is a system of community courses. The first, DGEI, was created in 1978 with the goal of creating bilingual, bicultural schools where indigenous languages were the principal language of instruction, while Spanish was taught as a second language. This was the first official shift at the national level in which indigenous languages were recognized as a medium of instruction. It deviated from the previous models where attainment of Spanish proficiency was a principal goal. The new model included both the national and indigenous culture in the classrooms. In practice, however, most schools still use methods of assimilation, with the goal of making Spanish a child's dominant language, and the use of Spanish increases through the child's education at the same time as his/her command of the indigenous language erodes (Salmeron Castro & Porras Delgado, 2010).

Of the 99,463 primary schools in Mexico, 9,470 (9.5%) are labeled as indigenous primary schools. Of the 14.96 million students enrolled in Mexico's primary schools, 837,296 are enrolled in indigenous schools, representing 5.6% of the Mexico's total primary school enrollment (INEE, 2008). A study of the "sociocultural context" of Mexico's schools—as determined by students' and parents' cultural and economic capital, stated that the overwhelming majority of indigenous schools in Mexico were either operating under "unfavorable" conditions (54.4%) or "very unfavorable" conditions (30.2%) (Fernandez, 2003). Mexico's indigenous schools often lack basic facilities such as desks, blackboards, and a bookcase (Reimers, 2000) and their students have substantially lower test scores than students in other rural and urban schools (Trevino, 2007; INEE, 2008).

While DGEI (through SEP) provides most of the indigenous education in Mexico, in the smallest rural and indigenous communities where there is no indigenous primary school, Mexico's National Educational Council[8] (Consejo Nacional de Fomento Educativo—CONAFE) runs a system of "community courses" designed to meet the educational needs of marginalized populations between the ages of five and 30 who do not have access to a primary school. Three quarters of the community courses are located in small villages with less than 100 people. CONAFE schools, like many indigenous schools in rural communities, are multigrade and cover the six years of primary school education, though some effort has been made to create programs at the preschool level. Frequently, there is only one teacher in the school responsible for all the grades—89.2% of the community courses have only one teacher, 9.5% have two teachers, and 1.3% have three or four teachers (Cardenas Cabello, 2010). While the system does not exclusively serve the indigenous population, it plays a key role in indigenous education (Schmelkes, 2000), particularly given the tendency of indigenous populations to live in rural areas. Teachers in community schools are not trained teachers, but rather generally young people who are between 14 and 24 years of age who teach two years after completing lower secondary school in exchange for a scholarship. They are provided room and board by parents of the students' families (Cardenas Cabello, 2010). CONAFE community schools are the least developed of Mexico's schools, and they fare even worse than DGEI's indigenous schools in a number of categories, including learning environment, teacher quality, and material resources (Cardenas Cabello, 2010; Fernandez, 2003; INEE, 2008). Academic outcomes, however, appear similar (INEE, 2008).

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[8] Here, I use the translation used by many English editions such as Reimers (2000). However, a more literal translation would be "National Council of Promoting Educating." It is a government agency charged with encouraging and promoting education in areas underserved by the traditional public education system.

Traditionally, Mexico's bilingual education program provided two years of instruction in

an indigenous language and introduced Spanish in the third grade (Schmelkes, 2000), but newer

reforms encourage use of the indigenous language until the 6th grade, although nearly all the

indigenous language textbooks used cover only the first four grades, and Spanish still remains

the dominant language of instruction, even in indigenous schools (Casto & Delgado, 2010).

Mexico's indigenous people on a whole suffer an illiteracy rate nearly four times that of the

general population of Mexico (CDI, 2006). Indigenous students are twice as likely to fail a grade

and three times as likely to drop out in the elementary grades (UNESCO, 2005). Further, there

are stark differences between the academic achievement of the indigenous population and the

rest of the population. The charts below, translated from the Spanish, highlight such differences:

Table 2.1
Academic Achievement Level, Sixth Grade Reading[9]

School Type	Level I	Level II	Level III	Level IV
National	27.76	31.38	27.40	13.45
Urban Private	4.61	13.78	34.42	47.29
Urban Public	22.71	32.22	30.98	14.09
Rural Public	38.46	34.09	21.12	6.34
Indigenous	57.02	28.39	12.05	2.54

Source: National Institute for Educational Evaluation –INEE (2008). *La educación indígena: el gran reto.*

Table 2.2
Academic Achievement Level, Sixth Grade Math:

School Type	Level I	Level II	Level III	Level IV
National	51.50	34.21	11.10	3.18
Urban Private	21.76	36.77	28.30	13.16
Urban Public	49.18	36.12	11.58	3.12
Rural Public	59.97	31.19	7.35	1.49
Indigenous	69.29	25.25	4.79	0.67

[9] Standardized test scores are placed into Level I (the lowest) to Level IV (the highest). Level IV was considered to read "very well" or be "well-prepared" in mathematics. These were considered to be the objectives of the national curriculum. Level III was considered partially sufficient, Level II was considered partially insufficient, and Level IV was described as a "lack of competency" in the curriculum objectives. Level III is considered the minimal "acceptable" performance category (INEE, 2008).

Source: National Institute for Educational Evaluation –INEE (2008). *La educación indígena: el gran reto.*

Tables 2.1 and 2.2 above show the performance of students in Mexico's indigenous schools relative to students in other schools. Mexico's National Institute for Educational Evaluation (INEE, 2008) reported that less than one percent of Mexico's indigenous students achieved the highest level in sixth-grade math, while just over 2.5% achieved the highest level in sixth-grade reading (described as reading "very well").[10] Likewise, the number of indigenous students who cannot demonstrate any meaningful command of the subject matter and who score in the lowest possible category is 57% for reading and 69% for math. Access for most indigenous people to bilingual primary schools is inconsistent, and many indigenous children do not live within the service area of an indigenous school (Schmelkes, 2000). Tatto et al. (2007) noted that more than half of the rural schools (many with principally indigenous populations) lack the full six-year program guaranteed by law, and in many schools, teachers are required to teach multiple grades.[11] Indigenous schools suffer from lower expenditures per-pupil than urban schools and schools in rural areas that are not indigenous (Schmelkes, 2000).

Historical Context of Language Reform in Mexico

Scholars of indigenous peoples have long argued that issues of indigenous linguistic rights cannot be separated from their historical-political context, and are often a result of it (Castellanos, 2003). The exploration of the historical context, then, seems vital. Bilingual education in Mexico is not new, but rather began as a program of assimilation by the Mexican government in the 1930's. It was designed to "Mexicanize" the "Indian" population, and the

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[10] Note that only reading in Spanish is tested.
[11] Interestingly, the 2001-2006 and 2007-2012 Secretary of Public Educational Sector Plan call for improving the training of rural teachers in multigrade classrooms, suggesting that this is unlikely to change anytime in the near future.

preservation of indigenous culture and language has not traditionally been an interest of the Mexican government's educational policies (Rippberger, 1993). In fact, despite its existence for decades, indigenous bilingual education was not given official legal status until 1979 (Schmelkes, 2000). Further, indigenous schools have difficulty finding teachers who are sufficiently proficient in indigenous languages, and often in rural areas some teachers have no more than a ninth-grade education (Gamboa & Linse, 2006).

Mexico's indigenous people have long suffered from colonial domination from a number of foreign countries, including Spain, France, and the United States. In addition, they often were enslaved by the ethnic Mexicans of a lighter skin color. During the Great Caste War, from 1847-1901, Mayans in the Yucatan peninsula rebelled in what is generally considered the longest and bloodiest revolution in Latin America, a region known for its violent revolutions. The Caste War is considered the most successful native revolution in the history of Latin America (Alexander, 2004). The central issue was enslavement of Mayan farmers and the heavy taxes placed on the remaining "free" Mayans, who often did not own the land but lived in virtual serfdom. The Mayans were eventually defeated, in part due to the superior weapons of the government forces but perhaps even more due to a lack of food caused by drought and outbreaks of a number of diseases due to poor drinking water. It is estimated that over 50% of the entire region's population was killed in the conflict (General Archives of the State of the Yucatan, n.d.), and up to 60% of the indigenous population was killed, with many of the rest displaced from their homes and communities (Alexander, 2004).

In 1917, the Mexican Revolution brought about some agrarian reform that affected the indigenous population, most notably the creation of the *ejido*, communal farm land that was made accessible to Mexico's poorest population. However, with the installation of the

Institutional Revolution Party (PRI) in 1920, indigenous rights were ignored by the new technocratic regime. In fact, some political historians have argued that the conditions of Mexico's indigenous populations were not a concern of either the revolution or the government during the Revolution, and they contend that the indigenous people of Chiapas have worked repeatedly to assert independence from the control of the federal government (Rus, 1994). Despite the earlier mentioned effort at modest inclusion of bilingual programs in the educational system, Mexico's government under the PRI saw the indigenous not as valuable members of Mexican society, but rather as "the indigenous problem" (Rippberger, 1993). Mexico's indigenous population has long suffered from repression by a variety of outside groups, ranging from Spanish missionaries to Mexico's Mestizo[12] majority. The Mexican Revolution, from 1910-1920, did little to improve the status of the indigenous people, and despite the populist rhetoric of the revolution the indigenous were treated poorly by both sides (Rus, 1994). When the Revolution ended, Spanish was clearly the dominant language, and Mestizo had become the dominant culture (Hamel, 2008). Although bilingual education in Mexico has existed in various forms since the 1930's, it was principally designed as an assimilation scheme (Rippberger, 1993). UNESCO (2005) claimed bilingual education in its most basic forms occurred in Mexico as early as 1911, with schools designed to teach the indigenous population Spanish. Lazaro Cardenas, who promised to make indigenous peoples a high priority in his administration, became president of Mexico in 1934 and opened a number of indigenous schools in the 1930's. However, these early programs were designed as tools of nation-building, not cultural preservation, and nearly all teachers were Mestizo and spoke only Spanish (Lewis, 2005).

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[12] A term describing people of a mixed European and native race.

There was substantial expansion of rural schools from 1920-1960, and even faster

expansion after 1960, though this was done as a broader education reform targeted at the

nonindigenous rural communities, and the indigenous population benefited little from it.

(Schmelkes, 2000). During the 1980's and 1990's, "bilingual and bicultural" [13] programs were

introduced with elementary grades to be taught in indigenous languages and Spanish taught as a

second language (Hamel, 2008). However, in practice such ideas were limited in their

implementation due to a failure to expand programs beyond the pilot level and opposition from

teacher's unions and indigenous parents, the latter of whom often resist their children learning an

indigenous language because they perceive it as having no economic value (Gabbert, 2004).

Though some indigenous language "primers" were developed, they were rarely used. Moreover,

the indigenous schools overall did a poor job of providing instruction in the Spanish language

(Hamel, 2008). Smelkes (2000) noted that many teachers in indigenous schools were so poorly

educated that they often did not have a sufficient command of their own native language to teach

even the most basic levels of language to children. She also pointed out that indigenous schools

also suffered greatly due to the poor preparation of teachers, who did not understand bilingual

education. Additionally, teachers did not value native culture nor see the value of their students

learning it (Schmelkes, 2000). Gamboa and Linse (2006) noted that teachers who proficiently

speak indigenous languages are difficult to find and standards for teachers are regularly lowered.

Schmelkes (2000) says 20.9% of teachers in indigenous schools had 9 years or less of formal

schooling, while only 2.3% had a four-year university degree. By contrast, teachers in urban

schools that served a primarily middle-class population had only 1.1% of their instructional staff

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[13]Mexico changed "bicultural" to "intercultural" in the 1990's (see below). Hamels (2008) says
this happened because many South American countries changed their policies on the grounds
"bicultural" was a divisive term.

with less than 9 years of formal schooling, while 54% had a college degree (Shmelkes, 2000). However, Mexico's Office of Indigenous Education (Dirección Generalde Educación Indígena-DGEI), claimed that by the 2007-2008 academic year, 45% of teachers in indigenous schools had bachelor's degrees (DGEI, 2008). This represents significant progress if one considers that teacher training institutions could not grant bachelor's degrees before 1984 (Tatto, Schmelkes, Guevara, & Tapia, 2006).

In the 1990's, the PRI's grip on power in Mexico began to loosen. Under pressure from human rights and indigenous groups, in 1992 the Mexican Constitution was amended to recognize Mexico as a "multicultural state," and in 1997 a further amendment to the constitution created a system of "bilingual and bicultural education" (UNESCO, 2005). On January 1, 1994, the day the North American Free Trade Agreement was scheduled to take effect, the Zapatistas seized power in several small towns in Chiapas, ostensibly by force but in reality often with the support of local people, and there was only token resistance. However, outside of these villages which they "took over," they had never been heard of before. According to one rebel declaration, their reasons for rebelling were that they "saw how widespread had become the evil wrought by the powerful who only humiliated us, stole from us, imprisoned us and killed us, and no one was saying anything or doing anything" (EZLN, 2005, para. 7).

Chiapas seems like a logical place for the revolution to begin. Chiapas has long been Mexico's poorest state, despite holding some of Mexico's largest reserves of natural resources. Though it contains land and a climate that is ideal for the growth of bananas, coffee, and other important exports, and is an important source of natural gas and petroleum, over 71% of Chiapas' indigenous suffer from malnutrition, only 11% of the state's indigenous population have completed elementary school, and Chiapas has the highest mortality rate of any Mexican

state, the most common causes including infectious diseases caused by a lack of access to basic sanitation. The latter problem is magnified by the fact that in predominantly indigenous communities, there is only one doctor for every 25,000 residents, and over one million indigenous people have no access to a doctor at all (International Service for Peace, 2007). It is also the state with the highest proportion of monolingual indigenous language speakers, with nearly 40% of the population speaking exclusively minority languages and not speaking Spanish (INEE, 2008).

As a result of the 1994 Zapatista revolution in Chiapas, a group of rebel leadership and government negotiators reached what was known as the San Andres Agreement in 1996. The agreement called for land reform and increased indigenous participation in the economy, as well giving indigenous populations more control over local natural resources. The agreement also addressed several educational issues, among them the demand by rebel negotiators that all Mexicans be educated on indigenous cultures, "the right of Indian groups to carrying out their own forms of education in their own cultural spaces and the adequate…resources to make it possible," equality of access to education at all levels for the indigenous population, and "the recognition of the need for Indian education to foster the development of Indian culture and at the same time to make universal knowledge, science, and technology accessible to the Indian population" (Schmelkes, 2000, p. 332).[14]

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[14] Schmelkes uses the term "Indian" here while writing in English, though the term is not widely used when speaking of Mexico's indigenous population. Given Schmelkes' undeniable reputation as one of the foremost researchers and activists on indigenous education, she likely has a strong reason for doing so, but does not give it here. I have personally preferred the term "indigenous", though that too, has its limitations. Some, particularly in Chiapas, prefer the term "original" while many Mayan townspeople of the Yucatan prefer the Yucatec Mayan word for native: *masewal*. However, even that has limitations, and scholars have suggested that historically some Yucatec Mayans considered it an insult (Gabbert, 2004). However, that is a semantic debate not within the scope of this dissertation.

The head of the Zapatistas, Subcommander Marcos, a Harvard-educated former philosophy professor,[15] has repeatedly accused the government of ignoring the San Andres Agreement, stating that little has been done to improve educational access to the indigenous community (Appel, 1997). Further, despite initially offering limited autonomy to indigenous communities, Mexico has increased military presence in the state of Chiapas and has largely refused to recognize indigenous towns that have declared themselves autonomous (Wessendorf, 2008).

With Mexico's first democratic election in seventy years occurring in the year 2000, former president Vicente Fox ran his campaign on a platform of attacking poverty and making the government more inclusive. He promised to end the revolution by passing a wide-reaching reform to protect the rights of indigenous-speaking peoples. The law is a direct result of this promise. Despite the heralding by some of the General Law on the Linguistic Rights of Indigenous People as a strong measure in the protection of indigenous rights, the Zapatista movement (often referred to EZLN, its Spanish acronym for the Zapatista Army of National Liberation) has largely rejected government overtures, and sees the law as insufficient. Indeed, in 2005 Subcommander Marcos launched "The Other Campaign," claiming that none of the three major parties competing for the presidency were representative of the indigenous community, and that all three had, in fact, "mocked us" (Marcos, 2005).

As a result of the Zapatista revolution the plight of Mexico's indigenous population became more widely known to a broader segment of both the Mexican and international population, and they became a symbol that many Mexicans, both indigenous and non-

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[15] Most have claimed that Subcommander Marcos is not himself indigenous, but the rather the child of Spanish immigrants. However, in a speech to a meeting of the Mexico's leftist organizations, Marcos (2005), in a thinly-veiled response to such criticism, states that "indigenous is that which lays claim to being indigenous" (para. 3).

indigenous, identified with. Six months after the EZLN began the revolution, polls showed it had earned the support of 78% of the general Mexican population (Piekarewicz Segal, 2000). In fact, studies show that in the time leading up the revolution, the poverty rate for Mexico's indigenous population, while still high, has actually decreased slightly in the past several years (Hall & Patrinos, 2006, p. 173).

The ideas set forth by the EZLN gave many other actors, including international organizations, labor unions, and reform-minded politicians, the motivation to work on this issue. All ultimately played a role in the passage of the legislation, with the law coming out of the EZLN's ability to use its revolution to establish the context for which the policy debate was set.

The 2001-2006 five-year Educational Sector Plan for the Secretary of Education was a breakthrough for multicultural education in Mexico. It began the process of creating specific pedagogical materials aimed particularly at bilingual, multicultural classrooms (which it proposed extending for the first time into the lower secondary level), and it called for increased training for all future and current teachers in techniques that recognize the diverse cultures of the Mexican nation (Mijangos & Romero, 2006). It also promised educational justice for all Mexicans, the recognition of the value of indigenous culture, and the creation of experiments designed to boost the quality of bilingual education[16] (UNESCO, 2005).

However, the most significant piece of reform, at least symbolically, was the 2002 General Law on the Linguistic Rights of Indigenous Peoples. As mentioned earlier, President Vicente Fox had just ended 70 years of single-party rule in Mexico in perhaps the freest election up to that point ever held in Mexico, and he was eager to demonstrate his desire to break from

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[16] It also claims to allow local populations to participate in the design of local curriculums. However, I have yet been unable to locate evidence supporting such participation and given the strength of the national curriculum such a claim should be treated with skepticism.

the past with a new, more inclusive administration. The law requires the addition of "the origin and evolution of the national indigenous languages" (General Law on the Linguistic Rights of Indigenous Peoples, 2003) as well as indigenous culture as a required part of all school curricula. The law also guarantees that teachers who work in indigenous communities speak and write the language of the local population of the communities where they serve, and requires educational materials to be available in indigenous languages in areas with a high concentration of indigenous residents. The legislation mandates teachers to include indigenous themes in their curricula at all schools nationwide (both public and private), and it requires each state to develop a specialization in indigenous education within its system of teacher education. Additionally, the law encourages the establishment and funding of libraries and cultural centers dedicated to indigenous languages and cultures, promises increased access to indigenous-language speaking officials at government offices and during legal proceedings, and promotes ethnography-based research of indigenous people. The law is also the first time that federal legislation in Mexico has prohibited discrimination on the basis of native language (General Law of the Linguistic Rights of Indigenous Peoples, 2003).

Many claim the new General Law of the Linguistic Rights of Indigenous Peoples was a direct result of the ceasefire that followed the Zapatista uprising. Schmelkes (2000) recalled that the government signed the San Andres Accords, the previously mentioned 1996 agreement between the Zapatista rebellion and the government, to address issues of concern to the indigenous population. Educationally, the government broadly agreed to rebel demands that would require all Mexicans to learn about indigenous cultures and address indigenous demands to improve indigenous access to education. However, the Zapatistas later contended the government had not lived up to its agreement, and they have mounted over 300 failed challenges

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to the new law, claiming the San Andreas agreements had never been implemented, and they were particularly upset about issues surrounding territorial rights (Wessendorf, 2008). Moreover, indigenous groups believe that the government is committed only to minor *cultural* reforms that are considered in a vacuum, and have shown little concern for the major *economic* or *political* rights of Mexico's indigenous people (Hamel, 2008).

Even after the law, however, serious inequities in the educational system remain for the indigenous population, and as Hamels (2008) lamented, "submersion and transitional" education that utilizes "assimilationist" policies is still the norm in Mexico today (p. 309). Despite the new legislation, indigenous languages are used very little in the classroom. Mijangos & Romero (2006) revealed that in indigenous schools in the Yucatan, instruction in all subjects and at all levels is principally in Spanish, with the single exception of the Mayan language course, but even then teachers need to revert to the Spanish language regularly.[17] Hamel, Brumm, Carillo-Avelar, Loncon, Nieto, and Silva-Castellon (2004) contended that the speed with which bilingual programs and teachers expected students to adapt to Spanish contributed to the displacement of the indigenous language (p. 84). There generally is no use of a Spanish textbook designed as a L2 primer, and indigenous children are taught Spanish with inappropriate textbooks written for native Spanish speakers (Hamel, 2008, p. 305).

Despite these limitations, various government documents claim that the education of Mexico's highly marginalized indigenous population is crucial to both the political and economic development of Mexico's future. The National Institute for the Evaluation of Education (2006) noted that "indigenous education is of great importance as part of the policy of equality and quality of the federal government" (p. 1). Schmelkes (2000) noted that the poor quality of

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[17] I presume this is at least in part due to their limited ability in Yucatec Maya. Mijangos (2006) observed that the more advanced the Maya course, the more Spanish was used.

teachers in indigenous areas is a major challenge to educating Mexico's indigenous population, and these teachers suffer from low levels of education, do not value native cultures, and have a limited understanding of bilingualism. This is a challenge because the need to value the culture of one's students is an important skill for teachers, and education outside of Mexico echoes the concerns for teacher education to reflect and support multiculturalism. "Valuing, affirming, and understanding indigenous epistemologies and the culture each student brings to the school is essential" (Quijada Cereced, 2011).

Scholars outside of Mexico underscore the importance of this. Lee (2011), writing more generally about teaching native populations, argues that "There is a dilemma in teacher education regarding how our schools and teachers can construct their classrooms to reflect and incorporate the diversity of their students and yet also encourage a common set of shared values, ideals and goals to which all their students are committed as members of their local, state, and national communities" (p. 276). She contended that indigenous populations are often seen as following their own cultural practices, and therefore their contributions to and participation in the larger national culture often go unrecognized. Gay (2005) argued that creating effective teachers of multicultural, diverse populations requires teacher education programs that openly engage and promote multicultural political values. Teachers are a link between "experts" (including teacher educators and other academics) and students (Mitchell, 1998). Teacher educators play a crucial role in the development of teacher dispositions, and the orientations of teacher educators "constitute a source of ideas and practices to draw on in deliberating about how to prepare teachers in a particular context" (Mitchell, 1998, p. 91). LePage (2001) said that it is the responsibility of teacher education faculty members to establish a framework of moral values and beliefs prior to addressing the more technical and methodological side of teaching.

Indigenous Education Reform and Teacher Educators as Policy Agents

The General Law on Linguistic Rights of Indigenous Peoples puts a burden not only on teachers but also on teacher educators. Given the findings of Schmelkes (2000) and others, and given that the reform specifically calls on teacher education institutions to create new programs to form teachers to work in indigenous areas who not only speak and write the language of the indigenous populations with whom they work but also have cultural knowledge about the indigenous communities, the need for reform in teacher development and teacher education was also substantial. As Feiman-Nemser (2012) pointed out, "Just as the teacher plays an important part in social reform…so teacher education is part of a larger strategy to create a more just and democratic society" (p. 88). Mitchell (1998) suggested that "Innovations mean different things to each party involved. Teachers reflect innovations as they come from higher authorities and they refract the changes on to students and parents" (p. 1). Then if teacher educators are the teachers of teacher education students, it seems most of these concerns would also apply to them. Though there is insufficient literature on teacher educators as policy actors, the literature concerning teachers as policy actors can be helpful here. Teacher educators have a multifaceted relationship to the teachers that are in the schools. First and foremost, teacher educators are teachers themselves, who indentify with the teaching profession. In the case of Mexico, most likely teach in a primary or secondary school full-time and then teach in a normal school part-time. Secondly, they are instrumental in the formation of the values and beliefs in new teachers. Issues of teacher education programs and educational policies surrounding teacher quality are indivisible, creating a "teacher-quality teacher-education policy web" (Cochran-Smith & Fries, 2011).

However, the values and beliefs of teacher educators have largely been unexplored. This is in spite of the fact that the literatures of political science, public administration, and teacher

education have long noted the importance of teachers as policy actors since Lipsky (1980) recognized teachers as front-line service providers who play an important role in shaping policy implementation through their decisions. Teachers apply policies based on a system of often unclear mandates and rationing the limited available resources (particularly time) to a high-need clientele (their students). They often make their decisions based principally on "information that is supportive of their world view," while they "filter out information that appears to be contradictory" in understanding their policy role (Lipsky, 1980, p.114). Rosenbaum (1980) contended that the chance for the success of a reform is only as strong as the punitive mechanisms to enforce "bureaucratic cooperation." McLaughlin (1987) noted that "at each point in the policy process, a policy is transformed as individuals interpret and respond to it" (p. 174). She further argued that front-line providers such as teachers implement policy based on their own navigation of the "multiple demands, priorities, and values operating in their environment" (p. 175). Maynard-Moody and Musheno (2003) observed that teachers are driven less by policy concerns than moral judgments, and they frequently carry out policy based on their perception of the worth of the individual citizen/student. They argued that even though teachers often operate within the constraints of a curriculum that is imposed from above, and despite not having the same level of coercive ability to insist on compliance as, for example, a police officer, teachers still exercise a great deal of agency in the classroom based on what they teach and how they treat both students and their parents. In the end, "Behind the closed classroom door, they [teachers] are in charge" (Maynard-Moody and Musheno, 2003, p. 39). Indeed, teachers make upwards of 1500 educational decisions a day (Kauchak & Eggen, 2005), many of which have substantial implications not only for children's future, but also for the policymakers attempting to mold what is happening in the classroom. Thus, the literature strongly suggests the need to understand

better teachers' decisions, particularly as they relate to policy. The orientation of teachers is relevant to policy in the context of reform.

To this end, we can see that certainly much literature has been written on how teachers often interpret policies in ways different from their original intent, and the literature has shown that there are many difficulties in implementing policies that teachers do not support or understand. Although Tyack and Cuban (1995) noted that teachers may sabotage reforms that they do not support, McDonnel and Elmore's (1987) study of a cross section of literature surrounding policy implementation suggested that often mandates and inducements fail simply due to a lack of expertise or training for the teacher involved, rather than any intentional refusal to comply. Shulman (1983) implied that the reason some reforms may fail is that teachers are unable to meet the intellectual, emotional, and pedagogical demands, and Lipsky (1980) argued that teachers will act in their own self-interests, hoping to improve their standing in the bureaucracy. However, all these major studies look only at teachers and not teacher educators. They therefore fail to address the crucial issue of preservice teacher education.

Spillane (2006) created a useful framework of policy implementation and cognition, observing that policy implementation needs to be understood through the cognitive "sense making" of the local agents who implement it, and arguing that more research is needed in this area. Kathryn Anderson-Levitt (2003) said that there are "huge gaps between a model and actual practice on the ground" (p.16). Although not the purpose of Anderson-Levitt's work, her demonstration of how policy moves from the global to the local clearly suggests that a number of decisions are made concerning policy that makes it look quite different at the local level than on the global level. Kennedy (2005) confirmed a wide body of literature that states that teacher beliefs and values are often different from the reformers and each other, providing a major

roadblock to change. Further, they "interpreted institutional guidelines to suit their own beliefs and values" (p. 230). There is also evidence that some teachers have dispositions so contrary to the spirit of a reform that they are unlikely to be able to implement it successfully. In studying mathematics reform in California, Cohen and Hill (2001) noted that "teachers made their own sense" of reforms, and "tacked the reforms in bits and pieces onto conventional instruction" (p. 84). In light of this, educational reform worked only "when teachers had extended opportunities to study and learn the new mathematics curriculum" (p. 2). Short of providing teachers with an extended education on the nature of a reform, however, the reform was likely to be implemented unevenly, and the reform failed in many areas because of fragmented understanding of the reform and its implementation. Further, they suggested government authorities' "technical and professional capacity to encourage and support local change was meager" (p. 13).

However, none of these major studies attempted to understand how teacher educators, rather than the teachers themselves, understand and implement new policies. Further, the crucial relationship between teacher educators and their role in the formation of such values and ideas in teachers represents a "missing link" in the literature that requires further study. Indeed, inquiries to some noted experts in teacher education and policy did not yield a single citation of a study that directly addresses the issue of how teacher educators' interpretation of policy affects its implementation (G. Sykes S. Wilson, P. Youngs, personal communications, October 23, 2009).

The literature does clearly imply teacher educators are key implementers of educational reform. Tatto et al. (2007) noted that historically, many educational reforms in Mexico have failed due to teachers colleges' "limitations to respond to change" and "the distance that exists between the curriculum content of [teacher education] programs and the real practice of the teacher" (p. 140). They stated that teacher education reforms have been successful only in

"serving a symbolic and political function" (p. 163), and Levinson (2004) contended that Mexico's attempt to reform civic education has been ineffective in large part due to poor teacher preparation and values inconsistent with the spirit of the reform. Forlin, Cedillo, Romero-Contreras, Fletcher and Rodriguez (2010) found that normal school graduates in Mexico lacked both experience and self-efficacy in working with an inclusive population, and the problem was intensified due to the inflexibility of the national curriculum. Garcia, Flores, & Gallegos (2006) suggested that science teaching reforms that required in-service training for science teachers were weakened by the limited subject knowledge of many graduates from the normal schools. This body of work confirms the importance of teachers, and that teacher decisions are important and informed by their beliefs and attitudes. There is also evidence to suggest that teacher educators play a central role in the creation of these beliefs and attitudes. Therefore, in trying to understand the reform related to indigenous education, I looked at the attitudes and orientations of teacher educators as a vehicle of the policy.

Research in the field of educational policy has emphasized the state, the teacher, or the student without giving due consideration to the intermediate step of preservice teacher education. Despite their critical role, the voice of teacher educators is rarely included in the educational policy dialogue. This study aimed to fill that void by investigating teacher educators' beliefs and values and their possible relationship to the implementation of a federal education policy in Mexico. Through better understanding of how policy is transmitted through the teacher education process, educational reforms can be improved, and actions can be taken to increase the probability of success for future initiatives.

My interest in teacher educators as policy actors who are influenced by their values makes me want to examine in depth the perspectives of a group of Mexico's teacher educators.

In the following chapter, I analyze the numerous interviews I conducted with "indigenous-oriented" teacher educators, in order to examine their background and their beliefs on a number of issues related to indigenous teacher education in Mexico, and I begin the process of comparing it to the larger population of teacher educators that took the survey.

CHAPTER THREE

RESEARCH QUESTIONS AND METHODOLOGY

Research Questions and Methodology

This chapter explains the research design of the dissertation. I start by describing the research questions and why I felt they are important. I also describe how I arrived at designing a study that used mixed-methods methodology and the work I undertook to prepare for it, including my pre-dissertation research. I offer a description of the participants in this study by presenting demographic data that provides a composite portrait of the teacher educators involved in the study. Next, I explain how the sites were selected and the different methods used for gathering both the quantitative and qualitative data. I provide information on response rates and sample sizes, and I highlight the methodologies used to analyze the data. I finish by describing some limitations that the study reflects, including issues of positionality that I confronted as a researcher.

Given the context which I discussed in the previous chapters, to understand reforms that rely in large part on reforming teachers and teacher educators, we must consider the crucial element of how the teacher education population looks at and makes sense of the reform in their individual contexts. As I discussed in Chapter Two, a number of authors have contended that teachers have a particular set of values and beliefs, and these values and beliefs affect the many decisions and judgments they make concerning the implementation of educational policy. Thus, I proposed the following research questions:

➢ How do Mexican teacher educators make sense of the new General Law on the Linguistic Rights of Indigenous Peoples and the issues that surround indigenous education reform in Mexico?

➢ What are some common beliefs and attitudes among Mexico's teacher education population?

➢ What are some common traits among indigenous oriented teacher educators? How do the orientations of teacher educators differ according to context?

Research Questions

How do Mexican teacher educators make sense of the new General Law on the Linguistic Rights of Indigenous Peoples and the issues that surround indigenous education reform in Mexico? Extensive literature seeks to answer the basic question of what impact the implementation of a specific policy has had (Hill & Hupe, 2002). However, as lawmakers target teacher training reform as a vehicle for change, many legislators worldwide are making the assumption that to reform teacher education is to transform the entire educational system. Policymakers grapple with the nuances of what aspects of teacher education are most amenable to policy intervention.

McLaughlin (1987) divided the history of policy analysis into "generations." The first generation (the late 60's to early 70's) emphasized implementation problems, while the next generation of the latter part of the 70's sought to explain the divide between policy and practice. The most recent wave of policy analysis, however, has acknowledged the crossroads between the policymakers and the individuals who implement them on a micro level. As "change is ultimately a problem of the smallest unit" (p. 174), understanding how teacher educators interpret the law is a crucial step to implementing successful teacher reform. Despite relatively few credentials, and the fact that they receive little ongoing professional development, teacher educators in Mexico are widely assumed to be "experts." We do not, however, know how they make sense of the new law.

What are some common beliefs and attitudes among Mexico's teacher educator population? My own previous work suggested that the understanding, or even consideration, of the new law was limited among teacher educators. There was neither initial nor ongoing training in implementing the law, and both the value given the law and the knowledge of the law varied greatly among teacher educators. With this question, I explored more in-depth the varying views of teacher educators. My assumption is that their beliefs and attitudes are important filters for their sensemaking of indigenous education policy reform.

What are some common traits among indigenous oriented teacher educators? How do the orientations of teacher educators differ according to context? As Spillane (1998) noted, individual cognition is crucial, and it varies depending on the local context. Thus, it is imperative to explore variation in perspectives by individual and institutional context. My previous pre-dissertation work suggested that there is great variation in how much time is actually spent on indigenous issues in each teacher education classroom. I also found substantial differences in opinions and values between instructors at the same institution. However, this supposition required further investigation and a larger sample size, which I was able to do in the dissertation stage. This seems like a particularly important question in light of the fact that historically, teacher training institutions have been slow to respond to change, and have often been linked with poor educational quality in Mexico in general (Tatto et al., 2007). Additionally, the context of southern Mexico is useful since experts have pointed out that while the context of teacher education programs is critical, there is little research on teacher training programs that sufficiently reflects the local context (Zeichner & Conklin, 2005).

Research Design

Studies of indigenous peoples have traditionally relied on small-scale ethnography, while policy researchers, particularly those affiliated with national governments and international organizations, have favored larger-scale, quantitative research. In this study, I sought to bridge the gap between qualitative and quantitative work by using what LeTendre referred to as "an iterative, multimethod research design." As LeTendre (2002) noted, "The development of iterative, multimethod research designs has allowed researchers to overcome major epistemological problems that previously separated qualitative and quantitative researchers" (p.199).

My study centered around qualitative interviews with teacher educators that were developed not only to provide in-depth insight into the everyday lives and attitudes of teacher educators, but also to provide me with the opportunity to craft more refined survey instruments using their own local vernacular. Given the limited number of teacher educators available for piloting, having initial interviews allowed me to be more certain about the clarity of specific expressions that appeared in the survey instruments. Having surveys also allowed me to test whether attitudes displayed in the interviews were isolated views or whether they represented the sentiments of broad numbers of teacher educators in the region. For example, one teacher educator stated, "I don't want to sound racist or anything, but I think all Mexican citizens are Mexicans and should stop trying to identify themselves as part of a subgroup." This language was then tested by crafting a survey item taken nearly verbatim from that statement and inquiring whether other teacher educators believed that "all Mexican citizens are Mexicans and should stop trying to identify themselves as part of a subgroup." Indeed, my decision to collect a large number of both surveys and interviews was a result of my desire to be able to validate the survey

findings with the interview findings. As Gomm (2009) stated, many researchers advocate mixed-method designs because "different methods tap different aspects of the topic and hence provide a fuller picture than could one method alone, and that each method may provide a check on the *validity* of the findings of another" (p. 204). By utilizing this model, analysis of my interviews was then informed by a larger number of surveys, some observation, local periodical sources, and policy document analysis. This plan allowed me to collect a much larger set of data than would have been possible by traditional ethnography alone, without losing the crucial element of the participant's human experience. "One of the advantages of mixed methods has been its flexibility to use cultural knowledge and systematic/anecdotal field observations as research data/evidence in different types of research" (Teddlie & Tashakkori, 2010, p.33).

Although there are some obvious methodological limitations with self- reported data, as collected in the survey, there is also significant precedence as to its validity and usefulness. Major studies of teacher education such as Teacher Education and Learning to Teach (TELT) and the National Commission on Teaching and America's Future (NCTAF), attempted to assess teacher education candidates' abilities in certain situations through self-reported mechanisms (e.g., interviews, surveys) (Zeichner & Conklin, 2005). Such approaches indirectly recognize the importance of teacher (and by extension teacher educator) perception of their own abilities.

Preliminary Research and Linguistic Preparation

Understanding the location where one is conducting international research is paramount, and this dissertation was only undertaken after a number of years of intense academic and linguistic preparation. As Levy and Hollan (1998) noted, "It takes considerable general knowledge about a place and its people before we can begin to understand the presence and significance of private variants and transformations of local cultural and social forms" (p.338).

This preparation took the form of not only many years of working in the Mexican educational system, but also multiple pre-dissertation studies that helped to inform my final study design and deepen my understanding of the problems faced by Mexico's indigenous population.

Though not then involved in the study of Mexico's indigenous population, I became greatly attuned to the disparities of wealth in Mexico while a Visiting Professor at three different campuses of the Tec de Monterrey system in Mexico, in the cities of Torreon, Guadalajara, and Hermosillo. My interests in the issue of poverty in Mexico led me to travel extensively in the south of Mexico to engage with the indigenous population.

In the years prior to conducting this study in the normal schools of Mexico, I had already conducted pre-dissertation research in a number of schools in the Yucatan and Chiapas, including normal schools. It was these experiences that increased my awareness of Mexico's racial and linguistic differences, and I first became attuned to the many linguistic issues that surround the educational experiences of indigenous youth, including the discovery that among the students preparing to graduate from middle school, the highest level of education available to them in their community, girls often graduated with only a limited knowledge of Spanish. Further, I was struck by how I observed, on numerous occasions, students being physically punished because they had spoken their native language.

During one summer in my doctoral program, I spent three months doing pre-dissertation research in Yucatan and Chiapas, focusing on increasing my understanding of the current reform and its context, developing relationships with academics in the region, sharpening my language skills, and confirming the feasibility and local institutional support for a more expanded study. This experience helped me to envision more clearly how to conduct a larger study.

Further, with a grant from the Tinker Foundation, I traveled to Bolivia and Peru to examine their versions of teacher education, to help me better understand Mexico in the general context of Latin America. This allowed me to be able to identity aspects of teacher education that were unique to Mexico and those that were largely replicated in other parts of Latin America with large indigenous populations. This experience helped me to envision a broader study of Mexico's teacher educator population as I was able to engage with various models and thinkers outside the Mexican context who were themselves involved in indigenous education, but in a different context and with a different lens.

Although my years in Mexico gave me fluent Spanish, which was the principal language of this research, I also engaged in extensive language study to prepare for my work prior to departure. I completed a summer course in Yucatec Maya at the University of North Carolina-Chapel Hill and a course in Kaqchikel Maya held in Guatemala through Tulane University. I continued to study my Yucatec Maya throughout my academic career, and during my stay in Merida I balanced my dissertation research with completing several levels of Yucatec Maya for Social Science Researchers, garnering two advanced-level certificates. Although due to Spanish's standing as the official language of educators and the normal schools, I rarely had the chance to utilize Yucatec Maya directly in the research context, this study gave me unique insight into the language and culture of the region's indigenous peoples.

Ultimately, my pre-dissertation work left me with several tools to design the larger dissertation study. I was able to understand the policy debates surrounding indigenous education, not through books or newspapers, but by interacting directly with those who were the implementers of the policy (the teachers, teacher educators and government officials) and the supposed benefactors of the policy (the indigenous residents of the towns). Further, I was able to

gather local resources that would not have been available in the United States. Additionally, the results of my pre-dissertation work helped me to design a clearer focus for the study. I had concluded that it seems there is wide variation among the attitudes of teacher educators, and these attitudes affect their inclusion of indigenous education in their classrooms and other aspects of implementation of the law. These attitudes varied greatly, not only between institutions, but also within institutions. Thus, I was left with a solid set of questions concerning variations in teacher educator beliefs and how they differed by context, and I wanted to investigate this further among the large teacher education population.

Data Collection Sites

The data was collected during a period of 15 month residency in the southern Mexican states of Yucatan and Chiapas. During this time, I was graciously housed in the *Centro de Estudios Regionales (The Center for Regional Studies) Dr. Hideyo Noguchi* in the Social Sciences Unit of the Autonomous University of the Yucatan in Merida, Yucatan. I traveled extensively throughout the states of Yucatan and Chiapas to spend considerable amounts of time at each teacher-training institution. This gave me a base from which to work. It also gave me access to a number of noted scholars in indigenous affairs and afforded me the opportunity to continue my study of Yucatec Maya. A total of 12 different teacher education institutions participated in the study (see Table 3.1). Eight of the institutions were located in the state of Yucatan, while four were located in the state of Chiapas. Ten were public institutions, while two were private. Because of the very small size of each institution, there was no "sampling" with the surveys. Rather I attempted to survey as many teacher educators in each state as possible, given my limited time and funds. Thus, I extended an invitation to all public normal schools in the State of Yucatan and to the majority of those in the State of Chiapas. In the case of Chiapas, I

had intentionally to exclude some normal schools in outlying areas due to having insufficient

funds and limited time. This was indeed the most glaring limitation of the Chiapas data. In the

Yucatan, eight of the nine institutions accepted my invitation to participate in the study. [18] In

Chiapas, all four accepted my invitation to participate. In addition, one campus of the National

Pedagogical University was selected given their unique yet crucial role in the development of

teachers in Mexico.[19]

The two states of Chiapas and Yucatan are excellent research sites to study indigenous

teacher reform. Both are areas with rich, indigenous traditions that make up a geographic region

that contain some of the most important traditional Mayan civilizations. Indeed, although the

Yucatan Peninsula has traditionally been the area most associated with the Mayan culture, parts

of Chiapas contain numerous centers of Mayan civilization, a fact largely overlooked by scholars

due to the dominance of the national culture in the state (Coe, 2011). The two states share a

distinct cultural and linguistic tradition. Though the languages are not mutually intelligible, the

majority of indigenous people in Chiapas speak a variant of one of the multitude of languages

that makes up the Mayan family. Despite the fact that Chiapas contains significant populations of

speakers of non-Mayan languages, such as Zoque, data from the 2000 census shows four of the

principal indigenous languages spoken in Chiapas —Tzotsil (36.0%), Tzetzal (34.4%), Chol

(17.4%), and Tojolabal (5%)—together represent over 93% of Chiapas' indigenous language

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[18] Although all the institutions accepted my original offer, the director of one of the institutions later decided his faculty were "too busy" to participate. However, he had a long history of vocal and highly public conflicts with educational researchers. In one previous study where a professor from the local College of Education found the educational model of his school to be "deficient," he complained to the local newspaper that academics did not value the work the normal schools do. However, given that this institution trains high school, not primary school teachers, it contained a different focus and was a variation within the sample that did not seem crucial to the study.

[19] For a more extended discussion of the role of the National Pedagogical University, see Chapter One. UPN also provides master's and doctoral degrees to in-service teachers.

speakers (INEGI, 2004) and they are all members of the Mayan family of languages. According to Mexico's National Institute for Evaluation of Education (INEE, 2005), Yucatan is the state with the highest number of indigenous language speakers, as over 33% of the state's residents speak Yucatec Maya.

Despite this, the two states offer a number of strong contrasts: Yucatan has a homogenous indigenous population, nearly all of whom speak Yucatec Maya, while Chiapas is a patchwork of different languages.[20] My pre-dissertation research left me with the question of whether Chiapas, with its multitude of languages, impoverished indigenous population, and the geographic isolation of many of its indigenous communities, would have a more difficult time implementing the policy than in the Yucatan. Moreover, the indigenous of Chiapas are more likely to be monolingual and lack a working command of Spanish (INEE, 2005). Further, the indigenous of Chiapas are less likely than their indigenous counterparts in Yucatan to complete primary school, less likely to have running water or sewage (INEGI, 2008), and less likely to have access to health care or a computer (CDI, 2006).

Piloting and Protocol for the Administration of Interviews and Surveys

A pilot study that pre-tested similar interview questions took place during the summer of 2008, when I spent several weeks visiting the normal schools of Yucatan and Chiapas conducting pre-dissertation research. The interview questions utilized in this dissertation study were largely an expansion of those that were used in the pre-dissertation work. This allowed me

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[20] Throughout this work, I have frequently referred to the principal Mayan language of the indigenous population of the Yucatan peninsula as simply "Maya." Though one sometimes sees the word "Yucatec Maya" when clarification is necessary, Mexico's National Institute of Languages' Official Catalogue of National Indigenous Languages (2008) officially categorizes the language only as "Maya." While some point out, correctly, that there is a family of Mayan languages, including many I have mentioned in this chapter, they are generally referred to by their proper name (i.e., Chol), not as "Maya."

to maintain questions that I believed yielded valuable information, while eliminating or revising questions that did not seem to yield as much information. Also, during pre-dissertation interviews I noted any questions that required clarification from those being interviewed, so that I could rework them for clarity prior to the dissertation interviews. The pre-dissertation work also allowed me to recognize opportunities for further lines of questioning as interview participants regularly guided me to other lines of literature and inquiry that perhaps I had not previously considered.

Though the pre-dissertation studies did not include surveys, the survey was piloted in the dissertation stage just prior to its administration in the teacher training institutions. Given that the number of teacher educators in the states I worked in was quite small, and given the potentially negative impact on the quality of survey data that might occur if some teacher educators had previously completed the survey prior to officially taking it, the piloting took place using people in related fields (including some former teacher educators), including university faculty, teachers, educational administrators, and government officials. Approximately 20 individuals took the pre-test. The sampling for the piloting was a non-random convenience sample, as is the norm in survey pre-testing (Rothegeb, 2008). The pilots were conducted attempting to simulate the atmosphere of the in-person survey administration. The completion times of each survey were recorded, as were any questions asked by the survey takers during the pilot. Respondents were asked to comment on any issues of comprehension, length, difficulty, cultural appropriateness, and potential areas of sensitivity and/or confusion. Where possible, individual debriefings took place after the survey was completed. Additionally, a prominent government attorney and activist well-versed in indigenous affairs read the survey to comment on the

appropriateness of any legal references, as did several local scholars in the social sciences. These comments were aggregated, and a final survey was produced based on these comments.

I began the process of arranging my data collection by meeting the director of each institution personally to request his/her institution's participation in the study. In this meeting, I emphasized the value of the work to the missions of their respective institutions as well as to the broader teacher education community. In some cases, the director agreed to participate immediately. In other cases, the director requested time for him/her to solicit opinions from the faculty concerning their institution's participation. As previously noted, in the beginning stages all institutions accepted the initial offer of participation.

If the director agreed, I asked him/her for some information about the institution's faculty—the number with full-time/part-time status, educational history, specialties, and courses taught. Often times, the director would refer me to another administrator who handled this type of information. From this, I attempted to construct an interview sample that drew from a wide variety of fields, areas of specializations, and courses taught. Interview samples were selected based on what Patton (1990) called "maximum variation sampling"—a technique designed to involve subjects that represented a wide variety of demographics, backgrounds, subjects taught, and educational experiences. Some educational researchers have suggested that "maximum variation sampling provides the most effective basic strategy for selecting participants for interview studies" (Seidman, 1998, p. 45). Maximum variation sampling is useful because it allows the researcher not only to document unique cases, but also provides a modicum of heterogeneity that allows the researcher to analyze "shared patterns that cut across cases" (Patton, 1990, p. 172). Warren (2002) said "Because the object of qualitative interviewing is to discern meaningful patterns within thick description, researchers may try to minimize or

maximize differences among respondents—say, according to class or gender, in order to highlight or contrast patterns" (p. 87). I had originally considered emphasizing faculty members who were actively engaged in the teaching of educational practice or the supervision of fieldwork in the interview sample. However, given the highly practical nature of the teacher training institutions in Mexico, nearly every faculty member had some aspect of field work supervision as part of their duties, so this was not a major issue. All things being equal, preference was given to those who worked directly in preparing students to work with indigenous populations.[21] Also, while I sought to include part-time faculty in my interviews, full-time faculty were given precedence due to the fact that they not only teach the majority of courses (despite being the minority of staff positions) but they also tend to have more extended longevity, as part-time faculty members often have high turnover rates. Where such information such as teacher education position, demographics, education level, experience, etc. was not readily available, I filled the interview sample using the most complete data possible. I also considered peer reputation in selecting the interview subjects. Between six and ten interview subjects were selected from each institution where interviews took place. It should be noted that the impact of my "sampling" was probably minimal, since sometimes as many as 56% of the institution's teaching staff were interviewed (see Table 3.1).

The procedures for conducting the interviews necessarily varied based on the leadership and the resources of each institution. Interviews were normally conducted in the office of the teacher educator, where this was possible. If this was not possible, or if the office was shared (thus jeopardizing confidentiality), I requested a separate conference room dedicated to

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[21] The latter was problematic because even when teaching at an institution where a large number of their graduates would ultimately be placed in indigenous communities, many teacher educators denied their role in this and believed it was up to "someone else" to train future teachers in this manner. See Chapter Six for more information about this phenomenon.

interviews only during the course of my visits. If there was no conference room available, an empty classroom sometimes had to suffice. However, in each case the interview was one on one.

Surveys (see Appendix A) inquired about respondents' understandings and perceptions of the new law as well as the implementation of the new indigenous-oriented curriculum in their own classrooms and their own professional development related to the new reforms. Interviews probed their backgrounds, their beliefs about indigenous culture, their view of the role of the teacher-training institution as advocates for implementing indigenous rights policies, and assessments of the problems their own students face preparing to work with the indigenous population. The interviews were recorded when the subject gave permission; in the few cases where the subject expressed a preference that our conversation not be recorded, I took notes by hand. When the participant consented, each interview was taped using two digital recorders to prevent the loss of data and to create a backup in the event of a mechanical failure or unexpected battery termination in one of the units. Because of the wide variety of responses and the different levels of engagement each teacher educator had with the topics, interview times varied widely— with a range of 30 minutes to 170 minutes. The "typical" interview was between 50 minutes and 75 minutes. Although this resulted in a huge amount of interview data, it allowed me more meaningfully to identify patterns within the large number of interviews. The large number of interviews, particularly when combined with the survey (as I discuss below) also helped me to better recognize points of view that may have been outliers and were not frequently shared by fellow teacher educators. It gave me a depth that I would not find in surveys alone, offering a nuanced perspective of the opinions of Mexico's teacher educators. The number of interviews conducted also gave me a substantial breadth of participants not often found in qualitative studies, and gave me wide insight into how the teacher training institution worked as a whole. In

the previous chapter, I pointed out some of the policy research that suggested that teacher educators do, in fact, play a central role in the implementation of educational reform. The surveys helped me to see the teacher educators not as simply numbers in a poll, but rather as real living, breathing humans whose values and beliefs were often a product of their varied backgrounds.

From each teacher-training institute, I aimed to survey the entire teacher educator population. This was important because the small number of faculty in each school did not permit the use of routinely accepted sampling techniques, and there was no reason to sample when in each case I was graciously given access to the entire population. (The largest institution in the study had a faculty of 30, many of whom were part-time.) In much the same manner as the interviews, the collection of the surveys required some flexibility. The most common method used for their collection was for me to attend a normal school faculty meeting and personally distribute the surveys to attendees. In some cases, this was not possible, and the director assigned a faculty member or other administrator to distribute and collect the surveys on my behalf. This personal method of administering the surveys was chosen because in-person administration of surveys generally is the most effective way to achieve maximum response rates in survey research (Saris & Gallhofer, 2007). This was reflected in the survey's overall high response rate. Below, Table 3.1 shows the percentage of currently working faculty members at each institution who were surveyed and interviewed.

Table 3.1

Faculty Size, Response Rates, and Interview Rates at Participating Institutions

Institution	State	Faculty on Staff[22]	Surveys Returned	Response Rate	Faculty Interviewed	Percent Interviewed
Public 1	Yucatan	22	22	100 %	9	41%
Public 2	Yucatan	21	21	100%	10	48%
Public 3	Yucatan	28	23	82%	10	36%
Public 4	Yucatan	25	21	84%	9	36%
Public 5	Yucatan	14	14	100%	N/A[23]	N/A
Public 6	Yucatan	18	17	94%	10	56%
Private 1	Yucatan	17	17	100%	6	35%
Private 2	Yucatan	15	15	100%	N/A	N/A
Public 1	Chiapas	10	6	60%	5	50%
Public 2	Chiapas	30	21	70%	8	27%
Public 3	Chiapas	25	23	92%	5	20%
Public 4	Chiapas	15	10	67%	6	40%
Total		240	210	88%	78[24]	37%[25]

Each participant was given a consent form prior to both the interview and the survey. After close consultation with local sponsors and researchers, it was decided that oral consent was the best method. There was a perception among local scholars that requiring a signature could potentially have two unintended consequences. A signature is frequently viewed as a legal instrument and is often associated with a financial obligation. Further, some believed that participants might perceive that requiring the signature could potentially threaten the confidentiality that participants were promised in the study. The consent form was read by the interviewer together with the participant prior to beginning each interview and survey.

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[22] Includes only faculty members who were actively teaching at the institution at the time the survey was administered.

[23] No interviews were conducted at these institutions since, with 90 interviews already conducted, the numbers reached what Seidman (1998) called a "saturation point," where little or no new information is gained.

[24] Does not include interviews of government officials, academics, and other educators, of which there were 12 additional interviews.

[25] Does not include institutions where I decided not to conduct interviews.

Participants were asked if they understood the contents of the form, and the interviewer asked for the participant's oral consent to continue. Each participant was provided with a copy of the consent form with the name and contact information of university officials if they had any further questions or concerns. I also provided each participant with a business card so they could contact me directly if they chose to rescind their oral consent (although no one chose to do so), or if they had any questions about the research. Copies of the consent forms are included in Appendix C of this volume.

The Interview

Understanding educational reform and policy is a big part of why educational researchers conduct interviews (Tierney & Dilley, 2002). Qualitative interviewing has the goal "to understand the meaning of respondents' experiences and life worlds" (Warren, 2002, p.83). Given my interest in Mexico's new indigenous rights reform and how teacher educators made sense of this policy, interview questions surrounded a number of related themes. Several questions were aimed at how the teacher educators understand Mexico's General Law on the Linguistic Rights of Indigenous Peoples. However, the interview questions were guided by my pre-dissertation work, and I anticipated that I would surely encounter teacher educators not necessarily aware of the law. I also understood that a knowledge of the law is not necessarily indicative of a knowledge of indigenous education, or vice-versa; some teacher educators could possibly be engaged in indigenous education at the micro level with little or no knowledge of the legal context in which they operated. Thus, the questions in the interviews were varied and far-reaching. They asked about their backgrounds and their studies, the classes they taught, the languages they spoke, their parents' education level and occupations, and their perception of and their relationship with their students and institutions. I inquired about their beliefs about teaching

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in indigenous areas, the problems teachers face in indigenous communities, notions of teacher knowledge, teacher preparation, and the current state of teacher quality in indigenous communities. I also asked them about the General Law on the Linguistic Rights of Indigenous Peoples, its impact on their institutions, their perceptions of the law's success, their training, and how they acquired information on political reform. The questions all seemed crucial to understanding how teacher educators act as policy agents and how teacher educators make sense of the current reform. Given that values and beliefs clearly play a role in how policy actors make sense of and implement a given policy (Lipski, 1980; Maynard-Mood & Musheno, 2003, McLaughlin, 1987; Spillane, Reiser & Reimer, 2002), it seemed crucial that my questions would probe deeply into the core beliefs of the teacher educators on issues related to indigenous education and reform. This was particularly important since, as I previously mentioned, I acknowledged that while some teacher educators may not have much information about the particular law in question, they still could be making positive contributions to indigenous education in general. Identifying these individuals required me to inquire about a number of related topics (i.e., issues of indigenous education, educational policy, etc.) in order to help me explore the law's possibilities and limitations. In each case, I gave the participant "the last word"—I ended each interview by asking if there is anything they would like to add or say. Many used this time to express gratitude, saying they believed that Mexico's normal schools had long been forgotten in the research arena. Others thanked me and said the questions made them reflect about a number of things about which they had not previously reflected.

The interviews were semi-structured and were conducted using a combination of elements from what Patton (1990) described as the "interview guide approach" and the "standardized open-ended interview" (p.288). In the interview guide approach, the researcher

decides the overall themes and questions in advance, although ordering and wording of the question vary. In the "standardized open-ended interview," the exact wording and order of questions is predetermined. In the interviews, I entered with a list of 45 standardized interview questions. However, I maintained the right to deviate substantially from them on a case-by-case basis. For example, if one respondent said they had never heard of the General Law on the Linguistic Rights of Indigenous Peoples, how could I ask them about specific clauses or the impact of the legislation? This flexibility allowed me to maximize the limited time I spent with each participant, as well as to juggle the schedules of the faculty who often had numerous demands on their time. Also, it allowed me to tailor each interview to the strengths of each person interviewed.

I tried to incorporate what Levy and Hollan (1998) call "person-centered interviews." They wrote, "Person-centered interviews are a mixture of informant and respondent questions and probes. A probe is an intervention to elicit more information, not necessarily in the form of a question… like 'Tell me more about that'" (p.337). Such probes are always open-ended and "are purposely ambiguous. This leaves the respondent a relatively wide choice of responses, dictated less by the exact answer to a factual question than by, presumably, some private concern or orientation" (p.337). Although these were not life history interviews, I encouraged participants to tell their stories regardless of the script at hand. Such probes often led to some very rich data that might not have been drawn out by the original questions. Indeed, some of the most interesting stories came out of such probes, including much of the very vibrant personal histories that appear at the beginning of the next chapter. A complete list of interview questions can be found in Appendix A of this volume.

In addition, I conducted in-depth interviews with policy officials from each state, allowing me to compare their understanding of the General Law on the Linguistic Rights of Indigenous Peoples with those in the teacher training institutions. These questions centered on policymakers' understanding of the law, their interpretation of how various clauses of the law relate to education and teacher education, their agency's role in implementing the law, and what they perceive to be the challenges and successes of the law. These interviews helped to contextualize the teacher educators' viewpoints.

The Survey

The survey was finalized following the initial rounds of dissertation interview data analysis. After approximately half of the dissertation-stage interviews were completed, I began the process of listening to the interviews with the goal of identifying common themes and patterns. One of my principal goals for the survey was to confirm whether some of these themes and patterns of beliefs and attitudes mentioned in the interviews were outliers that represented single points of view or whether they were, in fact, representative of the teacher education population at these institutions as a whole. Therefore, I constructed a number of survey questions aimed at clarifying and triangulating some of the things heard in the interviews. For example, I heard a number of teacher educators during the interviews take a rather dismissive attitude toward the inclusion of indigenous culture in their classrooms, while others seemed to make it a priority. Because inclusion of indigenous education in all curriculums, both public and private, is one of the key elements of the law, a survey question allowed me to understand better how such differences were distributed among the general population of teacher educators. The surveys also helped me to reach a larger sample than I would have been able to do with only interviews.

The survey consisted of four parts. The first part asked teacher educators about their attitudes and beliefs about certain topics, and it contained 23 Likert Scale items. The second part asked teacher educators to select from a list of the most important sources of information for them to keep current about the most recent educational policies. The third section asked teacher educators to rank, in order of importance, 12 different components found in nearly any teacher education program (with provisions made for local indigenous topics) throughout the world. The last part was a demographics section that asked about things such as age, highest education level, languages spoken, gender, place of birth, and employment status (i.e., full-time, part-time, etc.)

Each of the survey parts represented a different aspect of the study and performed a different function. The first part was designed to assess teacher educators' overall beliefs and values, and perhaps could be described as the heart of the survey. The second part measured the important piece of where teacher educators get their policy information, which ultimately will be a vital tool in not only understanding how they make sense of policy but also in how policymakers can best direct information towards them. The third part of the survey was instrumental in assessing what teacher educators value in their classroom. The key reform clause regarding the inclusion of indigenous themes and languages into the normal school curriculum will only succeed if teacher educators value such subject matter and incorporate it in their everyday teaching. The last part was a rather extensive demographics section, which makes it possible for me to consider the interplay of beliefs and individual and contextual factors. It included categories ranging from gender to part-time/full-time status to highest education level attained.

The first part of the survey principally centered on teacher educator knowledge and beliefs about concepts such as the indigenous population, indigenous education, and teacher

education. Because one single survey item is generally insufficient to draw inferences about a general concept (Saris & Gallhofer, 2007), multiple questions were asked on these themes. The number of questions, however, was constrained due to the need to limit the survey length, given the amount of time teacher educators had to answer the questions. This was in large part because, given the part-time nature of many teacher-training institution faculty members, they often were present only during class hours and naturally could not answer the surveys at that time. Therefore, in most institutions the surveys were conducted during a staff meeting, which was the only time all faculty were together and the only time many part-time faculty members were present outside of their classroom hours. Hence, the more time the survey took, the less time they had for other urgent business. Although the original survey was substantially longer, on the advice of the normal school directors (to insure their participation) and on the advice of some reviewers who piloted the program (to insure a high response rate), the survey was cut to allow for a completion time of no more than 20-30 minutes. Although many finished it earlier, some did take up to 30 minutes to thoughtfully reply to the questions.

The Participants—Who Took The Survey?

The unit of analysis for this study is teacher educators from the southern Mexican states of Yucatan and Chiapas. There were a total number of 209 survey respondents, all instructional faculty in teacher training institutions. Faculty ranged in age from 24 to 75, with an average age of 45.4. Fifty-six percent were men. The majority were part-time or hourly staff, with only 32.1% of all respondents identifying themselves as full-time. 86% were from public normal schools and 14% were from private normal schools. The average number of years teaching in the normal school was 12.95, with 26.4% having more than 20 years of teaching in the normal

school and 11.2% had 30 years or more. The longest-serving faculty member had 46 years of service.

Educationally, 39.6% claimed a bachelor's degree as their highest level of education, while 54.8% claimed master's degrees, and 5.1% claimed doctorates. 45.3% stated they spoke no language other than Spanish, while 42.7% reported some knowledge of English, although the most frequently reported level was "basic." 16.9% claimed at least some knowledge of Yucatec Maya. However, respondents' self-assessment of their knowledge of the language was low—only four (11.8% of those who claimed to be Yucatec Maya speakers) were native Maya speakers, while only two (5.9% of those who claim to be Mayan speaking) assessed their knowledge as "advanced." Meanwhile, 14.7% of those who said they spoke Yucatec Maya reported they had no *working* knowledge of it when asked to self-assess their level of the language. Additionally, 5.0% reported to have a knowledge of French. The indigenous languages Tzeltal and Tzotzil, both members of the Mayan family of languages, were at 2.5% and 2.0%, respectively. The non-Mayan indigenous languages of Zoque and Zapotec, as well as Portuguese and Italian, were each listed by two or less teacher educators (less than 1% of respondents).[26]

Of those surveyed, 64.5% had primary school teaching experience, 30.1% had lower secondary school experience, and 27% had high school teaching experience. 11.7% had taught in an indigenous school and 31.6% had taught in a rural school. Though the majority (87.7%) of teacher educators came from the states where they worked (Chiapas and Yucatan), teacher educators born in Mexico City, Oaxaca, Veracruz, San Luis Potosi, Nuevo Leon, Tamaulipas, Campeche, Chihuahua, and Zacatecas were also represented in the survey. 76.8% were born in urban areas, while 23.2% came from rural areas.

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[26] Percentages add up to more than 100 as teacher educators were allowed to identify up to three languages on the survey.

Data Analysis and Presentation

Survey data was analyzed by entering all survey responses into SPSS. In Chapter Four, the data is presented as simple frequencies. Given the number of items on the survey, I have chosen to replace the charts with more illustrative graphs. The graphs contain the same information as would be found on the charts, but they allow the reader to choose between visualizing the data in the form of a graph or reading the same information that is found on tables superimposed on the graph in the form of labels.

One of the principal research questions of this study asked whether context has any effect on teacher educator orientations. In order to consider context, I needed to first decide on a reasonable proxy for context. The two variables that might best be used for context in this study were whether or not the institution had an indigenous language program and the state where the institution was located. Note that Mexican teacher educators are considered generalists who are expected to teach across a wide variety of programs and subjects, and it is not possible to delineate precisely who works in indigenous education programs and who works in other programs. Thus, I looked for a method that would be most appropriate to show association between these two variables and the survey responses.

One oft-mentioned method for showing such association is the Pearson Chi-square. Chi-squares are useful for showing association between two different variables (Alvarez, 2003). Chi-square tests are of particular use in aggregating responses to single items that are designed to measure specific cultural beliefs (Weller, 1998). The chi-square test (x^2) is "the test [that] measures the significance of the relationship between two categorical variables" (Trobia, 2008, p. 97) and it is an excellent choice in many cases where a researcher wishes to show the statistical significance of difference between two groups (Morgan, Leech, Gloeckner, & Barrett,

2007). The chi-square statistic is useful because "several measures of strength of association have been devised" from it (Gray & Kinnear, 2012, p. 423). Additionally, the chi-square test can be used in conjunction with the phi coefficient, a statistic that is the preferred choice of analyzing relationships between two binomial variables (Kalaian, 2008), and is an excellent way to show the strength of the relationship and ultimately effect size (Morgan et al., 2007). Reporting the phi coefficient to estimate effect size in quantitative research addresses an increasingly vocal chorus of scholars who believe that researchers from a number of fields, including education, dubiously report significance without reporting effect size, even though effect size may be minimal or nonexistent (Kotrlik, Williams, and Jabor, 2011).

In Chapter Five, I consider the context and whether there is an association between the various survey responses and two of the principal variables that can serve as a proxy for context—type of institution and state. In Chapter Five, all Likert scale responses have been recoded into a binomial "agree" or "disagree" response. The responses "totally disagree," "disagree," and "somewhat disagree" were recoded into simply "disagree", while "somewhat agree," "agree," and "totally agree" were recoded as "agree." This served three main purposes. First, it allowed the data to be visually compared across contexts more clearly. Second, it provided an alternative way to look at the data by removing the nuances in level of agreement that had shown in the earlier graphs. Third, it ensured unanimous compliance with a major condition for the use of chi-square and phi: that "80% of the expected frequencies should be 5 or larger" (Morgan et al., 2007, p.104).

In comparing the different groups using the chi-square test, I have generally aimed for a significance level of p=<.05, although I have chosen to report the more liberal alpha of p<.1 as "minimally significant" where it occurs. This level of significance, while not as strong, is still

frequently used and reported (Buskirk, 2008). For effect size, I have used the frequently cited

effect size standards developed by Jacob Cohen (1992): .10 to .30 represents a small effect size,

.30 to .50 represents a moderate effect size, and .50 and above represents a large effect size. In

Cohen's standards, effect sizes less than .10 should be considered "trivial" (Gray & Kinnear,

2012). A more specific standard has been proposed by Rea and Parker (1997) who suggested that

.00-.10 should be considered a "negligible" effect, .10-.20 should be considered a "weak" effect,

.20-.40 should be considered a "moderate" effect, .40-.60 a "relatively strong" effect, .60-.80 a

"strong" effect, and .80-1.00 a "very strong" effect (p.191).

     The interview data was also extensively analyzed. Given the large volume of interview

data, the first round of coding was based on the digital recordings of the interviews. Because it

has been suggested that a 90-minute interview would take 4-6 hours to transcribe (Seidman,

1998), a decision was made first to begin the process of interview analysis by coding the live

interviews prior to the transcription process. In the first round, notes were taken and a series of

memos were written that highlight researcher reaction to and perception of the first round of

interviews. These memos "develop thoughts…begin the analysis process….and frees [the] mind

for new thoughts and perspective" (Glesne, 2006, p. 148). In this way, the first listening of each

interview was done a short period of time after interviews were conducted. I also conducted a

preliminary coding of the interviews to identify salient themes and to attempt to make

connections between the different interviews. Since a researcher cannot expect to identify all the

themes that emerge during the interview process, it is crucial to decide on a set of themes to look

for across interviews (Rubin & Rubin, 2012). Thus, for my second listening of the interviews

(after all interviews were completed), I used the memos and previous interview notes to

construct a rubric (shown and explained in Chapter Four) that led to the selection of 12

indigenous-oriented educators. (See Chapter Four for more information on the analysis of

interview data and the construction of profiles for the indigenous-oriented teacher educators.)

These interviews, as well as selected others, were transcribed for more in-depth analysis. Patterns

were identified and "thematic connections" were recorded (Seidman, 1998).

The guiding principles for early interview data analysis included grounded theory.

Grounded theory helps to "bring the researcher closer to the informants' experiences" (Bernard

& Ryan, p. 607) by looking at the text of the interview and linking it with different theories. This

process is also helpful in analyzing data in a manner that is useful for linking it with survey

results. Bernard and Ryan (1998) provided an excellent summary of grounded theory:

> The mechanics of grounded theory are deceptively simple: produce verbatim transcripts
>
> of interviews and read through a small sample of text (usually line by line). Identify
>
> potential themes that arise. As analytic categories emerge, pull all the data (that is,
>
> exemplars) from those categories together and compare them, considering not only what
>
> text belongs in each emerging category but also how the categories are linked together.
>
> Use the relationships among categories to build theoretical models, constantly checking
>
> the models against the data—particularly against negative cases. Throughout the process
>
> keep running notes about the coding and about potential hypotheses and new directions
>
> for the research. This is called "memoing" in the vocabulary of grounded theory.
>
> Grounded theory is an iterative process by which the analyst becomes more and more
>
> "grounded" in the data and develops increasingly richer concepts and models of how the
>
> phenomenon being studied actually works. (p. 608)

Although these may not have been grounded in "theory" in the traditional sense of the

word, it allowed me to see connections in a composite portrait of indigenous-oriented teacher

educators. It gave me a systematic way to look at the interview data and draw from it substantial themes and patterns.

Given that Spillane et al. (2002) suggested that schemas are a central part of how policy agents make sense of local policy, schema analysis played a central role. "Schema analysis is based on the idea that there is too much information about reality for people to deal with and that people must carry around some simplifications that help make sense of the welter of information to which they are exposed" (Bernand & Ryan, 1998, p. 604). Schema analysis looks for the cognitive aspect of the interview—how people make sense of things, how they fill in information gaps, and how they reason about decisions and situations they confront in their everyday lives. This model places emphasis on how individuals make sense of a particular context and the information that they receive within it, as well as how they arrive at the decisions they make. As Spillane et al. (2002) noted "Schemas can guide the processing of cognitive and social information, helping to focus information processing and enabling the individual to use past understandings to see patterns in rich or ambiguous information" (pg. 394).

Researcher Positionality, Limitations, and Delimitations of the Study

Positionality may be defined as "The researcher's awareness of his or her own subjective experience in relation to that of her or his participants" (Deutsch, 2004, p.888). Researchers need to pay careful attention to both the cultural and racial dynamics of academic research (Milner, 2007), and it is crucial for one to consider issues of race and class power dynamics in the research process (Seidman, 1998). Further, how a researcher relates to and identifies with the research population will unavoidably affect the data gathered (Suzuki & Quizon, 2012). The major advantage of researchers considering their position is that "it compensates for ethnocentrically erroneous assumptions and overarching generalizations" (Fong, 2012, p.69).

Throughout the study I constantly examined my own positionality in relation to the participants and what it meant for me as a researcher. Given that I was a visitor from a United State institution, and given the traditional power dynamic between Mexico and its domineering (and sometimes interventionist) neighbor to the north, I encouraged and ensured participation of local officials and educators in each stage of the research process, engaging each institution with flexibility, openness, and mutuality.

In the end, perhaps the greatest challenge was my own prior experience as a teacher in Mexico. These were, after all, individuals who shared a number of my own interests and concerns. Although this past experience gave me unique insight into the process and the Mexican teacher education system, it required me to "step back" a bit from my previous role as an educator in Mexico and critically reflect on the system. It was easy to see myself there, struggling with the same issues that many of the study participants faced when working with their students and not having all the answers. Despite researchers such as Seidman (1998) who suggest that participants are not friends, I achieved a congenial, indeed fraternal relationship with my brothers and sisters of the normal schools, and I am certain that this relationship will surely outlive the writing of this dissertation.

This study has a number of limitations and delimitations. For starters, as I say elsewhere in the dissertation, this was not an implementation study. Its goal was not to decide whether, or how, or even to what extent the General Law on Indigenous Rights of the Linguistic Peoples is being implemented. Rather, it addressed the sense making teacher educators have as they strive to make sense of the law, indigenous education in Mexico, and the context in which they work. Although findings from such a work would be difficult to apply elsewhere, the case of Mexico represents one example of the difficulties involved in reforming teacher education on the

national level. Methodologically, the principal weakness of the study was my inability to triangulate survey data and interview data with observation. Although observation certainly took place, my limited funds and limited time at each institution necessitated my concentration on the interviews and surveys. In the end, I acknowledge that the dissertation is a starting point and not an ending point, and I hope that despite its limitations it can make a lasting contributing to the field. Lastly, the dissertation contained a personal disappointment—the limited time and scope of this dissertation offered little space for the dissemination of Mayan culture, something that will remain a high priority for me but will have to be reserved for future writing.

CHAPTER FOUR

THE ORIENTATIONS OF INDIGENOUS-ORIENTED MEXICAN TEACHER

EDUCATORS

Chapter Focus

In this chapter, I present how Mexican teacher educators in Yucatan and Chiapas think about indigenous education and indigenous educational policy in Mexico, particularly as it relates to the General Law on the Linguistic Rights of Indigenous Peoples. I begin by looking at 12 indigenous-oriented teacher educators whose responses to the interview questions displayed a number of distinct background characteristics, attitudes, and beliefs. I summarize some of the backgrounds of these teacher educators and analyze some common patterns of attitudes and beliefs they display in the interviews, giving examples of each. I then compare and contrast these outstanding teacher educators with the larger teacher educator population by looking at survey data. I conclude by offering my analysis on what I found most striking about these results, and why it is significant in the context of preparing bilingual teachers in Mexico.

As I interviewed a number of teacher educators from two southern Mexican states, it was clear that some were quite outstanding in terms of their understandings and beliefs regarding issues of diversity and equality. The Mexican system of normal schools is frequently criticized as antiquated and slow to respond to change (Tatto et al., 2007), and some have even contended that the system of normal schools is hampered by the schools' close relationship with Mexico's teachers' unions (Sandoval Flores, 2001). However, it became clear during the interviews that there were a number of dynamic, progressive teacher educators whose view of the world was one that centered on issues of equality. As I began to analyze and transcribe the recordings, it appeared that some of these teacher educators "got it" while others simply did not. The issue was

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one of what I call orientation. I define a teacher educator's orientation as their position in the world—where they stand and how they see and interact with the world around them. Though there are a number of terms that can be used to describe this phenomenon, including such terms as disposition and worldview, I choose the term orientation because it suggests one's position is relative to others and does not exist in a vacuum. One's orientation is how they fit into the society at large, how they see the world around them, and how they understand the changing dynamic of their environment and their own role in that environment.

In Mexico, as in other nations throughout the world, teachers often marginalize students by feelings of apathy and by failing to understand the populations they are teaching. Often, the students most affected by these teachers are the indigenous populations. As a nation, Mexico has been struggling to improve the educational opportunities for its indigenous populations, who frequently suffer from low completion rates, low academic achievement, limited opportunities, high rates of poverty, and limited access to quality teachers (Schmelkes, 2000; Hall & Patrinos, 2006; UNESCO, 2005; INEE, 2008). Numerous studies have demonstrated Mexican teachers' insensitivity toward indigenous culture and language (Schmelkes, 2000; Mijangos & Romero-Gamboa, 2006).

This is the focus of this chapter. If we are seriously to consider how teacher educators make sense of and implement educational policies, it seems crucial to consider first their attitudes and orientations. Specifically, I assumed that teacher educators who are most successful in preparing teacher education students to work with marginalized populations, in this case the indigenous population of Mexico, have specific orientations toward the local indigenous populations that would generally be considered likely to have a positive effect on the instruction of future teachers to work with indigenous populations. I further hypothesized that it would be

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very difficult for teacher educators with a negative view of the indigenous population to be effective teacher educators in institutions with a mandate to produce teachers capable of working in indigenous communities. One who does not believe in the value of indigenous culture would be unlikely to develop the attitudes necessary to implement successfully the new policy. But what it means to believe in the value of indigenous culture and language and what this might look like for a teacher educator is not clear. The interviews give vivid examples of what such values and orientations might entail.

First, I lay out the analysis of 90 interviews with Mexican teacher educators and how I selected 12 "indigenous-oriented" educators. I provide profiles of these educators. Although, as I said previously, I did set out with a specific goal of creating profiles of these educators, their backgrounds and life stories contributed greatly to my own understanding of what such values, beliefs, and orientations look like in real people, and it seems useful to share them here. Then, I present patterns within those interviews. I describe common background characteristics that are frequently found among the indigenous-oriented teacher educators of the study. I follow this by analyzing the patterns of orientations found in indigenous-oriented teacher educators. Next, I use survey data to examine how such orientations differ from or diverge from the orientations demonstrated by the general population of teacher educators in the survey data.

The Common Orientations of Indigenous-oriented Teacher Educators

Today, there is much talk about the notion of orientations in teacher education and whether or not such constructs are even useful. Regrettably, much of the literature used in Mexico about the personal characteristics and beliefs of teachers originates from either the United States or the United Kingdom, and very little is written about issues of teacher educator or teacher attitudes and orientations in the Mexican context. Although Mexico has worked to

improve its research capacity, it has traditionally produced academic research that is limited in its quality and scope. Santibañez et al. (2005) report that educational research in Mexico is poor due to a relative low number of educational researchers when considering the size of the population, the poor academic quality of graduate programs, the lack of doctoral degrees, the overconcentration of academic researchers in the capital city, the poor environment for research, and the fact that few researchers are full-time and are often forced to juggle teaching, second jobs and other commitments. Further, Mexico produces insufficient quantitative research, policy analysis, and evaluative research, particularly in education (Santibañez et al., 2005).

Although it is obviously preferable to draw principally on research that originates in the country of study, a researcher working in a country with an underdeveloped infrastructure for research is often left making a difficult choice: Should one use a U.S. based theory that more appropriately addresses the issues under investigation, or should one limit themselves to local literature that may be inappropriate due to the limited scope of the available research? Or worse, should one avoid conducting research on a topic in a particular country for no other reason than that no one has developed a "framework" that is perfectly suited for the research topic? Here, I have chosen to use Mexican and other Latin American authors where possible, although the research area of teacher educators as policy actors is an area largely unstudied. As a result of the lack of literature that directly addresses the topic of my research, I draw from international, even U.S. based research to help the reader better understand my own work in the overall context of teacher education and educational policy. This research shows there is sufficient evidence to suggest that individual attitudes and orientations affect the academic outcome of indigenous children. For example, Schmelkes (2000) identified a lack of valuation of indigenous culture as a primary reason indigenous education in Mexico has failed.

Freeman (2003) traced the origins of the discussion of "dispositions" to the standards-based teacher education movement, and particularly to the Interstate New Teacher Assessment Support Consortium (INTASC). INTASC (1992) adopted the Model Standards for Beginning Teacher Licensing and Development (the report was chaired by Linda-Darling Hammond), which outlined standards that "represent a common core of teaching knowledge and skills which will help all students acquire 21st century knowledge and skills" (p. 3). The standards were based on ten principles, addressing everything from subject-matter knowledge to their relationships with colleagues. The standards elaborated on each principle under three subheadings--knowledge, performances, and "dispositions." These dispositions included issues such as "appreciating multiple perspectives," the belief that "all children can learn at a high level," and appreciation for "human diversity."

Many have argued that dispositions are central to preparing teacher education students to work with diverse populations and to represent skills crucial to allow the teacher to be an advocate for social justice. Villegas (2007) dismissed accusations that an emphasis on dispositions in teacher education programs is a violation of free speech, and rather argued that dispositions are "reasonable and defensible" (p. 370). She said that whether or not we agree with it, schools form a sorting mechanism where those who excel in school will do better socioeconomically than those who do poorly. However, since poor and minority children face extensive barriers to academic success and are often funneled into inferior positions, it is crucial that teachers are aware of the various barriers students face so they might be able to make the classroom a more equitable place.

In reviewing my own interviews with teacher educators in the south of Mexico, there is a set that stands out in terms of their own orientation. Mexican indigenous-oriented teacher

educators of the study share a number of common experiences and social attributes. It is not surprising then that there were also a number of shared, common threads that regularly appeared throughout the interviews of the most outstanding teacher educators. As I previously discussed, I will refer to these as common orientations—that is, a set of attitudes and beliefs that places the teacher educator in a particular social context.

Analyzing Teacher Educators and their Orientations

As previously stated, these indigenous-oriented teacher educators were identified after a careful review of the 90 interviews conducted with teacher educators in the two Mexican states. All 90 interviews were listened to at least once. [27] Each interview was rated using a 15-point scale. There were five categories that were initially rated. Interviews were given a score in each category—zero was given when the interviewee displayed no evidence of the category during the course of our conversation, one meant the interviewee showed limited evidence of the category during the interview, and two and three showed good and outstanding evidence of the category, respectively. The first category was peer reputation. Each interviewee was asked to nominate someone other than themselves on the faculty who best exemplified a teacher educator who was well-respected for their work in training teacher education students in issues of diversity, multiculturalism, and indigenous education, and a tally was taken at each institution of how often each individual faculty member was mentioned. Those who were mentioned most by others got the higher number of points. The second category was the completeness of the answers. Points were not given for simply the length of time a respondent spoke. Rather, "completeness" was judged by their ability to give accurate, insightful answers that represented the complexity of the topic at hand and avoided a superficial, uninformed reply. Also, I asked: Did they give simple

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[27] The exception was a few subjects who were not recorded due to interviewee preference, in which case any available corresponding notes were reviewed.

answers that offered little new information or did they give complete answers that demonstrated extensive thought and reflection on the issues and the context in which they are working? Could the interviewee expand on his/her answer if requested? Or did they simply repeat their previous answer? Third was general knowledge of teacher education. Could they articulate clearly their ideas and knowledge of teacher education? Did they show a strong grasp of teacher education methodology and research? [28] Fourth was knowledge of multicultural education. Although I did not specifically assess answers for their knowledge of indigenous education, they were examined to determine what level of knowledge they brought with them concerning multicultural education in general and in working with diverse populations. Usually, of course, given the context this resulted in an answer related to Mexico's indigenous population. Lastly, each interview was assessed for the interviewee being able to provide concrete examples of how he/she demonstrated their knowledge and views with actions in the classroom and in their community. The following rubric was used:

Table 4.1
Rubric for Initial Evaluation of Teacher Education Interview

Dimension	None (0)	Limited (1)	Acceptable (2)	Outstanding (3)
1. Peer Reputation				
2. Completeness of Answers				
3. Knowledge of Teacher Education				
4. Knowledge of Multicultural Education				
5. Ability to give specific examples of actions taken that supports their views				

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[28] As this was not a test, quoting or citing the literature was not required to achieve the maximum score. However, I did try to assess if their answers were in line with recent literature on teacher education.

This rubric was designed to provide me with a starting point in analyzing the interviews, and it contains direct and indirect substantive categories (rubric categories two, three and four), as well as a category that gauged their reputation with peers (one) and one that served as a proxy for activism (five). Alejandro (see his profile below), for example, received 3 points in every category. He was among the two faculty members mentioned most frequently by his peers as being an excellent example of a teacher educator dedicated to work with the indigenous population. In an interview that lasted over two hours, he gave highly detailed answers on each question, often considering the perspectives of different groups and the political context in which the situation occurred. He also got high points for his knowledge of teacher education and multicultural education. He referenced a number of important authors. Further, he could detail a number of actions he had taken that supported his views, ranging from starting each of his courses with an in-depth review of the General Law on the Linguistic Rights of the Indigenous Peoples, to his participation in a human rights lawsuit over forcing an indigenous language-speaking child to write a test in Spanish, to working to instill an interest in the Mayan culture and language in his son.

In the first round, I listened to (or read) all 90 interviews in order to select the 25 teacher educators that achieved the highest scores on the rubric. These were then transcribed (if they were not already transcribed), and I re-reviewed the 25 in even greater detail to narrow down my selection to 12 finalists for the deepest level of analysis. The purpose of these evaluations was to find 12 interviews that achieved the highest score on the rubric as exemplars of indigenous-oriented teacher educators whom I selected for further interview analysis. I do not claim they are "the best," nor do I claim that there are not other excellent indigenous-oriented teacher educators in the states in which I worked. I was simply aiming to find a manageable subset of interviews in

which to work, given the large amount of data collected. Further, I should point out that while

this highlights 12 of the interviewees, it does not limit the importance of the study's other

participants, whose thoughts and comments still appear in the survey data and interview

comments throughout the dissertation, and hence very much influenced my analysis and

interpretation.

Nearly all the educators mentioned here (with the exception of two who worked at the

National Pedagogical University, one of whom is retired from the normal school and decided to

start a second career at the National Pedagogical University) were *normalistas*—that is, faculty

at the normal schools of Mexico who are entrusted with the important task of preparing future

teachers for service in the public school system.[29] The *Normalistas* in the study form a colorful

and diverse group who come from a variety of different backgrounds. See Table 4.2 for the list

of this set of 12.

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[29] For a more extended discussion of the *normalistas* and the Normal Schools of Mexico, please
see Chapter 3.

Table 4.2
Some Indigenous-oriented Teacher Educators

Name	Parents' Education	Career Background	Spoke an Indigenous Language?
Luis	None/Illiterate	Elementary Teacher	Yes (Native Speaker)
Sofia	None/Illiterate	Preschool Teacher	Yes (Native Speaker)
Alejandro	Unknown	Elementary Teacher	No
Ramona	Early Elementary	Elementary/Special Education Teacher	No
Marianna	None	Catholic Nun	No
Guillermo	Early Elementary	Early Secondary Teacher	Yes (Native Speaker)
Rodrigo	None	Elementary Teacher	Yes (Native Speaker)
Ernesto	Early Elementary	Elementary Teacher	No
Hilda	None	Elementary Teacher/Principal	No
Horatio	Father deceased; Mother had high school level certificate in teaching	Elementary/Jr.High Teacher	No
Eduardo	None	Elementary Teacher	Yes (Native Speaker)
Samuel	Mother-Lower Secondary School; Father-High School	Government Administrator	No

The most prominent features of the interviews of these indigenous-oriented teacher educators fall into five main categories: their appreciation, their identification, recognition, diffusion, and critical thinking. Their appreciation shows what they valued as teacher educators. Indigenous-oriented teacher educators from this group showed an *appreciation* not only for indigenous language, but also for indigenous culture. They also appreciated the diversity that the indigenous peoples provided to a multicultural Mexico. They routinely *identified* with the indigenous populations, and they showed empathy for the indigenous population, mostly via their own backgrounds and/or experiences with the indigenous populations. They also identified the indigenous population as being a crucial part of the identity of the Mexican nation. They *recognized* the barriers that indigenous students faced and they recognized the existence of the

indigenous populations as separate and advanced cultures with their own set of ideas, traditions, beliefs, and knowledge that has made significant contributions to both national and world civilization. They also recognized the importance of preserving the indigenous languages of Mexico. They rejected standardized, uniform solutions to educational problems and understood that different children learn differently in different contexts. They are committed to the *diffusion* of the indigenous culture and their language in their nation, communities, teacher education programs, and families. This takes many forms, but I provide some examples of how these indigenous-oriented teacher educators implemented their orientations in the classroom and in the community. Lastly, they were cr*itical thinkers* who are able to see the imperfections in their society, their institutions, and themselves and who are willing to work to correct the flaws they encounter.

Profiles of Indigenous-Oriented Teacher Educators

Luis, 66, a native Mayan speaker, was born in a small town about 30 miles outside the capital and relocated to another small town near the ruins of Chichen-Itza while still an infant. His infancy was one of extreme poverty, having been born shortly after the Second World War, a time when many Mexican villages faced widespread food shortages. Neither of his parents attended school, and he described both of them as "being completely illiterate." Even though the law said he was technically supposed to start school at age 6, he passed the age of 6 "having never been read to" or "counted to," and his mother never enrolled him in school. He attributed this to her struggle to buy food and having nothing left over for the expenses of school. [30] His father abandoned him and his mother early in life, and the only contact he ever had with him was "one or two interviews when I was 13." Finally driven by hunger and desperation, his mother

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[30] Although public schools in Mexico are free, there are a number of indirect costs associated with uniform, shoes, supplies, etc.

went to the capital to seek employment and eventually found work cleaning the cathedral. Her

contact with the priests convinced her that her son needed an education, so at the age of 7, one

year behind schedule, he finally enrolled in the local elementary school. At that time, indigenous

communities did not have fifth and sixth grades available to them, so they had to go elsewhere if

they were to finish elementary school. He took advantage of a program during the administration

of former Mexican president Lazaro Cardenas to educate [31] indigenous students in rural

communities by sending them to centralized boarding schools where they received free room and

board, often in exchange for work. With economic help from his primary school teachers, he

enrolled in a residential program of teacher education. [32] He later finished a master's degree.

Soft spoken, tidy, and pensive, Luis spent several years as an elementary teacher and

founded several rural schools in underserved, predominantly indigenous areas, though in a state

different from his own. He is a quiet activist with strong views on the current state of teacher

education and indigenous education in Mexico. Among his many strengths as a teacher educator

are his knowledge of his indigenous language, educational policy, economics, and

multiculturalism in the classroom.

Sofia, 46, was raised in the rural highlands of Chiapas and is a native speaker of the

Mayan language Tzeltal. Her parents spoke no Spanish and she credits them with developing

"the sense of struggle" that indigenous people face by teaching her "the norms of indigenous

communities" and their culture. Among those norms were that girls "would get married at a

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[31] Some would say "indoctrinate."

[32] Teacher-training in Mexico was not at the level of higher education until 1985. For a full explanation of Mexico's teacher education system, please see Chapter Three. Also, it was previously common for governments to sponsor normal schools labeled as "*internado*." The *internado* normal schools were designed to create teachers for rural communities. It also offered children of poor farmers ("*campesinos*") educational opportunity by giving them room and board at the institution. For the most part, this was the only opportunity for children of poor farmers to go beyond elementary school.

certain age," often arranged and usually no later than when they finished lower secondary school. She said that even in school she sensed the struggle of women in the community "and wanted to be different."

She resisted an early marriage, and after finishing lower secondary school (the highest level available in her town) she travelled to the city to search for opportunity. She was held back by a limited knowledge of Spanish, however, and moved from job to job before finding work as a secretary in a government office. It was there that she became familiar with the EZLN (Ejército Zapatista de Liberación Nacional, or the Zapatista Army of National Liberation), Chiapas' revolutionary organization that staged the 1994 uprising.[33] She joined the EZLN, serving in a number of women's rights groups and claiming the group helped her to establish her "identity as a Mayan, an indigenous woman" and for the first time she recognized that she was "a citizen with full rights."

After the revolution and the San Andres Accords, she worked as a translator and began to write on indigenous topics, and she finished high school along the way. She then passed an exam for a teaching scholarship which allowed her to teach as a bilingual teacher in a preschool after just three months of initial training. She finished her bachelor's degree during her weekends and summer breaks while working and teaching in the same community where she was raised, and when school was not in session or she was not studying, she started a local women's group to educate women in the community on gender equality issues. She also explored the history of the Mayan culture and her extensive reading on the topic sharpened her interest in Mayan mathematics. She eventually developed a formal research project that centered on the logic of Mayan mathematics, and her project was selected for funding by the Ford Foundation after an

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[33] See Chapter Two for more about the Chiapas uprising.

extremely arduous international competition. She noted that there were a number of interviews during the selection process, many of them in English. During the contest, she struggled to relate stories of the Mayan cosmovision[34] in English, saying that many such terms did not exist in local Spanish, much less in an English language with little contact with the Mayan people. Her selection, while she admitted it surprised her, was an apex of her professional life and an important recognition of not only the importance of researching the Mayan people, but a testimony that the Mayan people themselves can develop the capacity to conduct research on an internationally competitive level. In spite of her successes, she still faced social pressures to marry.

> I was already 32, I hadn't played the role of being a mother, or a housewife, or a spouse, and again people and society starting criticizing me." She cried as she expressed sadness that for an indigenous woman, it had to be one or the other—one could have a family or have a career. "It's hard to say I want something else…[other than what society has prescribed for me]… I don't care if other people marked me. But my own town, my own community, my own family marked me.

Despite her father's resistance, she won a fellowship to study for a master's degree in Curriculum Studies at the University of Chile in Santiago. She completed the master's and her thesis with highest honors, even though she was tempted to give up and go home, saying she battled with depression over her difficulty in understanding the texts and the theories.

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[34] The Mayan cosmovision is a distinct way the Mayan people look at the universe, which consists of the heavens, the earth, and the underworld. For a complete discussion of the Mayan cosmovision, see David Carrasco's *Religions of Mesoamerica: Cosmovision and Ceremonial Centers*, Waveland Press (1998) and Merideth Paxton's The Cosmos of the Yucatec Maya: Cycles and steps from the Madrid codex (2011). Indigenous people have long been discriminated against for practicing traditional religions. Molesky-Poz (2006) noted that up to 50% of the Mayan people practice traditional ceremonies, "but only 10% do so openly" (p.2).

She returned to her home state to work on educational reform issues and teach in the local normal school. But she still faced the same constricting social norms as before. After becoming impregnated by her unmarried partner, a situation viewed highly negatively in conservative indigenous communities, she was subjected to yet another round of criticism from her community. When the baby was lost while traveling the bumpy roads between her hometown and the city, they blamed her and her professional ambitions and career commitments. She later married her partner, and they had another child together, meaning she has finally achieved her desire of having both a career and a family.

Alejandro, 56, shared many of the same views with Luis but with a different personality and tone. Sporting long hair, thick spectacles, and a ruffled shirt, he is an unapologetic product of the 60's and the quintessential aging hippie. A former elementary school teacher, he has lectured at a number of national venues on racial discrimination against the indigenous population. He does not speak an indigenous language himself, although he says his grandparents did. In spite of this, he strongly identifies with the indigenous people and takes pride in the fact that people call him "El Indio"—the Indian. He is a tireless advocate with a willingness to take on authorities in the name of social justice. He is particularly strong on issues of race, class, and differential instruction.

Ramona is an alumna of the very normal school where she taught. Her parents had only studied until the third grade of elementary school, and although she hoped to study nursing, her family insisted she enter the normal school to become a teacher, as teaching was considered a lifelong job that would help bring her family out of poverty. A retired elementary teacher in her 60's, the diminutive Ramona is the Madeline Albright of the normal schools—tough yet diplomatic and very, very smart. She ranks as one of few interviewees with a superior knowledge

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of special education issues, a field that regrettably receives too little attention in Mexico, although she was also strong on issues of gender and learning theories. She has a bachelor's degree in elementary education, a bachelor's in secondary science education, and a master's in teaching. She is currently studying for a doctorate in education.

Mother Mariana is the lone representative of private schools among the indigenous-oriented teacher educators. A Catholic nun with boundless energy and enthusiasm, she was raised in an impoverished family in the rugged highlands of the Chihuahua mountains. She wanted to make a difference in her community, but was faced with limited options for studying as her parents were unable to pay tuition. Thus, she joined an order of nuns dedicated to working with the most economically marginalized population. Her early years were spent working with the Tarahumara, a group of highly independent indigenous people in Mexico's Sierra Madre Occidental who are traditional cave-dwellers and have both historically and recently struggled with famine and the elements. She later travelled to Peru, where she spent several years working with street children in Lima and founded a school to educate them. She came to Southern Mexico to work on educational equality issues. She was recently elected by her peers to head a state-level school organization. She was actually the first teacher educator I heard talk about the extensive educational barriers of their own students (i.e., the future teachers currently studying in the normal schools), and not just the students their alumni would be teaching, and she saw addressing these issues as one of her primary goals as an administrator.

Guillermo is a former teacher in his late 40's and a native Mayan speaker. Brought to one of the normal schools to work on the new specialization in indigenous education, he is dapper and amiable. He is a gifted linguist with a strong knowledge of the nuances of language in the classroom. His mother never made it to school, while his father made it to the second

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grade. He was originally trained as an engineer, but a lack of jobs in the field during that time, combined with a love for children, drove him back into the classroom to study for a career as a high-school math teacher. He says Yucatec Mayan is his native language, but he never learned to write it until he was an adult. He is widely recognized throughout the south of Mexico for his expertise on indigenous language learning, and he has written a textbook on the subject.

Rodrigo is a native Mayan speaker who hailed from a small, rural town. He studied to be a teacher through a program similar to the one attended by Luis-a boarding school designed to educate the children of poor rural farmers. His parents also have limited educations. He said he became a teacher because having the type of contact a teacher has with a number of young minds and members of the community was the best place for him to work to preserve his native language among the younger generations. He noted that teaching is the only professional field that was available to him at that time, because the public normal school he attended was the only institution to offer him the financial assistance he needed to continue studying.

Ernesto was born into a family he described as "less than middle class." His father was a street peddler and his mother was a housewife. He teaches in the normal school in the early morning, beginning at 7 am. After that, he goes to his full-time job teaching the second grade in a local public school. In the evening, he returns to the normal school, working with students as an advisor on their senior theses. He has a reputation among his peers as someone who takes every professional development course offered by his institution. He has completed every level of the "Carerra Magisterial," a national program in Mexico designed to create a cadre of highly-trained, high-quality teachers. The Carerra Magisterial, described as a "system of horizontal promotions" (SEP, 2011c) is a multi-level system of evaluations and training that is linked to increased pay for classroom teachers at the primary level. Ernesto was noted for his critical,

sarcastic tone and his in-depth knowledge of the political landscape of educational reform at both the local and state level. Ernesto is a graduate of the normal school where he currently teaches, and he notes that although he has taught there for over 20 years, many of his former teachers are still are on the staff.

Hilda was born in the verdant hills of central Mexico, where her parents were poor farm laborers who never attended school. She admitted she entered the normal school purely because of "economic factors" and she said, "There didn't exist any real personal desire to be a teacher." Her mother was from the south of Mexico, however, and she travelled to the south to teach indigenous students in a one-room, multigrade rural school. Teaching, however, "permitted me to really discover my hidden and natural calling to this career." She later earned a bachelor's degree in primary education and three master's degrees: one in educational psychology, one in guidance counseling, and another in curriculum design. She has served as a principal of an elementary school, chair of the normal schools' field work department, chair of the normal school's outreach department, and the academic subdirector[35] of the normal school. She recently came full circle and was appointed director of the normal school that she had attended in her youth.

Horatio is a current administrator who has held a number of positions in the normal school, including time as director and time as a coordinator of normal schools for the state government. He has also taught science, health, and ecology at the elementary and early secondary levels. His entire education was in the same city as the normal school where he works, and he has both a bachelor's and master's in science education. He has begun a doctoral program

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[35] Each normal school has a director, but also a "subdirector" who are the second-in-command and responsible for a specific area. Each school I visited had an academic subdirector and a administrative/financial subdirector, though larger schools may have more.

entitled "Education Science" at a local extension campus of a private, for-profit university. His mother was a primary school teacher and his father died at a young age.

Eduardo was born in a small town to illiterate parents. They were monolingual Tzotzil speakers who spoke no Spanish and had no formal education. He was raised in great poverty. He told the story of his father frequently having to borrow money to buy corn and beans to feed the family. The interest rates were nothing short of usury, and after borrowing the money he would travel to a plantation where he would spend two to three months engaging in hard labor to repay the debt. Then he would return home, borrow more money to buy food, and start the cycle all over again. He was fortunate that his town had one of the region's few indigenous schools that allowed him to study until the sixth grade and he finished primary school in his community. But in order to continue to lower secondary school, he needed to travel to the city. He had no family in the city or any money to pay accommodations, but he was able to find a family in the city that hired him to do domestic labor in exchange for room and board. When the family had enough left over, he was paid a few small coins, although he often got nothing. Yet he was able to finish secondary school and high school, and he ultimately went on to earn a master's degree in educational administration. He has worked in numerous indigenous schools and also in the state's office for indigenous education.

Samuel is a current administrator in one of the normal schools in the region. A graduate of Mexico's prestigious National University (UNAM), he worked on teacher education policy at the national level in Mexico City for several years before returning to his home state to work in the state-level department of special education. He also served a term as coordinator of the state's education department office in charge of overseeing the normal schools. Characterized by his perpetual smile and business attire, Samuel projects himself as an ultra-professional

technocrat with an in-depth knowledge of Mexico's teacher education system and theories surrounding teacher education and special education. Although he identifies himself with the area's indigenous population, since he said his grandparents were Mayan speakers, he does not speak an indigenous language. Samuel received prestigious accolades and has held some relatively high-level posts related to teacher education, but he has never taught, although he spent substantial time working in rural communities as a school-parent coordinator. He is one of the few indigenous-oriented teacher educators with two parents who completed primary school, as his father attended lower secondary school and his mother attended high school. His experiences are unique as he has also served as an Invited Professor of Psychology[36] at the state's most prestigious public university. This makes him one of the few normal school faculty also to have substantial university experience.

At first look these teacher educators seem to be a diverse group of individuals. Some are from different states and they often came to teacher education via different routes. For some women, such as Ramona, it was because her dream of becoming a nurse was blocked due to the insurmountable financial constraints of her family, while for Guillermo it was the belief that education would lead to a more stable career than would his original training as an engineer. (Both, however, were motivated by financial need.) Still, a close examination of the interviews suggests many similarities in the backgrounds of these teacher educators. Among the common threads are the following:

➢ They generally came from modest backgrounds. Most had parents who were workers or even illiterate. None of them came from professional classes (i.e., had parents who were doctors, lawyers, etc.), and as noted, only Samuel had two parents who completed

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[36] A position similar to a visiting professorship in the US.

elementary school. And, although in the general population I interviewed many teacher educators who were children of teachers, only one person in this select group had parents who taught.[37]

➢ Most saw teaching as an avenue to the middle class. In fact, many mentioned being the younger child was the fortunate coincidence that made it possible for them to study, as older children worked to pay for their younger siblings' education fees. Also, many normal schools have public financing schemes and stipends not provided at any other higher learning institutions.

➢ Most had teaching experience in a primary school in either an indigenous or rural area.

➢ Each had incorporated an indigenous language into their life in some manner, ranging from speaking it at home, to being the children of Mayan speakers, to attempting to learn the language, to teaching it to students. Others taught it to their children or served as legal advocates for those who speak the language. Still, not all of them could speak an indigenous language. [38]

➢ All were strong critical thinkers who regularly reflected not only on the educational process, but also on their institutions, their culture, their society, and their individual performance as teacher educators. They did not hold back from pointing out something they saw as an injustice, and they regularly challenged their colleagues to do the same.

➢ While some were more politically involved than others, each saw the role of the teacher educator as one who could have a positive impact on society and play a key role in the implementation of indigenous rights and the improvement of indigenous education.

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[37] Keep in mind that there prior to 1987, teachers were not professionals and received only the equivalent of a high-school education. See Chapter Three for more information.
[38] See Chapter Three for closer look at capacity of the region's teacher educators to speak an indigenous language. See Chapter Six for a more in-depth discussion of its policy implications.

The Common Orientations of Indigenous-oriented Teacher Educators

I previously commented that the indigenous-oriented teacher educators were distinguished by their appreciation, their identification, their recognition, their diffusion of indigenous culture and language, and their critical thinking. Here, we look at each one of these concepts in more detail.

Appreciation.

Appreciation consists of seeing the value of the indigenous language and culture and believing that indigenous language and culture are worthy of being preserved despite the possibility that such a preservation might be costly. Some would say appreciating indigenous language and indigenous culture are two different things, and a person may appreciate one without the other. For example, someone may appreciate the language for the beautiful sound of its intonation, but have little appreciation for the culture. Or, as the survey data appears to suggest is common among teacher educators,[39] they may value the culture more than the language, perhaps due to the common perception that the language is not useful in the labor market. However, Nieto (2010) and others (including many of the indigenous-oriented teacher education faculty I highlight in this chapter) have suggested that language and culture are indivisible, and thus to have true appreciation one must embrace both aspects of the current indigenous existence in Mexico. The indigenous-oriented teachers mentioned here showed an appreciation for both. In several interviews, appreciation turned to pride, as several talked about how proud they were to hear their language spoken. The normally stoic and serious Rodrigo smiled broadly, displaying his pride as he said that he once again hears people speaking Mayan on the street:

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[39] See the survey data at the end of this chapter for more details.

Now, some people do not believe it but there are people in the city on whatever corner

and we hear people communicating in the Mayan language…People communicating in

the Mayan language whether it is for confidentiality or whether it is a normal form of

communication between them, they do it.

In addition to showing his pride in hearing the language, however, Rodrigo is making two

important observations here. The first is that speaking the Mayan language can be "normal."

Given that speaking an indigenous language in Mexico is often a stigma, the use of a minority

language being classified as "normal" is significant. For something to be normal, it must be

widely accepted. Secondly, its use "for confidentiality" is interesting because here Rodrigo

identifies the use of the Mayan language as an advantage. It is useful as a language which allows

members of a group to communicate with each other free of intervention from outsiders. This is

in sharp contrast with the views (discussed elsewhere in this chapter) often brought with

globalization that indigenous languages are "useless," because they are not readily transferable

into financial gain in the same way as English.[40] This actually inverts the view, held by many in

the region, that speaking an indigenous language is something to be ashamed about.[41] Instead,

his comments make it something special that few people have the knowledge to access.

Alejandro also shared a story that highlighted his appreciation of the Mayan language:

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[40] Though there is a widespread perception that indigenous languages do not offer improved
opportunities for employment, some noted Yucatec Mayan language instructors and government
officials suggested in the interviews that given the new law's requirement to provide services in
indigenous languages, there is increased effort, at least in theory, to hire indigenous language
speakers by government agencies. I was unable to confirm, however, whether such hiring
actually ever took place and indeed the lack of indigenous speakers hampered many agencies'
ability to provide such services. In any event, such hiring would certainly be on a very small
scale when compared to the overall unemployment rate of the indigenous populations in Mexico.
[41] Gabbert (2004) notes that speaking an indigenous language was traditionally a class marker in
the Yucatan, and Yucatec Maya was considered "the idiom of ignorance" by the dominant
classes (p. 77).

There is a strong tendency for schoolteachers, even those in indigenous education, to

speak in Spanish and then make invisible many of the expressions of the Mayan

language, including making invisible the children who speak Mayan. Or, the children

who speak Mayan are in some form inhibited. I remember a very strong experience in an

indigenous school. The children came discussing among themselves in Spanish within the

school. They were children from fifth grade, so they were already literate in Spanish.

They came down the path, speaking Spanish, until they crossed through the archway of

the school gate. Then, like magic, they began to speak in Mayan. Therefore, I think this is

one of the dynamics they emit in school. This repression confronts children who speak

indigenous languages. It is a type of symbolic violence, as would say some authors. This

repression is not always the objective but it has a mechanism the teacher goes on

constructing, some consciously and some unconsciously--excluding the use of the Mayan

language in the classroom. Other teachers do use it [the Mayan language]…but only to

clarify the homework assignment so that there is an understanding that the child is going

to do it in Spanish. So there are none or few instances…where the dynamic of the use of

the [indigenous] language in schools has to do with the learning and reflecting process.

Here, Alejandro demonstrated his strong orientations in a number of ways. First, his

reference to "symbolic violence" suggests that he was at least familiar with the overall concepts

of the literature and can apply it to his own observations. He also showed his critical thinking

skills with his reflection on how teachers construct the symbolic violence he saw happening. He

further showed he understood the challenges that many indigenous students face in building their

linguistic identity, and he recognized that the superficial use of the language is not enough (i.e.,

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to clarify a Spanish language homework assignment), but it needs to be used in meaningful, real contexts.

Guillermo showed strong appreciation for the Mayan culture and language, and seemingly even used the terms culture and language interchangeably:

The Mayan culture needs to be valued so that people are not ashamed of it. I've noted when I go to Chichen Itza, I go with my people, and I speak purely Mayan. And I run into Chinese, Spanish, half a world that comes from different countries and each speaks their own language. I pass them and I am speaking Mayan...I listen to the foreigners, with the little notion I have about languages...I know they are speaking Italian or French or English, right? But I have noted that they turn and look at us when they hear us speaking in Mayan...'What language are you speaking?' they ask. I [speak Mayan] on purpose to show them that my language can...peacefully coexist with other languages-nothing bad happens. Now, you want to know what I am saying in Mayan? With pleasure, ask me and I will tell you. Now if I want to know how to say [something] in English, I will ask you, and we will learn.

Here, Guillermo's story is significant on several levels. First, he went to great effort to demonstrate his linguistic background and to show it. He intentionally went to Chichen Itza with other Mayan speakers and he intentionally put himself in a situation where foreigners will hear and inquire about the language he was speaking. Note that Guillermo started by stating his valuing of the Mayan *culture* but then telling the story about how he makes an effort to promote openly the *language* among the visitors of Chichen Itza. Thus, it seemed for Guillermo, language and culture are indivisible.

Horatio too spoke often about the need to emulate not only the Mayan language, but also the Mayan culture. When discussing the culture of the region, he stated:

I think there is a little bit of a lack of valuing of the Mayan culture, in our case. We speak of the Maya because it is here…all around us. There is a lack of feeling proud about our culture…we lack better diffusion of what [the Mayan culture] has achieved or what our ancestors have done so that the students can value what they have done and it is precisely this that gave birth to everything we have today.

Note that Horatio expressed his belief that the Mexican teacher education system needs to place more value on the Mayan culture. It is a topic of discussion, he said, because they are by chance located in an area that has a high number of Mayan inhabitants. Yet, his appreciation for Mayan culture was not the type of shallow, commercial opportunism of street vendors who sell "Mayan" trinkets to tourists, but rather for him formed the basis of his identity. He refered to it as our culture and spoke of *our* ancestors. Equally importantly, he saw his Mayan ancestors as not only the basis for regional culture, but also as a cornerstone of the national Mexican culture and he credited them as the source of "everything we have today."

Identity.

A common identity was another pattern that emerged in all of the interviews with the indigenous-oriented teacher educators. They all showed empathy for the indigenous population, and nearly all of them identified personally with the indigenous population in one way or another.

Alejandro said:

They call me the Indian. It's my nickname. Everyone knows me as the Indian. It makes me feel very proud. It was never a stigma for me. On the contrary, it was what has kept

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me going. But in practice, there is discrimination against indigenous language speakers--a lot of discrimination.

Alejandro not only displayed how his indigenous heritage is central to his identity, he went a step further and acknowledged that for many people, this same heritage leads to abundant discrimination. Yet, by accepting this nickname he was also making a strong statement that he is an advocate who is willing to fight for the indigenous people, even it is means that for him it causes some amount of suffering or detrimental effects. Rodrigo noted:

I hope that…before the culture is lost, better yet before we lose our identity, that we achieve its preservation, because whether you love the language or not, in the case of the Yucatan our Mayan culture is a symbol of the existence of the Yucatan Peninsula, and of all of Mexico, no? …Now, some people do not believe it but there are people in the city on whatever corner and we hear people communicating in the Mayan language… And this is what we are losing in Mexico, it is what we are losing in our communities, it is what we lack supporting more, is the diminishing and perhaps the minimizing the problem of Mexico, which is the loss of identity. The loss of identity is the principal problem in Mexico…We lack an effort by teachers on this.

Like Horatio, Rodrigo noted that the Mayan culture is the basis not only for the culture of the region, but for the entire nation. And note that Rodrigo, too, intertwined culture and language in his response. For him, like most of the indigenous-oriented teacher educators, both culture and language interact to help one form their identity.

Sofia would agree. Sofia said her own experiences helped her to understand the difficult conflicts of identity that rage within every student as they face their own reconciliation of the views taught them by their parents and the "global" ideals they are introduced to in the modern

world. She says that when she went to the city from her indigenous town, she not only faced

discrimination and linguistic difficulties, but also problems with settling one's own identity:

> When coming from the town to the city, it creates an identity crisis. You want to stop
>
> being indigenous, because you want people to accept you, or you simply want to seem
>
> like the others. It was a frustrating stage…My color, my smell, my mannerisms mark me
>
> as an indigenous woman. It was these social struggles that helped me find myself.

Throughout the interview, Sofia displayed her constant struggle to maintain her identity

as an indigenous woman in a world where original peoples were under constant pressure to

abandon their roots and turn their back on their indigenous upbringing. Sofia has lived a difficult

life that has required her to shift constantly between her hometown that represented indigenous

tradition and the city that represented the new global economy and the pressures and

opportunities it offered. She stood firmly with one foot in each, until finally, by settling into a

normal school in a small, indigenous community, she embraced her roots once again. She

repeatedly stressed that she was not just an indigenous person, rather "an indigenous woman."

For her, being a woman was not only a crucial part of her identity, it was also a second

socioeconomic disadvantage that when combined with her indigenous heritage made upward

mobility even more difficult. Her recognition of the educational challenges that girls faced was

also a central part of her identity, and she admitted that she often had problems with males in her

normal school classes because "they can't see a woman can be successful and move forward."

Guillermo too, noted his own struggle with his identity, even in the workplace:

When I see [Mayan -speaking] acquaintances here in the hallway [of the normal school],

I greet them in Mayan. Many of our teachers view this as strange and ask 'What? What are they

saying?' and 'What are they talking about?' But I have learned to   value what is mine and it is

something the rest of the population lacks: the recognition of their ethnic identity. I say, "One lacks identity"…some say, "No, they have identity. They just don't recognize it. Then the recognition of one's identity is more precisely to know that one belongs to a culture, to a people, one of the great [peoples], isn't it?"

Guillermo highlights that teacher educators who display empathy for the indigenous populations can face conflicts not only with the population at large, but also within their own institutions. His story illustrates that respect for indigenous culture is not always a given even in Mexico's normal schools and varies widely between individuals. Also, he showed his critical thinking by reflecting on his colleagues' comments, and he showed his desire to continue the diffusion of the language. He did not stop speaking the Mayan language in the normal school, rather questioned what it was about his critics that causes them to act this way. However, he was comfortable enough in his identity as a Mayan speaker that he looked for the cause of the conflict in the negative attributes of his colleagues, rather than questioning his own action of speaking his native language.

Thus, different individuals identified with the indigenous people in a variety of ways. For some, they were raised in indigenous communities and spoke indigenous languages. This is the group that most strongly identify as indigenous people. Others acknowledged that while they did not speak an original language, they lamented that they had parents who spoke an indigenous language but chose not to teach it to them. Yet, they frequently identified with the Mayan population due to a strong belief that their ancestors were Mayan. Others were activists who had taken it upon themselves to stand in solidarity with the Mayan people and identified politically with the indigenous rights movement. All of these experiences created empathy for the

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indigenous population and a strong bond between these educators and the indigenous community at large.

One often-mentioned crisis in identity was created by the constant conflict between indigenous culture and globalization. Luis addressed the conflict between globalization and indigenous culture and language. He said that the modern Mexican education system is designed to go hand and hand with neoliberal economic policies that often promote values that are inconsistent with both indigenous culture and language. He said that in Mexico, neoliberal economic policies are often done under the banner of "modernization." Such large-scale, free-market values are very abstract to someone who lives in a subsistence economy and who struggles to buy daily necessities. He stated:

> The economic model clashes with indigenous culture because in indigenous communities it isn't easy to understand a neoliberal project that has to do with the free market with priorities given to spending in certain sectors of the economy [that don't seem relevant to them].

He said that they understand spending only in the context of spending "on clothing, on food, on the articles used every day that are very necessary in the indigenous community."

He noted one conflict between the indigenous population and globalization: the distribution of income and resources. Luis's point is that there are difficulties in attempting to get indigenous people to "buy in" to an educational plan that is centered on improving the global economy when they do not benefit from it. He said the situation is similar to something he experienced when he was an elementary teacher in a rural, indigenous school:

> A poor farmer (*campesino*) arrived one day and told me "Teacher, my son won't be returning to school."

I replied: "But how is he not going to return to school? He is still only in the second grade."

"Yes, but he is not returning because he doesn't learn anything."

"What??!! How is he not learning anything? He is learning to read and write."

'Yes, teacher. But what good is it to him?'

In this case, the parent could not see the use of reading and writing. In the rural agricultural town in which he lived, it was unlikely his son would ever be able to obtain a job other than one as a manual laborer, so learning to read and write had little value to the father, since it was unlikely to improve his son's life chances. Luis often took exception to the fact that Mexico's educational system was built to respond to a global economy in which most indigenous people do not wholly participate. He stated:

In indigenous communities they maintain the traditions of the customs, the [informal] education they receive from generation to generation, so they can see how there is a conflict with the promotion of education, the "official" education. In other words, the education plans and programs that are designed to respond to the economic model. I observe that there is an established clash between the traditional customs and the official education that the children of the indigenous communities receive. I consider this a problem. It is a problem because it speaks of an indigenous education, however, it applies a national program. So, the young [teachers] who work in indigenous communities [learned from] a program of the national education system but when they arrive [into the indigenous towns] they have no capacity to…relate to the children.

Here, he showed his excellent critical thinking skills by observing the difference in the national curriculum and the local culture. Teachers learn from a national curriculum and often

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arrive in indigenous towns poorly prepared to meet the challenges of everyday life in the villages. This is because the system is designed to create workers who support the national economy. At higher levels, Mexico's educational system emphasizes areas such as engineering and business, fields traditionally seen as being useful for expanding the economy. This often comes at the expense of fields such as philosophy or literature, as these are not traditionally fields that produce economic expansion. Lower levels are designed to train workers for employment. Indeed, indigenous languages are often affiliated with low-status. "Modernization" projects come at the expense of the indigenous population, who due to their traditional beliefs are often portrayed as being somehow backward or the antithesis of being "modern". How can they understand a banking system at the national level if they do not even have a bank account?

The indigenous-oriented teacher educators also recognize that different learners have different needs. They understand that different groups of learners would respond differently to different methods of instruction, and they were able to recognize differences in the student populations and understand that indigenous students have a distinct set of needs and barriers, and that a teacher should be trained to differentiate their instruction toward these children. Luis said that a teacher educator must prepare teachers to confront the wide variety of situations, learning styles, and backgrounds of the students they teach, and he said it is the job of a teacher educator to make a program that incorporates the training to respond to their own needs as future teachers. He stated that the teacher educator must provide a future teacher with:

> The opportunity to recognize that teaching practice does not conclude with a particular [plan of] study…because it is dynamic and further the problems are not constant. They move constantly and every community is different, every classroom is different, and every child is different.

Luis believed that a teacher education program must provide a future teacher with a number of different tools for different teaching situations. He encouraged students to reflect and evaluate the effectiveness of their teaching among the different groups of children they work with so they might better understand what method works in each situation. This process of evaluation, he said, is continuous, as classrooms are volatile and dynamic.

Alejandro concurred. In describing the early effort to create high-quality teachers to serve the indigenous population, he said that there was a need to do something different than the normal schools have done in the past. They needed a new, specialized program to create teachers to work with an indigenous population that had a special set of needs. He said that this was a challenge, as the teacher-training institutions had no experience in offering this kind of program:

> In order to form teachers for the indigenous populations, we prepared a really interesting project. We began with more institutions than knowledge, but it has helped us reflect and generate a space for discussion and recognition that we have populations that are assumed to be culturally different. Thus, the formation of the teacher cannot be homogeneous. Something had to be done to create a project of teacher formation that was distinct.

Note that Alejandro acknowledged that teachers need to be trained differently depending on the population they serve. He summarized the mission of his work and his institution as "the act of legitimizing an educational policy of forming teachers to work in indigenous education and to legitimize cultural differences that are taught with a distinct, pedagogical discourse."

However, Alejandro and Luis's views were not always well-supported among the majority of teacher educators at their institutions. Surveys discussed elsewhere in this

dissertation suggest that while there is broad agreement that indigenous teachers need specialized training, there is a little importance given to differentiated instruction.

Diffusions/Actions.

Excellent teachers and teacher educators need to do more than just talk about their orientations. Many people talk of social justice and equality but do very little to actually spread their ideas and translate their orientations into meaningful actions in the classroom and in the community. Alejandro was constantly looking for ways to promote indigenous culture and languages. He explained his belief that education is political:

> The educational process is not a neutral one, rather it is a process that originates in the political climate that has distinct expressions, from the matter of public policy with its norms, its prescriptions, and everything. It also has its own forms of organization of work in the classroom, the curricular process. For example, the curriculum has a boundary, a political dimension that many times makes us invisible.

He participated in a lawsuit over a child who spoke an indigenous language yet was forced to take an intelligence test in Spanish. He describes it like this:

> They put the test in Spanish, and sure they are bilingual, but they have the right that if they are going to be evaluated they are evaluated in their own language—it's the state's obligation…they want to impose and evaluate their performance…and intelligence…with a written test. And further, they make them in Spanish and it is absurd—talking about pets in the Paris Metro. Everything is in a context that not only linguistically, but situationally, has nothing to do with our existence.

Here, the orientation of Alejandro shines as he pointed to his deep understanding of indigenous education. He again drew attention to the fact that simply translating the material is

not enough. Not only is the language a problem, because the exam is written in Spanish, but the cultural inappropriateness is also an issue for him. These students know nothing about Paris and have never seen a metro. He also showed he understands that schools are a sorting mechanism, and such intelligence tests will have lasting impacts on the child. And, he noted that even if a student is bilingual, he/she still has a right to take the exam in their own language because this is the duty of the state. Note he also used "our existence," suggesting a strong sense of empathy with the indigenous students.

Alejandro even found ways to combine his advocacy for indigenous languages with fatherhood. He told the story of his son coming from school with an assignment:

My son, when he was in lower secondary school, told me: 'Dad, help me because they told me to find 10 words in Mayan. I don't know Mayan, but you do.'

And I asked him, what is this? (Points to belly button.) 'Tuch'[42], he responded.

That, son, is Mayan.

So Alejandro went through 10 more words, each of them words that were originally Mayan words that had come into common use in the everyday Spanish of the Yucatan. Soon his son had his list, surprisingly using words he in actuality had already known.

Others advocated within their own institution. Ramona was one teacher educator who was not afraid to advocate for indigenous education in her institution. Although as previously noted the normal schools follow a standard, national curriculum, the reform plan of 1997 implemented a two-semester "regional course," where normal schools could integrate topics of particular interest in their own state. When it first began to be implemented, however, Ramona

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[42] "Tuch" is the Yucatec Maya word for belly button. It has supplanted the standard Spanish word '*ombligo*' in everyday Yucatecan Spanish.

did not feel the course accurately reflected the culture of the Yucatan, and it lacked an emphasis on the state's indigenous culture.

> The people who designed it, well…(pauses)…really didn't consider the needs of the region. When I arrived here at this school I went to the director and I said "As this course is set up, I won't teach it. I won't teach it because it doesn't address the needs of the region."…The truth is he was very considerate and told me that I should design something that truly served the needs of the students.

She said that she objected because the course was supposed to emphasize regional history and culture, yet it gave virtually no attention to the local indigenous population. Mostly, it talked about the geography of the region. She found this to be unacceptable, and she believed, since it was the only part of the national curriculum where the institution could insert local topics, it was crucial to include themes related to teaching the indigenous population in the curriculum. She noted that since that time, the second semester of the regional course has been designed "to support the students in indigenous education."

Ramona was willing to put her job on the line over her beliefs that teacher educators need more indigenous-related content. She demonstrated the kind of critical thinking and self-reflection the indigenous-oriented teacher educators exhibited. Teacher educators must be able to think critically about their surroundings, including reflection on their own program.

Ernesto said that often times teacher educators blame the system or the policy, but fail to see that they themselves may be to blame. He said "Many times is it easier for the teacher to blame the government, to blame the policy, but I say, as they say here, many policies come and go, but we don't achieve quality because we don't become involved."

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The General Population of Teacher Educators: How Do They Stack Up?

A number of teacher educators who are distinguished by an orientation toward diversity are dedicated to educating future teachers who are well-trained to work with the indigenous population. What does the overall teacher educator population of the southern Mexican states of Yucatan and Chiapas think about these issues? In the next section I present the results of my examination of that question. The 209 surveys allowed us to examine the attitudes and opinions of a larger sample of teacher educators than only those that were interviewed.

Economic Development vs. Cultural and Linguistic Traditions.

Figure 4-1 shows how the general population of teacher educators views the tradeoff between the economic development of indigenous towns and the maintenance of their cultural and linguistic heritage. Overall, of the 209 teacher educators surveyed, 120 respondents (58.5% of all respondents) disagreed that the economic development of the indigenous communities is more important than maintaining their cultural and linguistic traditions, while 85 (41.4%) agreed.[43] Thus, the responses present a mixed bag, demonstrating how difficult it is to overcome the conflict between economic development and preserving indigenous language and culture. Often indigenous people are forced by their economic circumstances to work in situations where they need to hide their indigenous identity[44] (Castellanos, 2010). For while many wish to preserve their cultural heritage, there is a necessity to earn a living, an opportunity that many indigenous people believe the public education system fails to give them. Even Luis, the native indigenous speaker and staunch advocate of preserving indigenous language and culture, said

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[43] Four were missing (individuals who declined to answer that particular question), resulting in 205 total responses.

[44] For example, domestic servants are often not allowed to wear their traditional clothing in the homes where they work and sometimes even live.

"neither can we hide from this modern world. They [residents of indigenous communities] are human and look to have things for a better life."
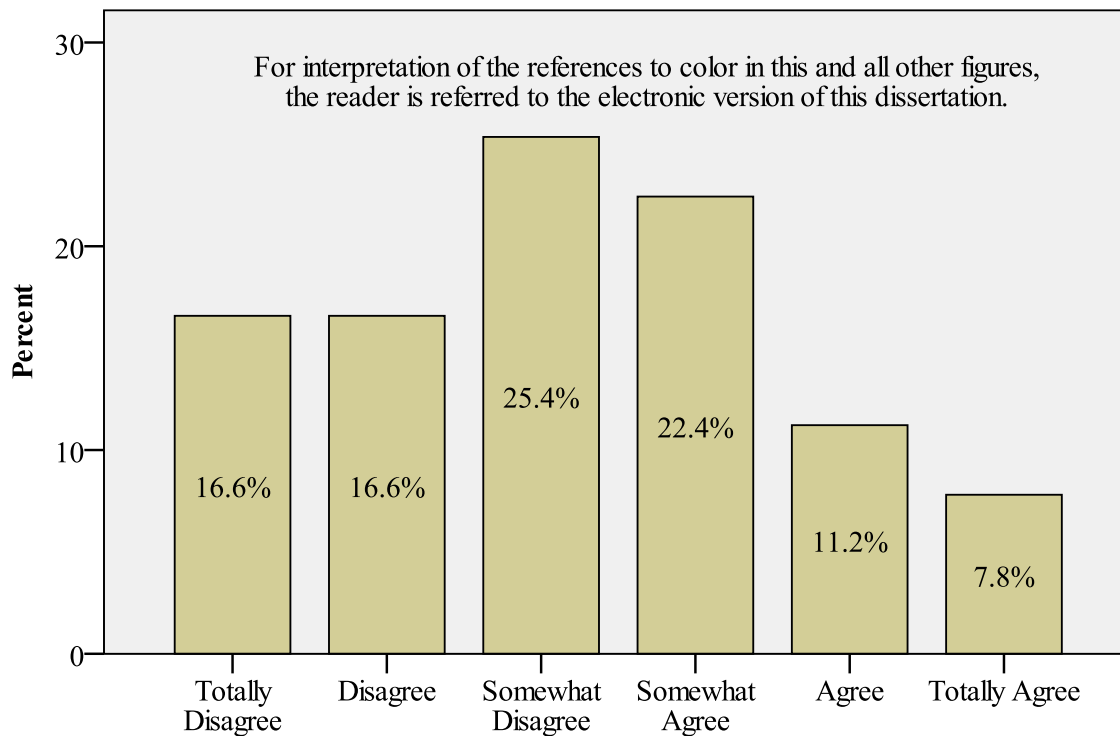
Figure 4.1. Economic development of indigenous towns is more important than the preservation of its cultural and linguistic traditions

The Importance of the English Language vs. Indigenous Languages.

As discussed in Chapter Two, there is a substantial push and pull between Spanish, English, and the indigenous languages of the region. While advocates, and in some cases the state, encourage learning an indigenous language, there is often resistance on the part of parents to teach their children the parents' native tongues (Gabbert, 2004), since Spanish is considered the language of commerce, education, and political affairs. At the same time, tourist destinations along the Caribbean Sea import laborers to serve in the hotels, restaurants, nightclubs, and shopping centers which are oriented toward tourists. There is a key requirement of speaking

English for these jobs, and wages are uniformly higher than what indigenous people could earn by staying in their hometown. Many indigenous individuals study English because it is equated with higher earnings and improved job opportunities (Castellanos, 2010). English is also useful for continuing on to higher education.

Despite the attraction of English language instruction, while officially part of Mexico's educational plan, is spotty in its coverage in the public schools in Mexico, and the level of instruction is extremely low. Often, English language study takes place in expensive, low-quality, for-profit language institutes. However, in 2012, Mexico's Secretary of Education announced the goal of offering the English language in every public school by the year 2018 (Notimex, 2012). This an ambitious goal since Mexico's relative new pilot program of teaching English in the public schools existed in only about 15,348 of Mexico's 226,374 schools in 2012 (SEP, 2012), a coverage rate of only 6.7%. The majority of the program's funding has gone to the northern and central states, with Aguascalientes, Jalisco, Coahuila, Nuevo Leon, and Durango receiving by far the largest amount of funding; each received at least over four times the amount of funding the program received in Chiapas and three times the funding received in Yucatan (PNIEB, 2012). Guillermo said that the English language threatens indigenous languages because it is often seen as an either/or proposition. He understands that English is often a valuable, even crucial skill in the job market, but sees that its importance often comes at a cost of reducing appreciation for native languages. He said that "[People hear] 'There are jobs, but you need English' and so I understand that my Mayan language isn't worth anything. That is how we understand it. But I advocate 'Learn it! Let's Learn English so I get a good job' is valid, but do not tell me my language is not worth anything."

Below, 60% of respondents disagreed that English is more important than the indigenous language and 40% agreed. (See Figure 4.2) Still, 40% of teacher educators favoring English seems unusual, given the region's indigenous population. However, relatively few totally agreed that English is more important for their students, and that is noteworthy.

Noting that government policies often favor English over indigenous languages, Alejandro asked how is it possible for a teacher to finish a program with a specialization in indigenous education with no indigenous language skills and then sent to a town where 60% of the students speak an indigenous language, when "if I want to finish a master's degree, they make me learn English."
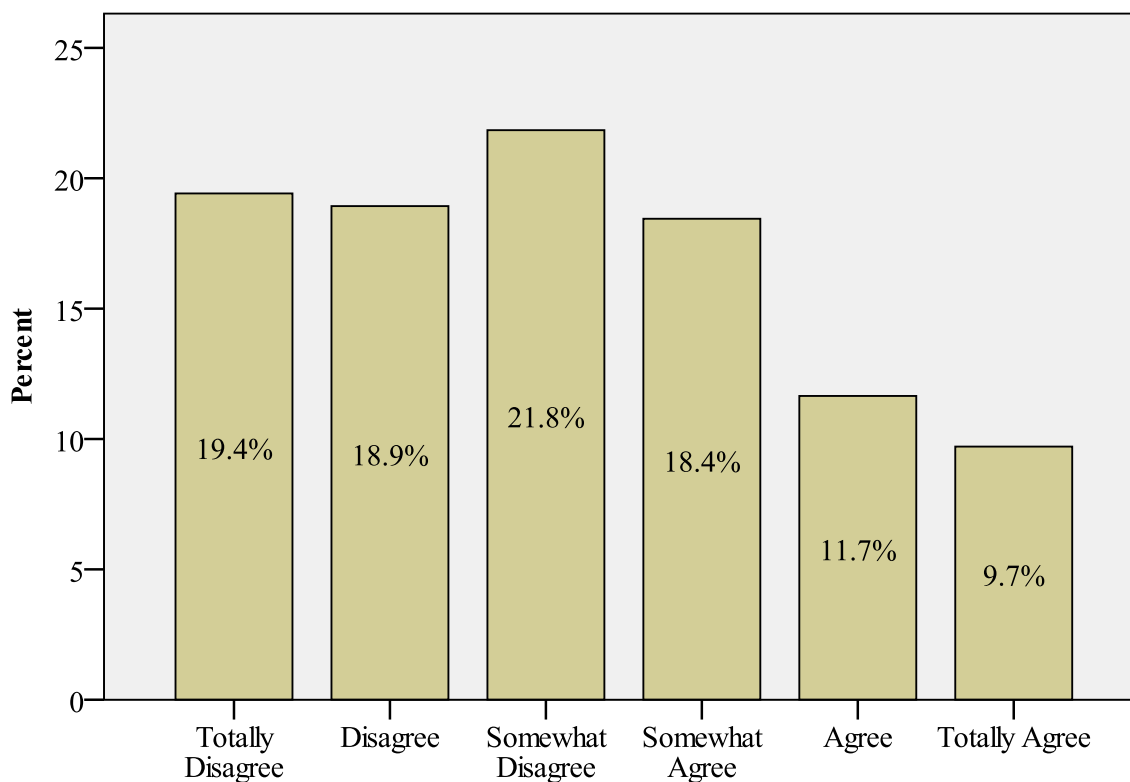
Figure 4.2. Learning English is more important for our students than learning indigenous languages

Recognition of the Indigenous Peoples.

The goal of the Mexico's (and other nations') indigenous rights movement has largely centered on the recognition of indigenous peoples as an independent community of individuals with their own distinct language and culture that should be emulated, not eliminated through assimilation, something crucial not only for their survival but for their identity (Hlusek, 2011; de la Peña, 2005; Grey Postero & Zamosc, 2004). Therefore, it is noteworthy that, as Figure 4.3 indicates, 64.4% of all teacher educators surveyed agreed that all Mexican citizens are Mexicans and people should not try to identify themselves as part of a subgroup. Only 35.6 % disagreed in any way, and only 13.7% totally disagreed, as our group of indigenous-oriented educators did. This suggests that large portions of the general population of teacher educators often fail to acknowledge the existence of Mexico's diverse indigenous population, calling into question their ability to train teachers for a population they believe should be assimilated into the rest of the national population. And interviews of many teacher educators also suggest a lack of support for the acknowledgement of indigenous groups. One long-term teacher educator panned, "There are no indigenous communities any more. There are only Mestizo, mixed communities."

Indigenous-oriented teacher educators, however, not only understand the importance for indigenous people to self-identify, but also see it as a challenge to strive to improve the methodology of teaching indigenous children. In assessing the current state of the Mexican teacher education system, Alejandro presented a different view:

> There are a lot of limitations. On the one hand, we don't have an appropriate curriculum [in the normal schools to form teacher educators to work with the indigenous populations]. On the other hand, we still don't have sufficient knowledge about the process of development of the Mayan children. But we also lack…the didactic tools that

are going to permit us to offer an open education—an education that creates an indigenous citizenship. I can say I am Mexican and that I speak Spanish. Someone else can say I am Mayan, and I speak the Mayan language, Spanish, and French. In order to construct this type of citizen, Mayan children need to accumulate a certain kind of knowledge in addition to addressing their economic problems. This is what we call intercultural teaching practice—how to develop a Mayan citizen who is better equipped to interact with other cultures. This still is not sufficiently discussed—how to teach a child to read and write the Mayan language [so that the language] is not just an objective of study, but also as a development tool and a form of artistic expression. These psychopedagogical tools still aren't constructed.
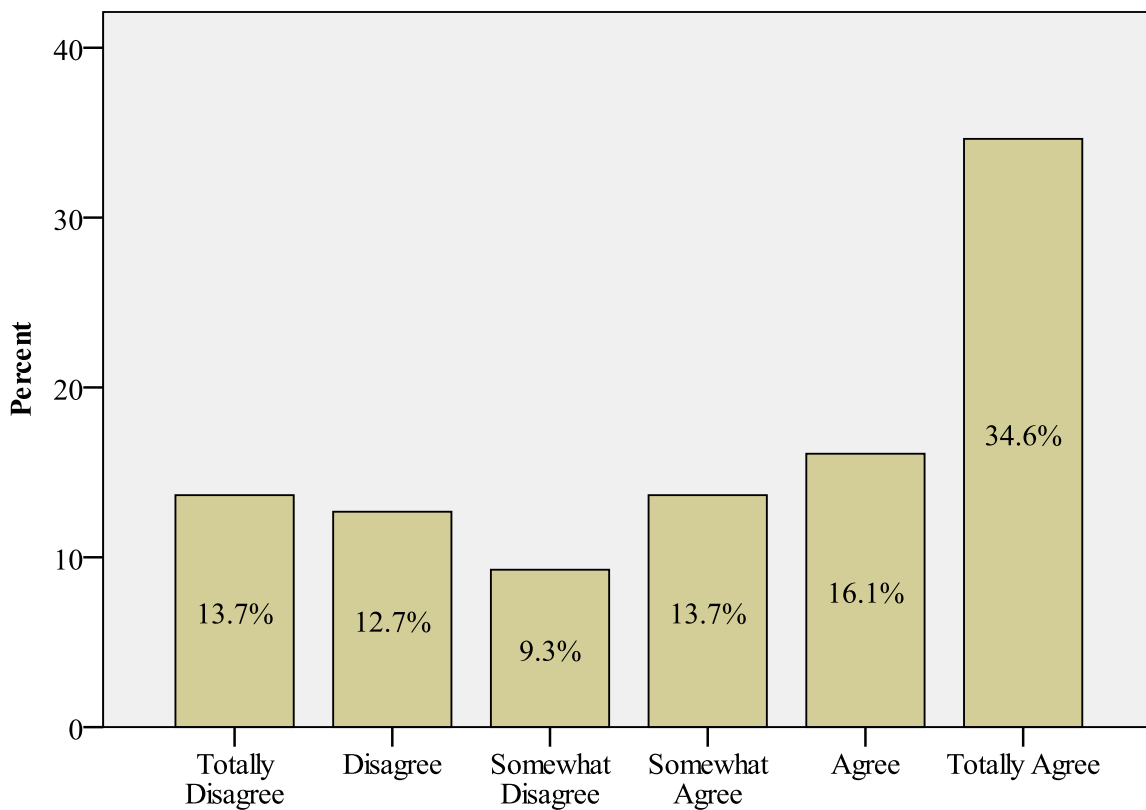
Figure 4.3. All Mexican citizens are Mexicans and should not try to identify themselves as part of a subgroup.

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The Role of the Teacher Education Institution in Indigenous Rights.

Most teacher educators see their institutions as being able to play an important role in implementing indigenous rights policies, with 80.6% agreeing at least somewhat, while 62% agreed or strongly agreed, a small minority of 19.4% disagreed, and only 3.3% totally disagreed (see Figure 4.4). This suggests at least some potential for laws that look to strengthen indigenous rights by reforming teacher training institutions. It also suggests that teacher educators, if given the knowledge and resources to do so, could be crucial allies in the struggle for indigenous rights. However, as we are seeing with some of the survey data, there may be a need to change some of the fundamental beliefs about the indigenous population before this can happen.
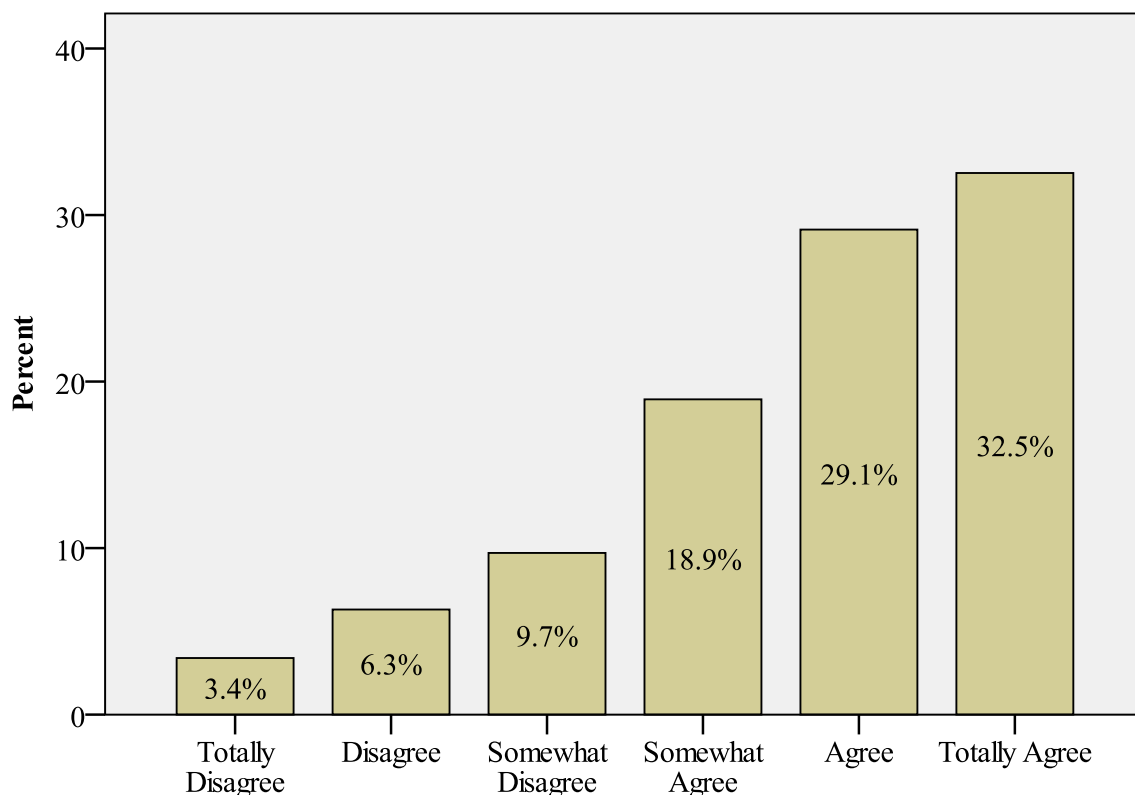
Figure 4.4. My institution can play an important role in implementing indigenous rights policies.

Teacher Educator Confidence in Teaching Methods for Indigenous Populations.

In interviews with the indigenous-oriented teacher educators, they expressed their confidence in their ability to train future generations of teachers to work in indigenous communities. This seems like an important skill, since they are seen by society as teaching experts and will ultimately play an important role in the formation of future teachers of indigenous populations. While 62.9% replied they were sufficiently trained to teach future educators methods to work with the indigenous populations, overall confidence was relatively weak (See Figure 4.5). "Somewhat agree" was the most likely response among the agree choices, suggesting a lack of absolute confidence in their own training and abilities in this field. Only 8.1% of teacher educators totally agreed they are trained to teach students methods about how to teach indigenous populations.

Research suggests that confidence plays a key role in teacher behavior, and students are unlikely to be exposed to ideas that teachers lack confidence to deal with, particularly surrounding issues of policy and civics (Alviar-Martin,Randall, Usher, & Englehard, 2008). Mills (1989) suggested that a lack of confidence in musical ability in generalist, primary teacher education students results in little music being taught in primary schools despite the official curriculum. Indeed, a wide variety of literature on self-efficacy confirms the positive effect of teacher self-efficacy on student outcomes.
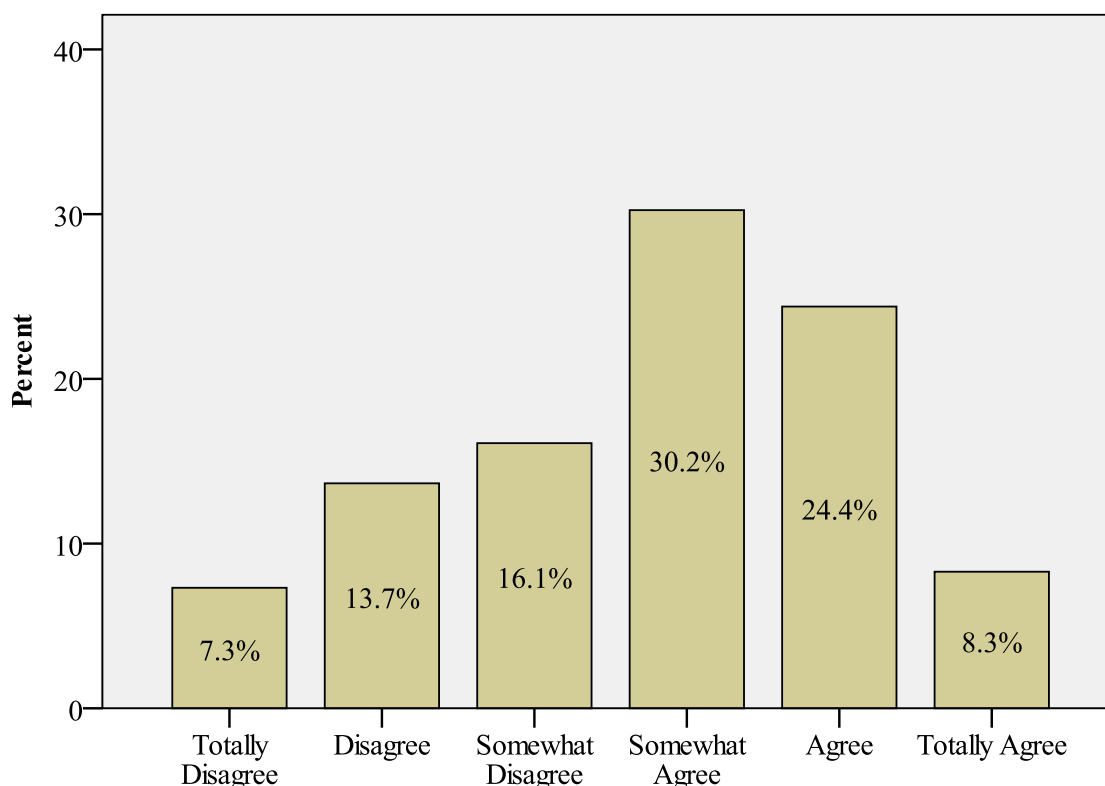
Figure 4.5. I am sufficiently trained to teach students methods to teach indigenous populations.

Teacher Educator Recognition of Barriers Indigenous Students Faced.

Indigenous-oriented teacher educators were able to articulate the many unique barriers indigenous students face in the public primary schools due to their socioeconomic and linguistic status, as the interviews referred to earlier indicate. However, the general views among teacher educators were more mixed. As Figure 4.6 shows, overall, 44.7% of teacher educators felt that indigenous students have the same opportunities in public schools as others, while 56.3% disagreed. While it may be reassuring that 56.3% acknowledged that the indigenous population suffers from some degree of limited opportunity, only 17.7% totally disagreed. This number may be considered alarming given the huge achievement gaps between indigenous and nonindigenous

students, while studies show indigenous children are three times as likely to drop out and twice as likely to fail a grade (UNESCO, 2005).
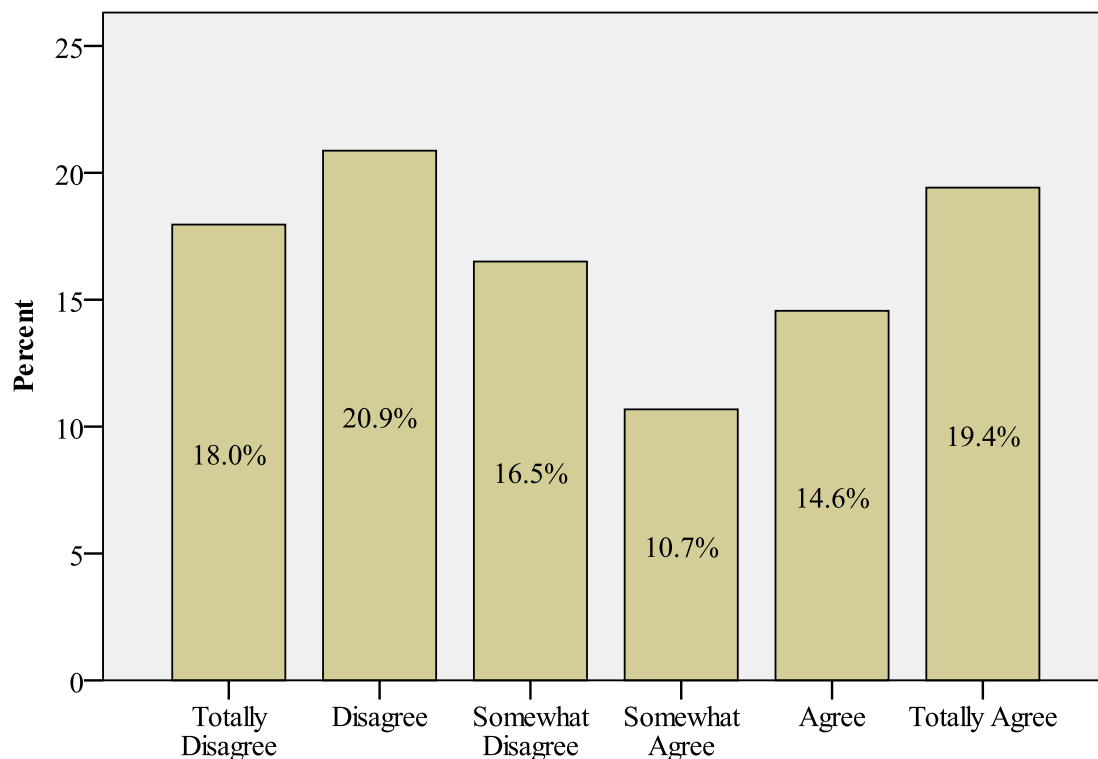
Figure 4.6. Indigenous students in public elementary schools have the same opportunities as any other student.

The Need for Specialized Training for Educators Who Work with Indigenous Populations.

Overall, teacher educators in general expressed strong support for teachers in indigenous communities to have specialized training, with 91.7% agreeing on such a need, as Figure 4.7 shows. It certainly makes sense that teacher educators who prepare preservice education majors would acknowledge the need for their students to undergo specialized training, and this counters the notion that teaching is an "easy" occupation that anyone can do with little need for specialized study. This is important since at least the normal school faculty recognize the need

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for the creation of specialized program in indigenous education, something required by the new law.
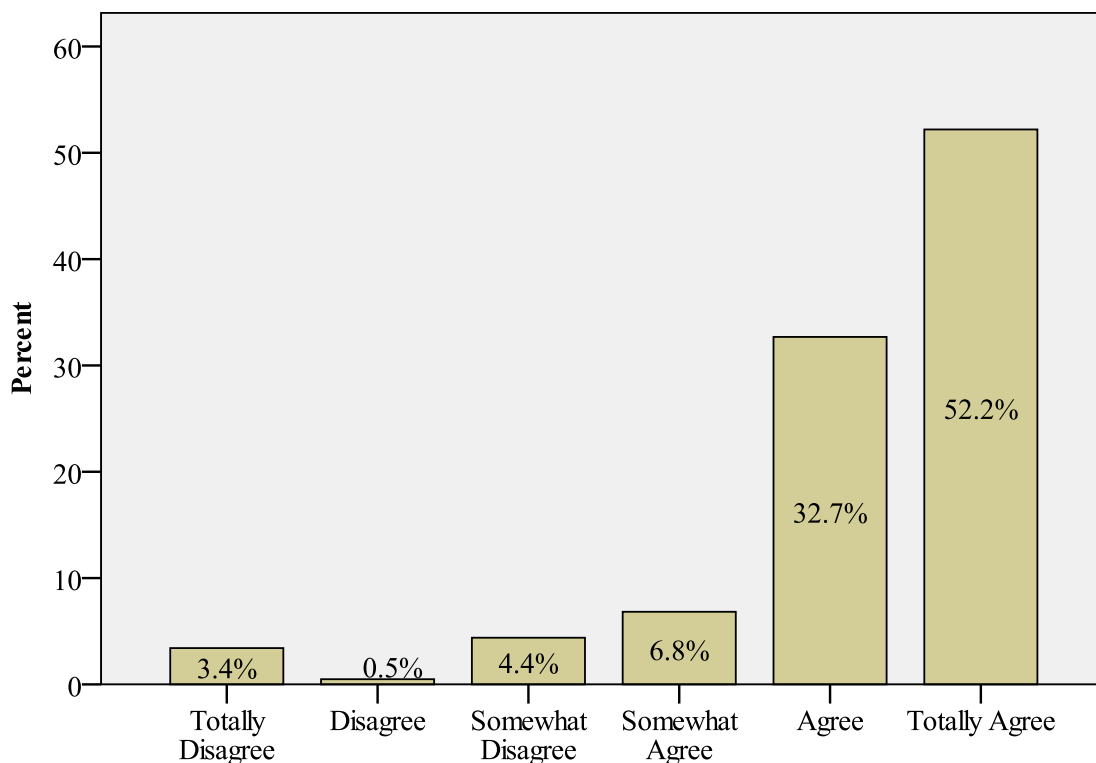
Figure 4.7. Our students need specialized preparation if they are going to successfully teach in indigenous communities

Time Teacher Educators Spend in their Classrooms on Indigenous Topics.

While 73% claimed that they integrate some topics relating to indigenous affairs in their classroom, only 19.6% totally agreed, and the interviews suggest that very little is done with indigenous affairs in most classrooms (see Figures 4.8 and 4.9). One teacher educator, when asked how much time she spent on indigenous education, said: "Really very little…the context in which we are practicing is not in the area of the 'pure maya.' We are in an area of the coast where they don't speak much Mayan- the children don't know Mayan very well." Note how this

teacher educator justifies not including indigenous themes in her classroom because the students do not know the Mayan language. She failed to note that there is a benefit to the students learning about their heritage (which she linked to their lack of linguistic ability), and she suggested if Mayan children do not know the Mayan language, they should not bother to learn the culture. Also, she failed to acknowledge that future teachers will be teaching in indigenous areas. And perhaps worst of all, she imposed her own identity on the Mayan people and denied their very existence by constructing a concept of who is and who is not "pure Mayan."
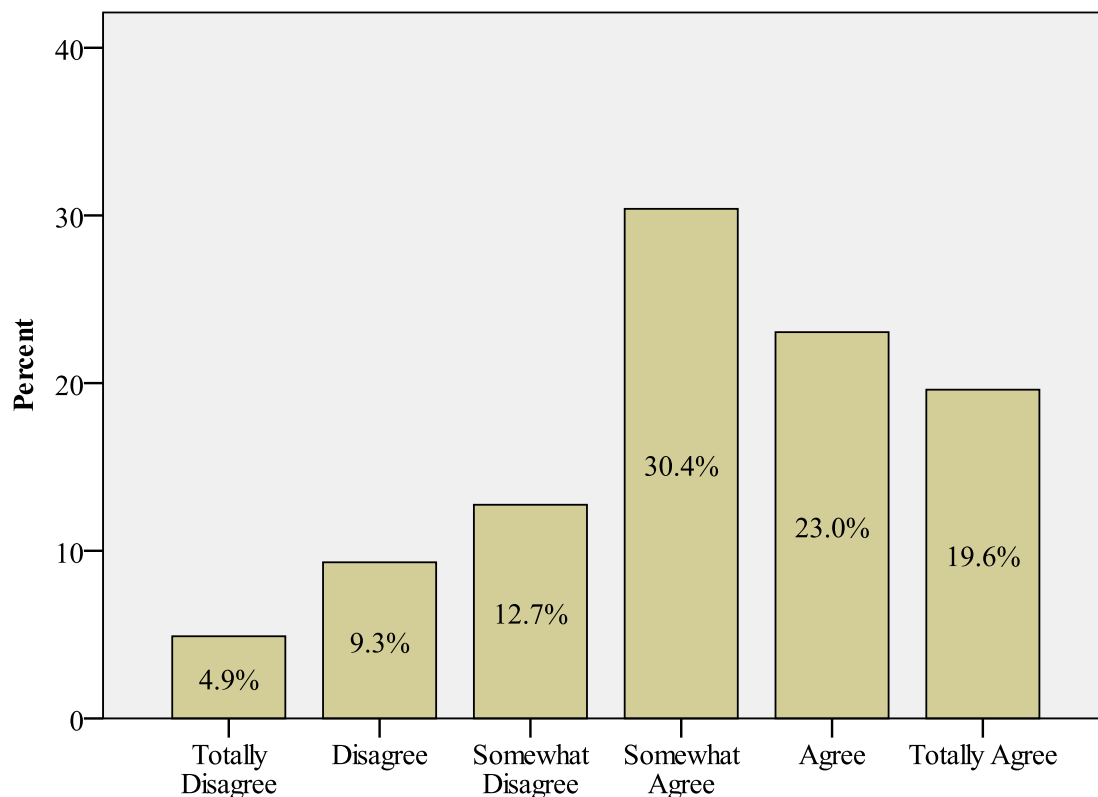
Figure 4.8. I regularly integrate topics related to indigenous affairs in my classes.

Only 13.9% of teacher educators totally agreed that they give indigenous culture the same amount of time in their classroom, confirming the dominance of the national culture in the discourse of teacher education programs. This is a sharp contrast to the interviews of the

indigenous-oriented educators, where Alejandro stated that in his classes "Close to 90% of my time in about indigenous education. [In my classes]. I am practically dedicated to this alone." Luis also incorporates into his classes a project that will assist students in understanding the situation encountered among the indigenous populations, the "pedagogical proposal":

> [We have] the construction of an academic instrument we call the pedagogical proposal. This proposal consists of a piece of work that the [students] work on when they recognize a problem in their fieldwork…They have the opportunity to review the plans and programs--the curricular map…They develop and identify a problem or a theme that is resulting in a problem in the classroom regarding children's knowledge. Then…they work on a pedagogical proposal that is an academic work that has everything--a structure, it has purposes, it has contextual markers, it addresses the population to whom it is being directed, and the didactic strategies that they propose to reverse the problem.
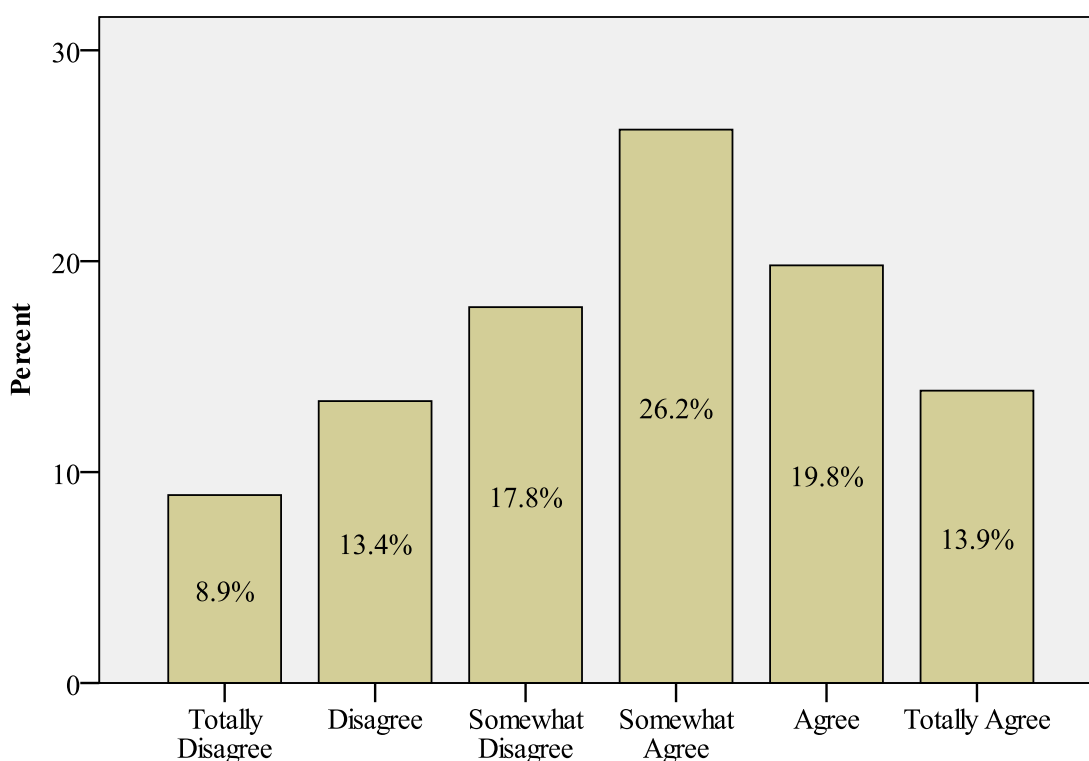
Figure 4.9. I devote the same amount of time to themes related to the indigenous culture and themes related to the national culture in my classes.

The analysis in this chapter suggests that indigenous-oriented teacher educators in the region, while they show some heterogeneity in a number of areas, share a common set of beliefs that show positive orientations toward Mexico's indigenous populations. These orientations are fortified by their appreciation for indigenous language and culture, their identification and empathy with the indigenous population, their recognition of the barriers indigenous people face both as individuals and as a group, and they move forward by taking concrete actions to diffuse and preserve the indigenous cultures and languages of their region. Further, we see that many of these indigenous-oriented teacher educators express in their interviews positive values that often diverge from other teacher educators as reflected by the survey data.

Therefore, there is significant evidence to suggest that while the indigenous-oriented teacher educators clearly possess a diversity of personality traits, attitudes, and backgrounds,

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there are enough similarities in the interview responses to suggest common threads that vary from the overall orientations of the larger population of teacher educators as shown by the survey. As stated earlier, all the interviews showed this subset of teacher educators to possess an appreciation of indigenous culture and language and the diversity they bring to the classroom and to society. They identify with the indigenous populations, and they recognize differences within the student population as well as in the broader society. They also actively engage in the promotion of indigenous culture and/or languages, and they exhibit a high level of critical thinking.

As a researcher, of course, I am constantly making decisions based on my own viewpoints and positionality.[45] While it is true that what I noticed may have been influenced by my own belief that each one of these is a positive attribute, there is substantial support in the literature of teacher education for each of them. Empathy has always been a key element of positive teacher-student relations (Cornelius-White, 2008), and various studies suggest that teacher empathy correlates with strong academic achievement, improved self-esteem, and positive attitudes in students (Feshbach & Feshbach, 2009). Likewise, recognition of difference is a crucial first step in a wide variety of different models of multicultural teacher education (Appelbaum, 2002; Gorski, 2009).

I have already shown several examples of these attitudes from the interviews as well as from the survey responses to a select number of relevant questions. It should be noted that my goal is to display some common characteristics of the set of indigenous-oriented teacher educators. From the beginning, I hoped my dissertation would do more than simply produce the same stale discourse that emphasizes the failures of educational policies, but rather would

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[45] See Chapter 3 for a more extended discussion on my positionality.

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highlight a few of the many outstanding teacher educators who often work in difficult conditions yet still do amazing things with passion, dedication, and pride. They help us to inform policy because by examining these teacher educators, we see a group of individuals who model positive behavior that policymakers can strive to support.

Of course, that is not to say all that the comments I heard in the interviews were positive. One teacher educator, when asked about the current law on indigenous education, asked me if I had an extra copy to give him because he had not seen it. Another refused to acknowledge that indigenous students in public schools face multiple barriers to academic success and criticized indigenous efforts to preserve their language and culture, believing they are a waste of resources. One during the course of the interview referred to indigenous people as "darkies." Another, who worked in a program specifically designed to educate future teachers of indigenous populations, considered herself an expert in "interculturality." In response to a question on whether she included themes related to indigenous education in her classrooms, she said she taught "interculturality" and that she acquired her knowledge from "the great experiences I have had in visiting Europe and to observe, for example, Lisbon, Paris, Rome. They have so much tourism, so many people who come from other places." She then launched into a lengthy discussion of the importance of regional differences. While she later compared this experience to the different parts in Mexico, her views on interculturality were clearly based on her vacations in another part of the world. She did not once mention indigenous culture or language in response to the question. In addition to the obvious concern that she did not answer the question (about the inclusion of indigenous topics in her classroom), her response was problematic. This is representative of the fact that some teachers and teacher educators often think of "culture" in the very global sense that invokes thoughts of other countries and exotic locales, yet they fail to see

the richness of the local culture that exists around them. Her examples were also loaded with stereotypes, such as Texans are "wild" when compared to the rest of the US population. There is, of course, nothing intrinsically wrong with her developing an appreciation for more dominant world cultures, and her curiosity and love for adventure are to be admired. However, she showed no inclination to include the local indigenous minority populations in her cultural framework.

Similarly, the survey results show a diversity of opinion by the teacher educators, and the implications of the wide variety of the responses are not quite as clear. Consider Figure 4-1. When asked to agree or disagree with the statement that the economic development of the indigenous towns is more important than maintaining their cultural and linguistic traditions, respondents were divided, with 58.5% disagreeing and 41.5% agreeing. The question, of course, is whether or not these two are mutually exclusive. While it is true that there may be a concerted effort to bring indigenous populations into the global economy in a manner that is consistent with the preservation of their indigenous background, Mexico's indigenous people are often forced to give up their identity and language to placate their employers if they wish to be gainfully employed (Castellanos, 2010). Further, in the interviews many teacher educators framed it as an "either/or" proposition.

Survey results also show that 40% of the teacher educators surveyed believe English is more important for their students to learn than indigenous languages. Although institutions have limited ability to track where their graduates are placed, some administrators interviewed estimated that 80-90% of their graduating students who receive positions upon graduation do so in rural communities whose residents speak indigenous languages. This holds true for institutions that do not have an indigenous program, since virtually all the new openings occur in rural

communities. [46],[47] It seems logical that teacher educators would see a clear-cut advantage for their students to know indigenous languages over English, although this does not seem to be the case.

Another troubling aspect of the survey results is the lack of recognition of the indigenous peoples as a distinct part of a multicultural Mexico. Sixty-four percent said they agreed that "All Mexican citizens are Mexican and people should not try to identify themselves as part of a subgroup," while 48% believed that indigenous students in public schools have the same opportunities as everyone else. Given the long history of indigenous peoples' struggle to win their legal recognition as a distinct group under Mexican law, it is interesting that the majority of teacher educators do not recognize their right to identify themselves as part of an indigenous subculture.

The new law and its requirements clearly state that the normal schools must include in their curriculum topics on the indigenous peoples and their contributions to the national society, and on the requirement to "implement interculturality, multilingualism, and respect for linguistic diversity"(General Law on the Linguistic Rights of the Indigenous People, Article 3, Section 5, 2003). But how can teacher educators acknowledge the contributions of a group that they do not even recognize? And how can they prepare teachers to respect Mexico's diversity when they do not distinguish between the various groups that constitute the nation? And how can they train teachers to work with diverse populations, engage in differentiated instruction, or create

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[46] See Chapter Six.
[47] One teacher educator described what he called "The Ring." Drawing a series of circles around the state's capital, he noted normal school graduates are often placed far outside of the major urban centers. This is due to the low turnover rate of urban teachers in Mexico. After a year, however, they apply for an appointment at a school closer to the city. The next year they apply to a town even closer. Until, finally, sometimes after several years, they get an appointment in an urban school, complete with the bars, restaurants, shopping, and other modern conveniences that only the city can offer.

culturally responsive teaching without accepting that each child is different and that different groups of children face different barriers, something so eloquently stated by some of our indigenous-oriented teacher educators such as Luis and Alejandro, and something widely considered necessarily for successful teaching?

It is also concerning that only 8.1% of teacher educators totally agreed that they are trained to teach students methods about how to teach indigenous populations. The literature of teacher self-efficacy clearly suggests a link between teacher confidence and the quality of instruction and student outcomes. If a teacher educator is uncomfortable with the subject matter, he/she is less likely to engage in it, and may be likely to avoid the topic all together. This is a problem because Mexican teacher educators are considered generalists who are expected to be able to teach a wide variety of courses to a wide variety of students, many of whom will ultimately practice their craft of pedagogy in indigenous communities. It seems unlikely that an institution where over 90% of the faculty lack a high level of confidence in the subject they teach could produce large numbers of the kind of high-quality teachers they aspire to graduate. After all, they are supposed to be the experts.

On a more positive note, however, there are some items where agreement was much stronger. 91.7% of respondents agreed that teachers of indigenous populations need specialized training, while 81.0% acknowledged that their teacher-training institution can play an important role in implementing indigenous rights policies.

It ultimately seems that many teacher educators are, in fact, a product of their own background. They successfully formed an ideology that allowed them to do more than just "tolerate" diverse populations, as some less progressive teacher educator theories suggest (Gorski, 2009), but also engage with the indigenous population and celebrate its achievements.

Their individual backgrounds, although diverse, led them to forge an identity that not only empathizes with the indigenous people but encourages others to do so. Although most do not speak an indigenous language, many are from lower-income backgrounds. Their orientation toward diversity is a basis for their beliefs and a building block for their own further development.

In this chapter, I have shown a number of teacher educators who I describe as being indigenous-oriented and I have discussed their context within the overall teacher educator population. In Chapter Five, I present more survey data and consider the context in which the teacher educators work, in order to see if there is a statistically significant variation between types of institutions and teacher educator attitudes and beliefs. I also consider where Mexican teacher educators get their information to keep abreast of the changes in educational policy, and I discuss how such information likely affects the development of their attitudes and beliefs.

CHAPTER FIVE

MEXICAN TEACHER EDUCATOR BELIEFS AND ATTITUDES TOWARD

INSTITUTIONS AND THEMSELVES

Cognitive Sensemaking as a Useful Framework for the Analysis of Teacher Educators

A number of frameworks are potentially useful for the analysis of the orientations of the teacher educators presented here and their interpretation of educational policy. Lopez (2008) argued that indigenous language-based education reform is complicated by a clash of both "top-down" policies and "bottom-up" resistance. He suggested that many indigenous leaders often reject intercultural bilingual education systems (IBE) they once supported because they do not see them as leading to sufficient progress in their effort to increase their level of political participation. In Lopez's model, indigenous resistance is based on their own political identity and sense of how they feel they are progressing in the political phase. For Lopez, the political consciousness of their situation and their resistance are indivisible. In this study, however, the actors being studied are not necessarily indigenous, so Lopez's framework may be less appropriate. Grindle (2004) suggested that educational reform in Latin America often succeeded despite a series of barriers that would at first glance seem insurmountable. Ultimately, she observed that:

> Education reform was not so much about approving or rejecting a policy at a specific moment as it was about a series of decisions and actions that drew reformers and antireformers serially into conflict with malleable institutional contexts. In most cases, strategic choices about how to use the resources they had determined the outcome of those conflicts (p. 203).

Grindle's work too is not wholly appropriate to apply as she is principally concerned with institutions, such as the teachers' unions, and in that sense differs from my study's emphasis on the individual.

However, both Grindle and Lopez can contribute to the discussion of teacher education and reform. Grindle's work is helpful in pointing to the importance of decisions, something which is central to my efforts to understand the sensemaking and decisions of the faculty as they pertain to their teaching and their engagement with the reform. Lopez forces us to consider how top-down decision-making conflicts with bottom-up resistance.

A more useful framework for consideration here is that developed by James Spillane et al. (2002). Spillane et al. (2002) et al. offer a framework that can be used to link individual attitudes at the micro level with broad policies at the macro level. They present us with a framing of cognitive sense-making that proves highly useful in the analysis of teacher educators and their orientations, as well as how this impacts policy implementation.

Spillane et al. (2002) acknowledged the difficulty of implementing policy at the local level. In the framework of Spillane et al., agents who implement policy construct a meaning of a particular policy that is formed by "the interaction of their existing cognitive structures (including knowledge, beliefs, and attitudes), their situations, and the policy signals" (p. 387). Often, these beliefs and attitudes are affected by how they perceive their practice, but are also a direct result of the agent's "prior knowledge and experience" (p. 394).

This framework helps us avoid the typical trap of many policy studies that emphasize only how policies fail. Indeed, many theories of policy implementation emphasize failure. Spillane et al. (2002) noted that typical political science implementation theory often portrays policy agents (including teachers) "as intentionally interpreting policy to fit their own agendas,

interests, and resources…These accounts assume that teachers and other implementing agents are responding to the ideas intended by the policymakers, which they either ignore or modify" (p. 391). However, Spillane et al. suggested that these theories are oversimplified and they fail to acknowledge that there is a wide body of literature that confirms that "Sense-making is not a simple decoding of the policy message; in general, the process of comprehension is an active process of interpretation that draws on an individual's rich knowledge base of understanding, beliefs, and attitudes" (p. 391). Such interpretations are not always driven by self-interest, nor are they always a negative that necessarily leads to failure. The authors wrote that "We do not always assume that policymakers get it right all or even most of the time" (p. 389). Therefore, while individual policy actors affect policy implementation with their individual sense-making and adaptation of the policy to the local context, this is not always detrimental to policy success, but rather is an unavoidable consequence of human nature. "Policy messages are not inert, static ideas that are transmitted unaltered into local actors' minds to be accepted, rejected, or modified to fit local needs and conditions. Rather, the agents must first notice, then frame, interpret, and construct meaning for policy messages" (p. 392).

This is in sharp contrast to a number of other rational choice policy analysis frameworks such as Lipsky (1980) who, as Spillane et al. (2002) pointed out, operate on the assumption that personal gain is the only basis for decision making. However, people make choices for reasons other than just personal gain. If teacher educators choose to provide their students with a service-learning experience in an indigenous school, they may gain nothing personally from such an effort, but they may believe, based on their past experiences and background, that there is an inherent reason to do so. It may be the belief that it would make the students better educators, or it may be because they have experienced firsthand the learning opportunity such a practicum

brings from their own days as a student-teacher. In any event, such a decision is not necessarily based on personal gain, and they would likely not benefit directly from such a decision.

Spillane et al. (2002) suggest a framework for analysis that covers three central aspects of sense-making. Each relates to different aspects of the sense-making process: individual cognition, which relates to each individual's beliefs and experiences; situated cognition, which relates to the context of the sense-making process; and the role of representations, which relates to how the representation of ideas in society affect one's individual sense-making. This study emphasizes the first two.

In this chapter, I begin by considering information that the teacher educators had access to. For this, I draw on relevant survey items. Then, I emphasize what Spillane (2006) called "individual sense-making" and "situated cognition," but I also consider the role of representations. In terms of individual cognition, I use the survey data from the teacher educators to examine what some of their commonly-held beliefs are, and I extend the discussion of beliefs and experiences that was begun with the examination in Chapter Four of the "indigenous-oriented teacher educator" interview data. To consider the teacher educators' beliefs and experiences, I divide the survey questions into three categories for the purpose of organizing the questions into specific topics to facilitate discussion. The categories are 1) teacher educators' institutional beliefs, 2) teacher educators' societal and policy beliefs, and 3) teacher educators' self-beliefs. After considering these with the goal of discussing individual sense-making, I then consider Spillane's concept of "situated cognition" and seek to compare the attitudes and beliefs of the faculty at the different institutions in the study. I pay particular attention to the comparison of two types of institutions—those that formally offer a program specializing in indigenous education and those that do not. Finally, I explore Spillane's concept of representation by

looking at some ideas about certain concepts such as the policy, how they are represented in the responses across the survey, and what they mean for the teacher educators I encountered, particularly as it relates to Mexico's new indigenous rights reform policy.

Information

Spillane (2006) said that sense-making "is an active process of interpretation that draws on the sense-maker's experiences, knowledge, beliefs and attitudes." (p. 76) He noted that these beliefs and experiences and knowledge form "scripts" or "schemas," that are webs of meaning through which all newly acquired information must pass. "The sense we make depends on the sense we already have; our existing knowledge is a primary resource in the development of new, sometimes better, understandings" (p. 76). He said that information in the sense-making process is gathered selectively—we cannot possibly take in everything, but rather "sense-makers notice some things in their environment while at the same time ignoring many others" (p. 76). Teacher educators go through life accumulating information that in the end allows them to make sense of the world around them, including the policy sense making that leads to policy decisions.

Although there have been some efforts in Mexico to move towards decentralization in the educational system, as Chapter Two suggests, these reforms have generally not reached the normal schools.[48] And given the highly centralized nature of Mexico's normal education system, where nearly the entire teacher education curriculum is uniform throughout the country and across institutions, there is a perception that information flows from the top down and is uniformly disseminated throughout the teacher education faculty. The government produces a number of handouts and pamphlets that provide relevant information, such as an overview of the law and even manuals that contain suggestions for teachers and teacher educators for working

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[48] For a discussion of the Mexican system of normal schools, see Chapter One.

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with the indigenous populations. However, I was unable to identify any consistent distribution of information across teacher education institutions and faculty.

In interviews I asked individual teacher educators if they had been given any information by either the federal or state agencies, the normal school and its administrators, or any other source of information about the General Law on the Linguistic Rights of the Indigenous Peoples and/or working with the indigenous population in general. While some of the teacher educators who were more indigenous-oriented, such as Alejandro, had copies of the law and presented it to their students, virtually no one said they received much significant guidance concerning the law's implementation. In fact, of the documents I gathered that had been given to the teacher educators interviewed, most were only copies of the law or contained information about the new system for classifying indigenous languages under the National Institute of Indigenous Languages (INALI). They did not specifically address teachers or teacher educators. While I was able to find a number of plans and manuals online that were published by the national Secretariat of Education (SEP), they did not specifically address the law and its implications, though a few discussed working with the indigenous population. However, these were found on my own and I did not encounter anyone in the teacher training institutions I visited who was actually familiar with them.

There was often a divide between the directors and subdirectors of the normal schools and the teacher educators on the faculty. One administrator claimed that the institution regularly works to update its faculty on the most recent changes in educational policy, mostly through staff meetings and memos. He said,

> We in this current administration give our faculty all the resources, both human and
> economic, so that they can be prepared. We have courses and give them the tools so that

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they are updated in everything new, from the curriculums to the reforms of basic education.

However, most rank-and-file faculty members who were interviewed disagreed with the assessment that the administration had provided ample professional development to the faculty concerning educational policy. Many said they have never attended such a course or received any information from the administration about working with the indigenous population. In fact, the administrator quoted above had just addressed a faculty meeting I attended. One teacher educator, however, did not believe they had received much of anything useful from the administration about the most current educational policies, and he said the staff meetings were unproductive since administrators rarely offered meaningful advice. Sharing his perspective of the most recent staff meeting and the administrator who ran it (the same one quoted above), he said,

> In the meeting, Paul, no one paid attention. I tell you this because I saw it. Seven teachers were on their laptop and weren't doing things related to the meeting. I counted seven laptops. Me? Well, me too. I am going to do it if they are going to. I started to check some course material. Who paid attention? What was the result of us having met there for an hour and a half? What was the result? None, because that boy[49] knows nothing.

Throughout the interviews, teacher educators regularly noted that while workshops and training on new educational policies did exist, the coverage was not universal, and many said they were of limited use. The fact that many of the normal school faculty were part-time also contributed to the problem, as many ran from one job to another and could not take the time to attend such a workshop even if one was offered. One faculty member, who served as a primary

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[49] This is a reference to the younger administrator who ran the meeting.

school principal by day, said he often shared his experiences at workshops with his normal school colleagues because he had better access to such training as a public school principal than as a normal school faculty member. Even when an individual faculty member could discuss an in-service workshop or similar event during the interview, it was rarely about indigenous education. One teacher educator said that the in-service trainings are insufficient and teacher educators still need to go looking for the policy updates themselves: "We ourselves are looking to see who has the information, but we still lack information [on the latest reforms]. We have to be as current as possible, no?"

Another teacher educator noted that while he attended an educational conference in San Cristobal de las Casas, Chiapas that discussed the new law on indigenous rights, it lacked detail and was too broad to be of much use. He said, "I am familiar with it [but] not deeply. In the last conference, in San Cristobal de las Casas, they made it clear that this law existed in the state.[50] However, nothing more was explained."

Throughout the interviews, teacher educators believed it principally fell on them to take charge of their own learning regarding the new educational policies, and throughout the interviews there was no one dominant source of information given by those interviewed. Thus, it appeared they turned to a wide variety of outlets for their information on educational policy. The survey data clearly confirms this and supports the notion that most teacher educators receive their information about educational policy from a wide variety of sources. Spillane noted that information used in the sense-making process is gathered selectively.

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[50] The law I was asking about, The General Law on the Linguistic Rights of Indigenous Peoples, is a federal, not state law, though a number of states, including Chiapas and Yucatan, have instituted their own state-level indigenous language rights legislation.

On the survey, faculty were asked to select the three sources of information they most rely upon to keep them current on the latest educational policies. Table 5.1 below shows the percentage of respondents who listed each item among their top three. Training workshops were the most frequently listed source of information, followed closely by the internet, SEP (Secretariat of Public Education), and TV news with the newspaper rounding out the top five.

Table 5.1
Top sources of information in terms of percentage of teacher educators who placed them in the top three they relied on to keep current on educational policies: n=175

Rank	Information Source	Percent Selecting
1	Training Workshops	54.9%
2	Internet	51.2%
3	Federal Secretariat of Education	45.4%
4	TV News	34.7%
5	Newspaper	27.9%
6	State Education Department	21.1%
7	Colleagues	17.9%
8	Director of Institution	17.1%
9	Academic Subdirector	10.9%
10	Radio	6.8%
11	Friends	2.9%
12	Family	0.6 %

It is interesting to note that in the interviews, many school directors and subdirectors for academic affairs saw themselves as being important conduits in the transmission of education policy to their faculty members. In addition, nearly all of them who were interviewed considered this an important part of their job. However, only a small percentage of the teacher educator population selected them as important sources of educational policy information. In fact, only radio, family, and friends were ranked as being more insignificant sources of policy knowledge than the institutions' own directors. This confirms my suspicion, something that frequently came out in interviews, that the institutional leaders, and by default the institution itself, are not major sources of policy knowledge. However, such a low ranking of their administration is not surprising. Teacher educators in the interviews regularly maligned their administrative officials.

It seems like the administrator's platform for promoting educational policies was weakened by the perception among many teacher educators that their institutions' directors are nothing more than political appointments. One teacher educator noted that the director of his school was appointed to her current leadership post at a time when she did not even have a bachelor's degree. This happened after a political party change in the state government. He said,

> I had her as a teacher [when I attended this school]. She was the one I would have rated the lowest. She didn't have a bachelor's degree, she only had a certificate of elementary education…Now, this time [after her appointment as director] she studied a bachelor's degree and finished it and now is studying a master's. Good for her! [Sarcasm noted in voice] But when she was appointed, she was appointed [without a degree]…and there are teachers who said in front of her… "You don't have the ability. This is a political favor." And I asked myself: "How is this possible? What happened to the concept of merit?"
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> Further, while the category "training workshops" indeed was the information source most often mentioned on the survey, being slightly more frequently mentioned than the internet, both the interviews and answers given on other parts of the survey suggest that this may be a weaker response than it first appears. The majority of those interviewed claimed they had not attended a workshop in the past year, and even fewer claimed they attended a workshop related to indigenous education, the new law, or even the educational policies in general. One of my questions in the interviews asked each teacher educator if they had attended a workshop on the law or on indigenous education or on any educational policy. It proved so uncommon for a teacher educator from the region to attend a workshop on indigenous education that when forced to limit the number of survey items, I eliminated that question on the grounds that no one in the first 20 or so interviews had yet claimed to attend such an event. It seemed unlikely that would

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be a "high yield" question.[51] In the survey, I therefore asked only about attending a general workshop. Also, the interviews suggested that many of the training workshops faculty attended were often through their day jobs in the public schools and not through the normal school. This was almost universally the case with the part-time faculty members (who constituted nearly 68% of the faculty across all institutions). When asked if their institution "regularly offers training to their faculty concerning recent changes in educational policy," 60.5% agreed and only 12.2% strongly agreed, while 39.5% disagreed (see Figure 5.1).
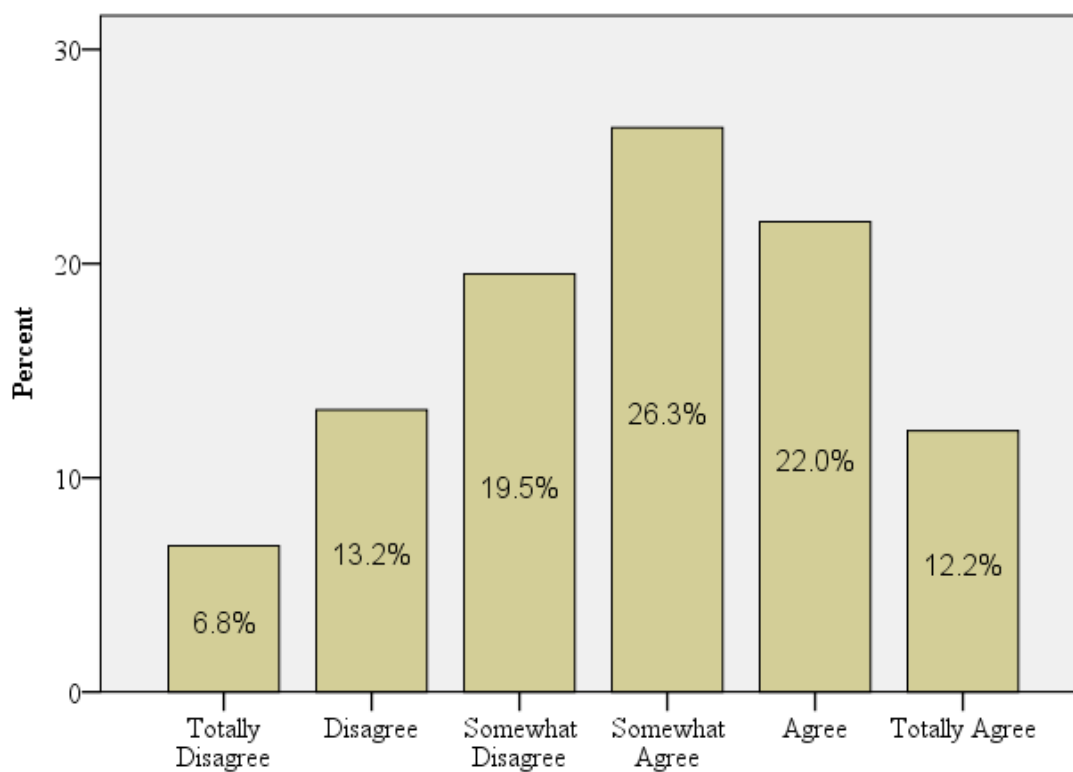
Figure 5.1. My institution regularly offers training to their faculty concerning recent changes in educational policy.

Further, 56.6% agreed they had attended some kind of policy-related workshop that was sponsored by their school within the last year. This suggests some coverage of in-service policy training on behalf of the normal schools, since a small majority agreed that they had attended a

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[51] This was my thinking at the time, though in retrospect I likely would have done it differently.

workshop supported by their institution within the last year related to educational policy. However, because 43.3% of the teaching faculty said they did not attend such a workshop (see Figure 5.2), coverage was not universal, and the interview data suggests that those who did attend a workshop were unlikely to attend one related to the new law or related to indigenous education.
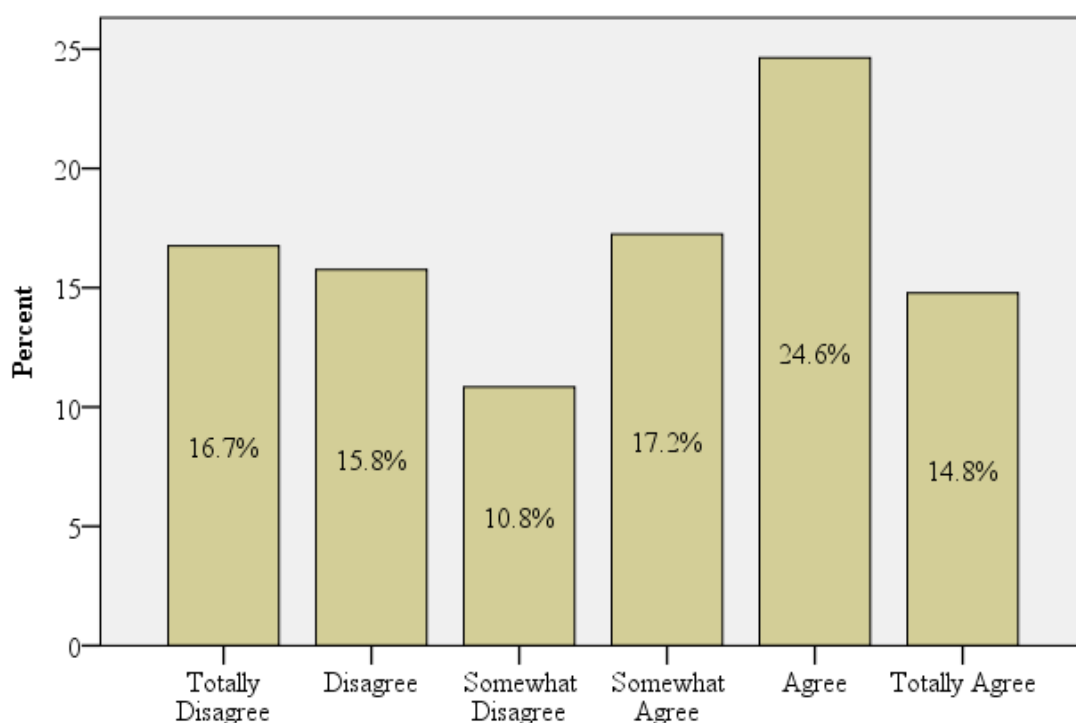
Figure 5.2. I have participated in workshops supported by institution related to changes in federal educational policies in the last year.

Thus, the surveys suggest that teacher educators in southern Mexico utilize a wide variety of media to learn about the latest changes in the dynamic and ever-changing realm of educational policy. While it is true institution-based workshops clearly play a role in informing teacher educators of policy changes, both the interviews and the surveys showed that many find the in-service training on education policy offered by the teacher-training institutes to be insufficient in

providing faculty members with enough information on recent changes in educational policy and they often look elsewhere for educational policy information.

Given the wide variety of information sources that teacher educators utilize, questions are raised as to the consistency of the information received. For one, as reported in Table 5.1, those charged with educating the next generation of teachers seem to find sources such as TV news or the newspaper more helpful sources of educational policy than their own institutional leaders. This reflects poorly on the school administrators' reputation among their faculty and undermines their standings as policy leaders. Spillane (2006) suggested that teachers often rely on institutional (or district-wide) policies to act as a "surrogate" (p. 120) for state and federal policies, since institutional policies would logically have to reflect and incorporate policies handed down by the federal and state bureaucracies. However, here this does not appear to be the case. Teacher educators are often left to consider alternative sources of information which may not only place an extra burden on the teacher educator, but could lead to more confusion as they try to resolve the inconsistencies one would naturally find in the varying information sources.

The version of a policy one reads online is likely quite different than what is reported on the TV news and written about in the newspaper. Further, the writers of such media are likely generalists with no training or experience in education who are writing for the general population. These sources are unlikely to provide more than a superficial look at educational policies, and they would be unlikely to provide the kind of in-depth information one would need to effectively implement them, much less teach them in a teacher education classroom. Also, unless one takes copious notes from sources such as TV, something that seems quite unlikely, teacher educators would necessarily have to reply on their memories of what they read or heard.

It seems there exists some risk that the flow of information from the upper levels of

government is highly fractured, even watered down by competing policy signals from other sources, whether or not on paper there is a centralized system in place for the dissemination of educational policy information. I also suggest that teacher educators often go to a divergent number of information sources which impacts their cognition and how they make sense of the law and other educational policies, leading to variance in how teacher educators make sense of, and ultimately implement, educational policies in the normal schools. Spillane et al. (2002) wrote, "The fundamental nature of cognition is that new information is always interpreted in light of what is already understood" (p.394). This new information is constantly combined with the information that has already been processed through an individuals' background and experiences. Thus, it seems critical to consider the source of this information if we are going to understand better how sense making takes place as a result of this interaction.

In Spillane's framework of sense making by policy actors, the new information that comes to teachers from the various sources of information combines with their own beliefs, backgrounds, and attitudes (presented in Chapter Four) to construct the basis of one's individual sense-making. Recall that in Chapter Four I looked at the backgrounds of the teacher educators, through both the interview and the survey data. I compared and contrasted the attitudes and beliefs of the indigenous-oriented teacher educators with the general populations. I observed that among the 12 indigenous-oriented teacher educators, there is a distinct set of characteristics that define them: their appreciation of indigenous language and culture, their identification with the indigenous population, their diffusion of information surrounding indigenous language and culture, their recognition for cultural differences, and their ability to think critically about their institution and surroundings.

The categories we have looked at so far are what Spillane et al. (2002) labeled "individual cognition" (p. 388)—how individuals possess certain backgrounds, values, knowledge, and attitudes that affects their cognitive sense making. However, such values and attitudes do not exist devoid of a policy agent's social context. Thus, we examine the attitudes of teacher educators that display their beliefs and attitudes about their institutions. Although obviously influenced and intertwined with the context of their working environment, the principal utility of such analysis lies in its ability to show how teacher educator's assess and value the institutions they where they teach.

Institutional Beliefs

Spillane (2006) wrote that "policymakers' actions do not take place in a vacuum but in a complex web of organizational structures and tradition" (p. 176). Next we consider what kind of attitudes teacher educators have shown concerning their own institutions and the Mexican educational authorities. This is not context in the broadest sense of the word, as the opinions are still at the individual level and do not reflect the collective beliefs of the whole institutions' faculties. We will consider that in the next section. However, the following survey items suggest how each individual feels about the institutions in which they are working and practicing their craft, which sheds light on the context of the reforms.

The Policy Climate

Spillane (2006) suggested that the policy climate can affect one's sense-making of educational policy. We start by considering how the teacher educators perceive Mexico's federal Secretariat of Public Education (SEP) (see Figure 5.3). Although SEP is highly involved in the oversight of normal schools and their operations, teacher educator assessment of SEP's knowledge of teacher education was mixed. However, 55.3% believed that SEP did not

understand how to improve teacher training, while only 44.7% gave SEP a vote of confidence. This suggests that large portions of the teacher educator population may be more likely to reject initiatives from SEP, since many see them as not having the level of competence needed to play a role in improving teacher education. The data also shows substantial ambivalence of teacher educators toward SEP, with many responses in the middle and few strong views on either side.
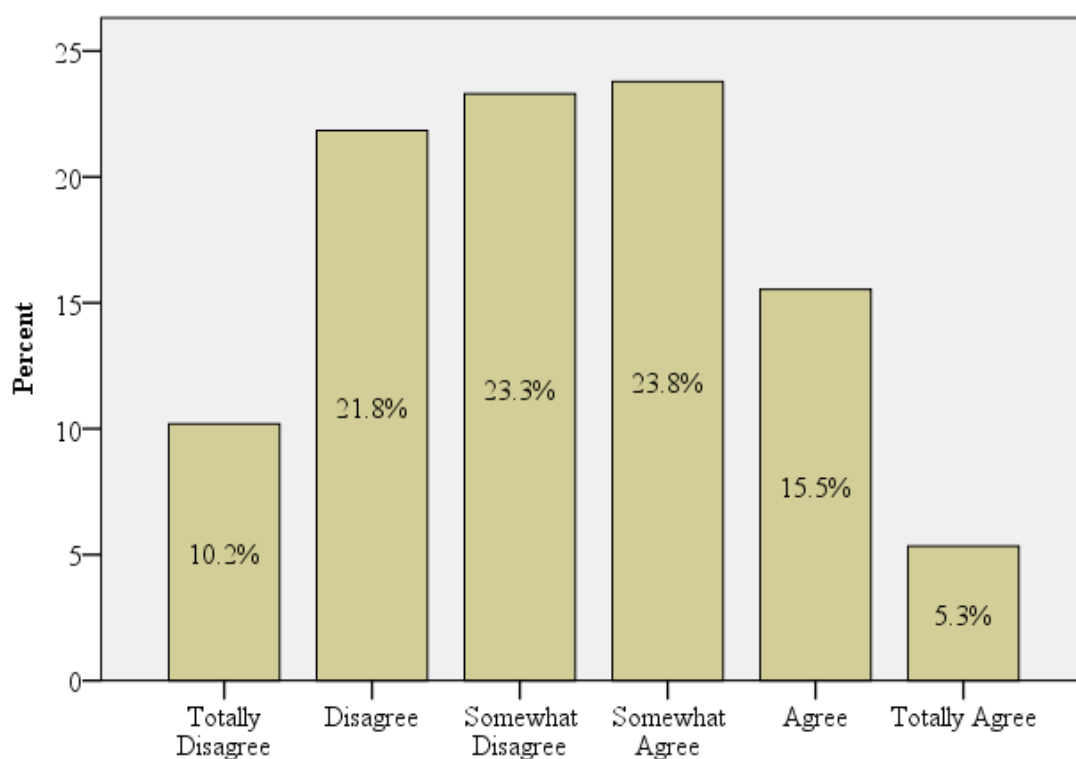
Figure 5.3. Federal authorities from the SEP understand how to improve the training of new teachers.

Teacher Educator Agency

The following three survey items represent what I see as proxies for teacher educator agency, because they reflect on their sense of their institution and their belief that they have the authority to make decisions that affect educational policy. They include items on resources, independence, and the ability to implement policy in the respondent's local context. Although the definition of agency, or even the word used to describe it, may vary, resources,

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independence, and the ability to apply policy in a different context all are key concepts in a wide variety of policy implementation literature (Lipksy, 1980; Maynard-Moody & Musheno, 2003; Spillane et al., 2002). They are included here under "institutional beliefs" because they also reflect teacher educators' beliefs and viewpoints about their institutions.

Spillane (2006) noted that "Sense-making depends on the resources at the sense-makers disposal" (p. 93). Acknowledging that "Policy making is resource intensive," policy implementation cannot take place unless it is backed by sufficient resources to carry it out. It is not sufficient to have the necessary knowledge, skills, and attitudes to implement a policy if there are no resources behind it. Interestingly, despite the frequent perception by many academics and observers that Mexico's educational system lacks sufficient infrastructure and resources, teacher educators seemed to indicate that resources are not a major barrier to them doing their job. In fact, 75.3% of all faculty members said they had sufficient resources to do their job well (see Figure 5.4). One caveat: This survey question was the only one asked only in

the State of Yucatan, and its results should be interpreted with a great deal of caution.
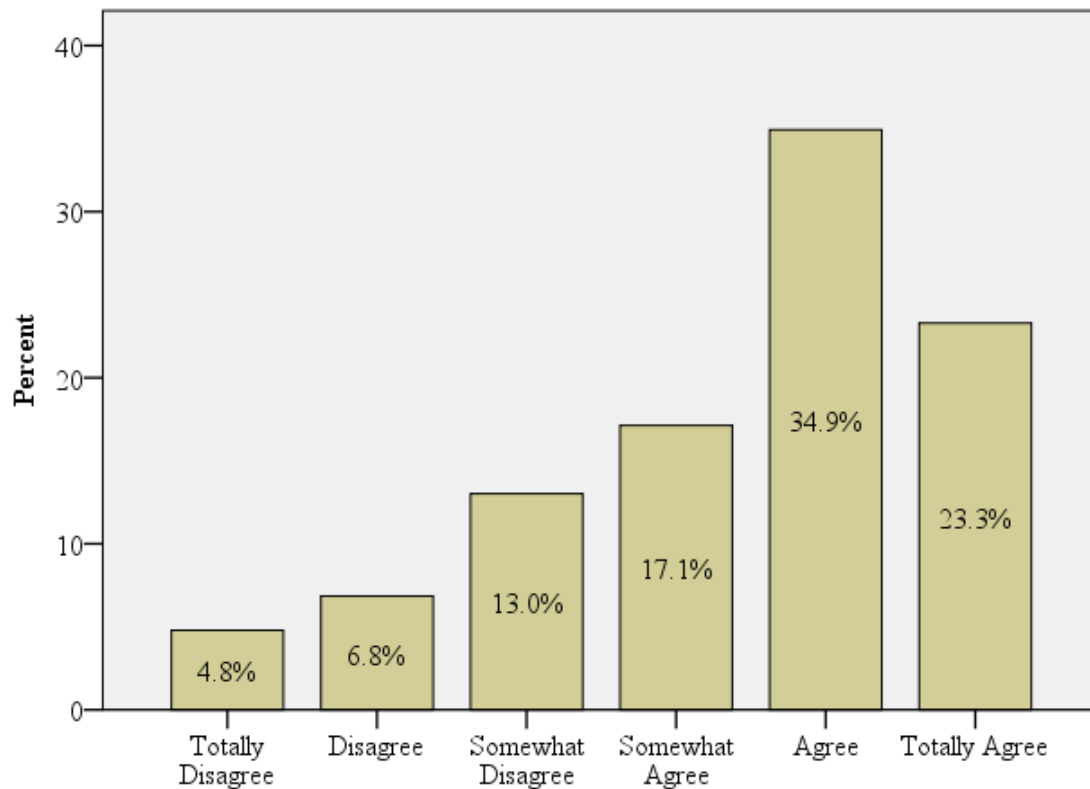
Figure 5.4. I have sufficient resources to do my job well.

Despite the highly centralized nature of the Mexican normal school curriculum, there is a strong belief among Mexican teacher educators that they have the independence necessary to teach the courses they are assigned. This conflicts somewhat with interview data that suggests the national curriculum restricts teacher educator independence because the curriculum is chiefly designed in the capital, and there is little room for the individual teacher educators to add to or modify the curriculum. This is important because, when combined with the high number of teacher educators who stated they had sufficient resources in the previous question, it appears that teacher educators feel they have both the resources and independence to be active agents in the policy implementation process.
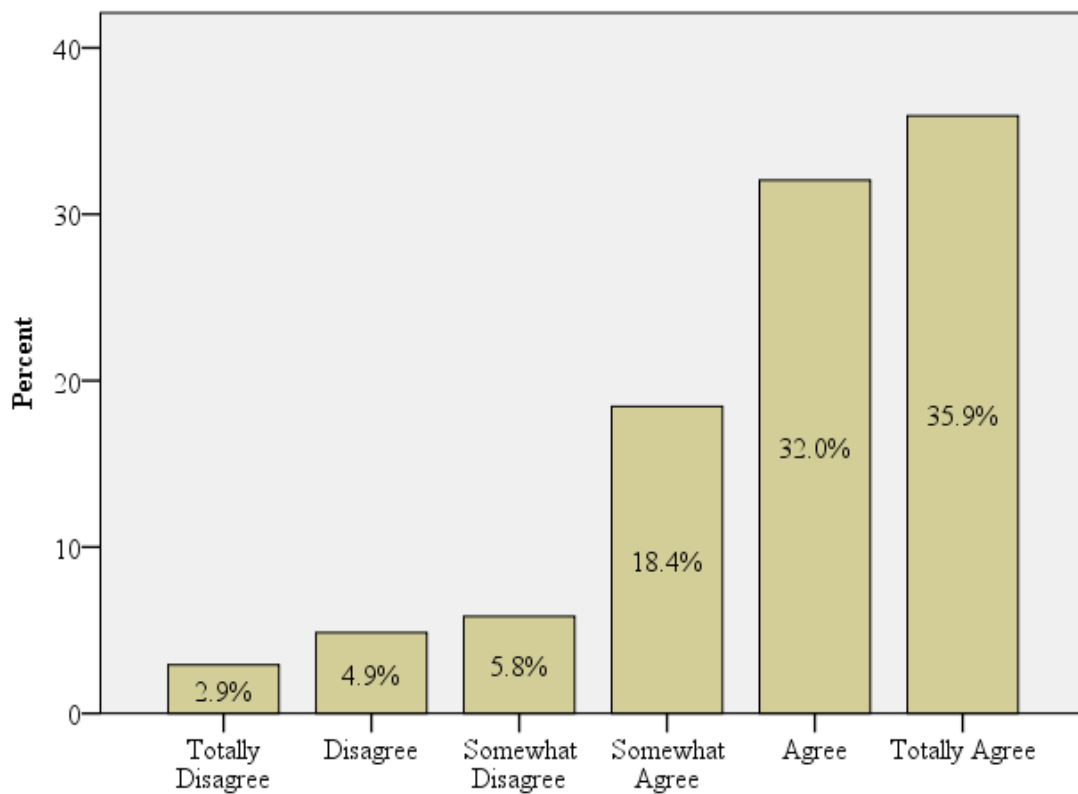
Figure 5.5. I have the independence to teach the courses I am assigned.

As figure 5.6 (below) shows, 79.9% of all teacher educators believed they had the ability to interpret and implement educational policies in the manner that best adapts to the local context in which they work. Here and in the previous two questions, teacher educators confirmed they feel they have the resources and independence to interpret and implement local policies in a way that best adapts to their local context. This makes them potentially powerful policy agents in the educational realm. This suggests that teacher educators not only feel they have an impact on the implementation of the policies that are adopted in their institution, but that there is some leeway in how they interpret and implement it.
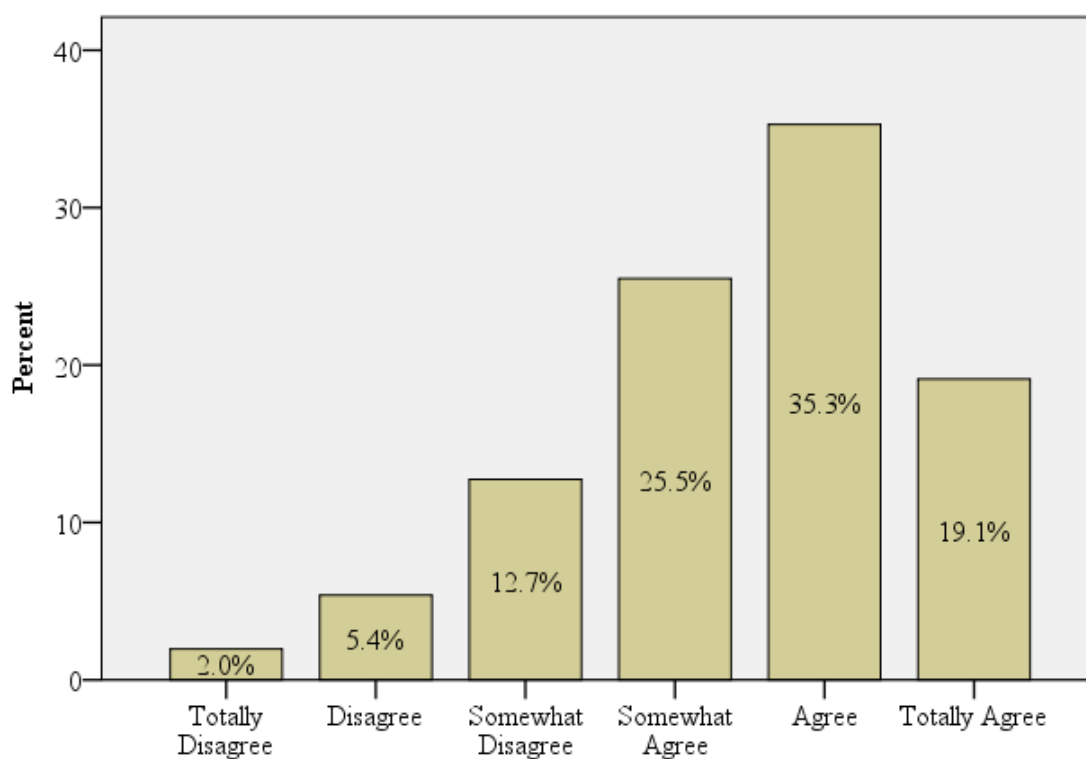
Figure 5.6. I have the ability to interpret and implement educational policies in the manner that best adapts them to the local context where I work.

Teacher Educator Assessments of Current and Future Teachers in Indigenous Areas

Spillane et al. (2002) noted that policy actors' sense making occurs at both the macro level, with his or her perception of the world, and the micro level, which is frequently defined by the policy actor's "immediate environment—considered in terms of the organizational arrangements of the workplace" (p. 406). Teacher educators' perceptions and assessment of their own institution seem not only vital to understanding how that immediate workplace affects one's sense making, but also to understanding the teacher educator and placing them in an institutional context. Overall, teacher educators have a relatively high opinion of the preparedness of their graduates to work with the indigenous population, with 60.5% agreeing that their graduates are well prepared to work with the indigenous population and 39.5 % disagreeing (see Figure 5.7). Responses gravitated toward the middle, however, with few respondents agreeing or disagreeing

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very strongly that their graduates are prepared. While the survey showed that the majority

agreed, the fact that nearly 40% disagreed that graduates of their institutions are well-prepared to

teach the indigenous population suggests there is likely substantial room for improvement.

However, it does conflict somewhat with the results of another question. When asked if they

believed that teachers who are currently working in indigenous areas were well-prepared, 62.4%

said they were not (see Figure 5.8). Below, I discuss the implications and likely cause of this

phenomenon—that teacher educators in the study show signs in the interviews of being more

critical of other institutions than themselves, and a feeling that younger, more recent graduates of

the normal schools are better prepared to work in indigenous areas than older, more senior

schoolteachers.
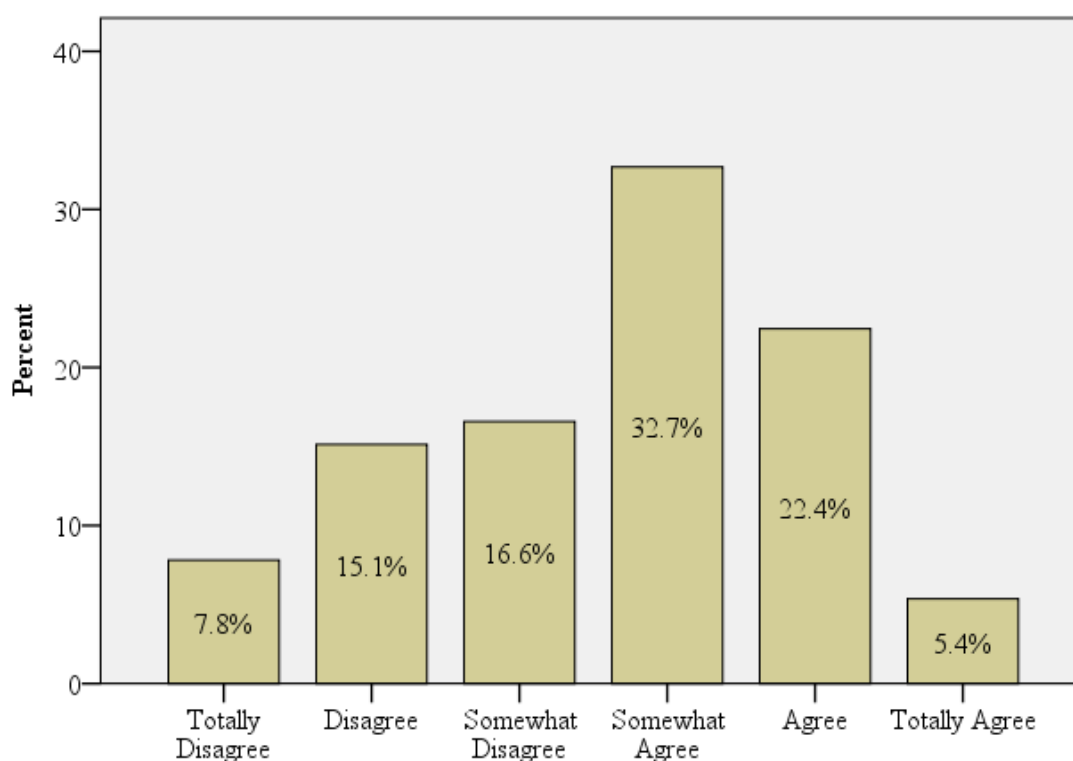
Figure 5.7. The graduates of my institution are well-prepared to work with indigenous populations.

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Here, only 37.6% of teacher educators agreed that teachers currently working in indigenous areas are well-prepared (see Figure 5.8). These numbers seem to contradict earlier results that suggest teacher educators generally believe their own graduates are prepared to teach in the indigenous community. If teacher educators contend that teachers who graduate from their institutions are highly-qualified to teach in indigenous communities, as they suggested above (see Figure 5.7), why are the current teachers who are teaching in indigenous areas not seen as being well-prepared? One possible explanation was given by a normal school director. She suggested that the problem is there are many older teachers who are not sufficiently trained in education who refuse to retire, and this lowers the overall quality of the teaching force. While this seems logical on one level, it is inconsistent with the current trend that young, recent graduates of the normal schools are the most likely teachers to be sent to indigenous areas, and these new teachers often feel like they have to "pay their dues" in indigenous areas before achieving the seniority necessary to secure a position in a urban area. It also follows a pattern that suggests that teacher educators are more critical of their colleagues than of themselves.
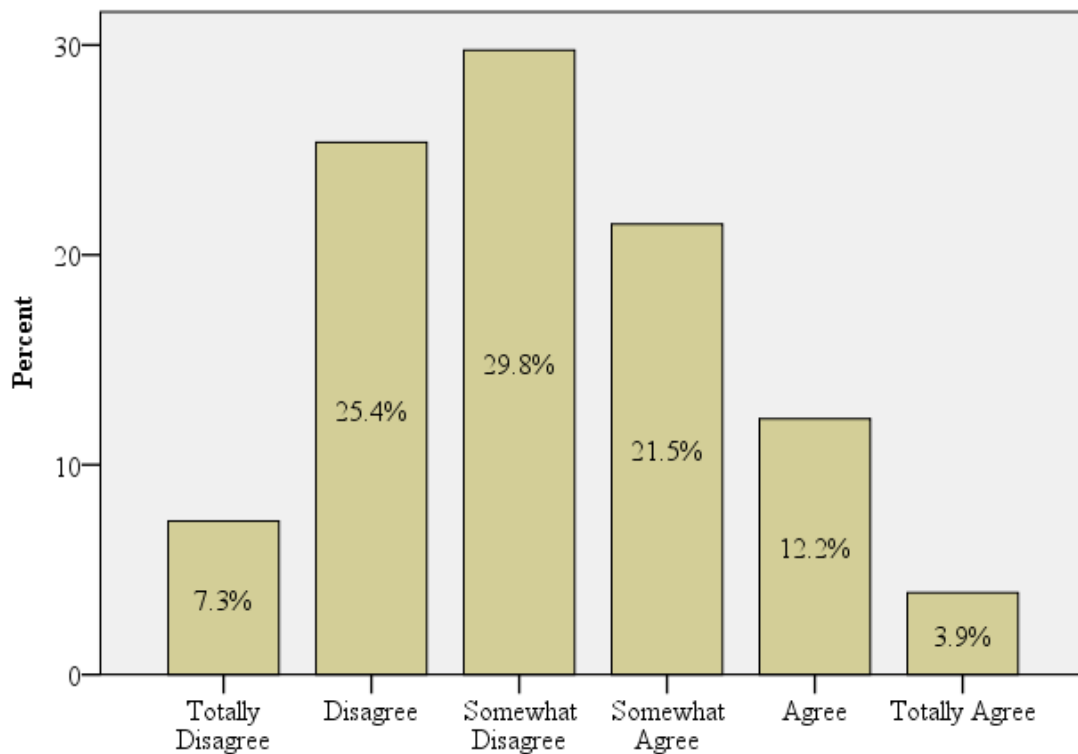
Figure 5.8. I believe teachers currently working in indigenous areas are well-prepared.

There is clearly a lack of indigenous speakers in Mexico's education system, a recurrent issue we see throughout this work. In Figure 5.9, we see the limitations of Mexico's teacher education system's ability to train teachers in indigenous languages. While some nations, such as Guatemala, seem more effectively to emphasize programs designed to recruit native indigenous speakers for teacher training institutions and thus emphasize teaching native speakers educational sciences, Mexico emphasizes recruiting students from the dominant majority and attempting to teach them an indigenous language. Because there is no place in the national curriculum for teaching indigenous languages, these are done as a "workshop" that needs to take place after hours and thus varies widely from institution to institution. One offers 2 hours a week for 6 semesters. In another, the director lamented that the state government had cut off the funding for his only indigenous language teacher. In Figure 5.9, we see that only 30.7 % of

teacher educators agreed that their institutions offer sufficient training in indigenous languages for their students who are going to work in villages that speak indigenous languages, and only 2.9% strongly agreed. Meanwhile, 69.2% disagreed that their institutions provide sufficient training in indigenous languages for their students who are going to work in indigenous villages.
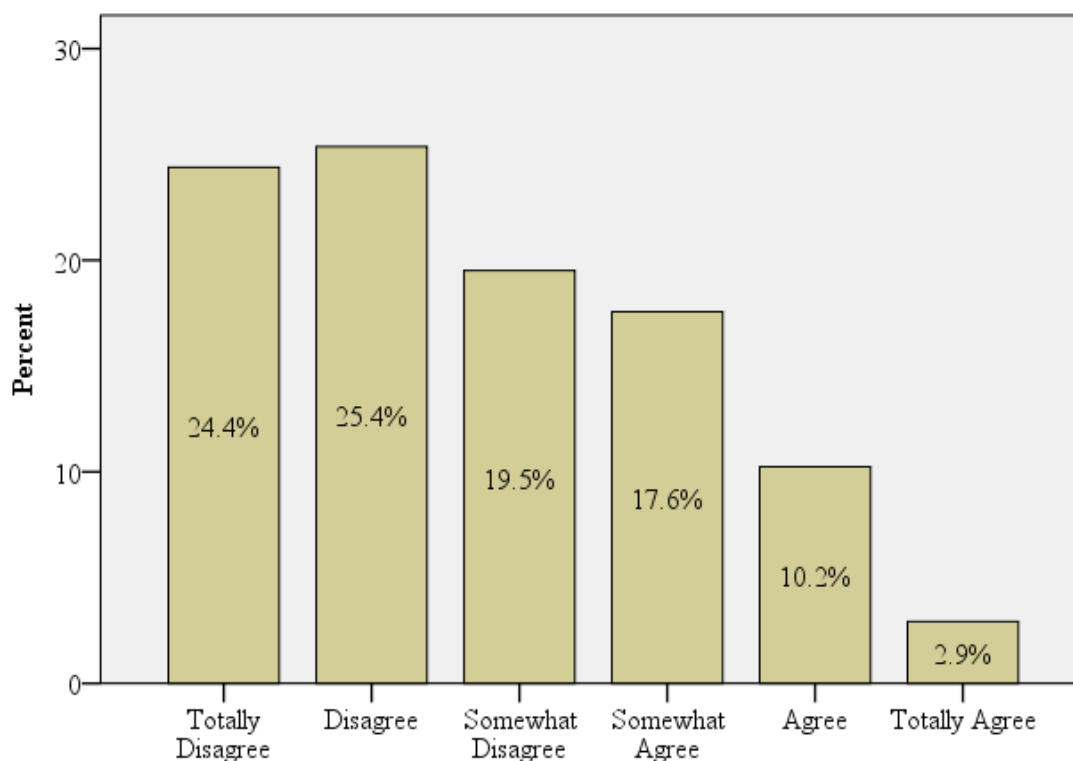
Figure 5.9. Our Institution offers sufficient training in indigenous languages for our students that are going to work in villages that speak indigenous languages.

Spillane (2006) suggested that the policy climate can affect one's sense-making of educational policy. He contended that while a number of other authors often attribute policy failure to resistance, he believes there is substantial evidence that "local officials resistance does not account for policy failure" (p. 7). Lopez (2008), on the other hand, suggested that resistance is a key reason for the failure of intercultural, bilingual education (IBE) in Latin America. However, there seems to be at least ostensibly little resistance to the reform itself.

Support for the General Law on the Linguistic Rights of Indigenous people was near unanimous, with 90% of respondents saying the law is necessary (see Figure 5.10). Of course, it is difficult to ascertain whether there is complete support for the law or whether people simply fear publicly opposing it. In the interviews, only two individuals expressed opposition to the law. One young teacher educator believed the law was divisive and believed that the Mexican nation was becoming too divided by people identifying themselves into different categories. Another more seasoned teacher educator suggested that the law was unnecessary, and it was simply sufficient to treat all students with respect and dignity. Alejandro, however, said he knows of no substantial opposition but admits "in the current discourse, which is favorable, it is difficult for someone to oppose this legislation, at least publicly." The survey numbers support Alejandro's assertion and suggest that there seems to be at least a positive political climate in the normal schools to implement the reform. However, recall in Chapter Four that we discussed that 64.4% of teacher educators did not believe that people should be able to identify themselves as indigenous or part of another subgroup but rather should simply be content to identify themselves as teacher educators. In the section that follows, I consider how teacher educators understand the law (and they overwhelmingly indicate they do not). I also discuss the implications and possible meanings of all this seemingly contradictory survey data in Chapter Six.
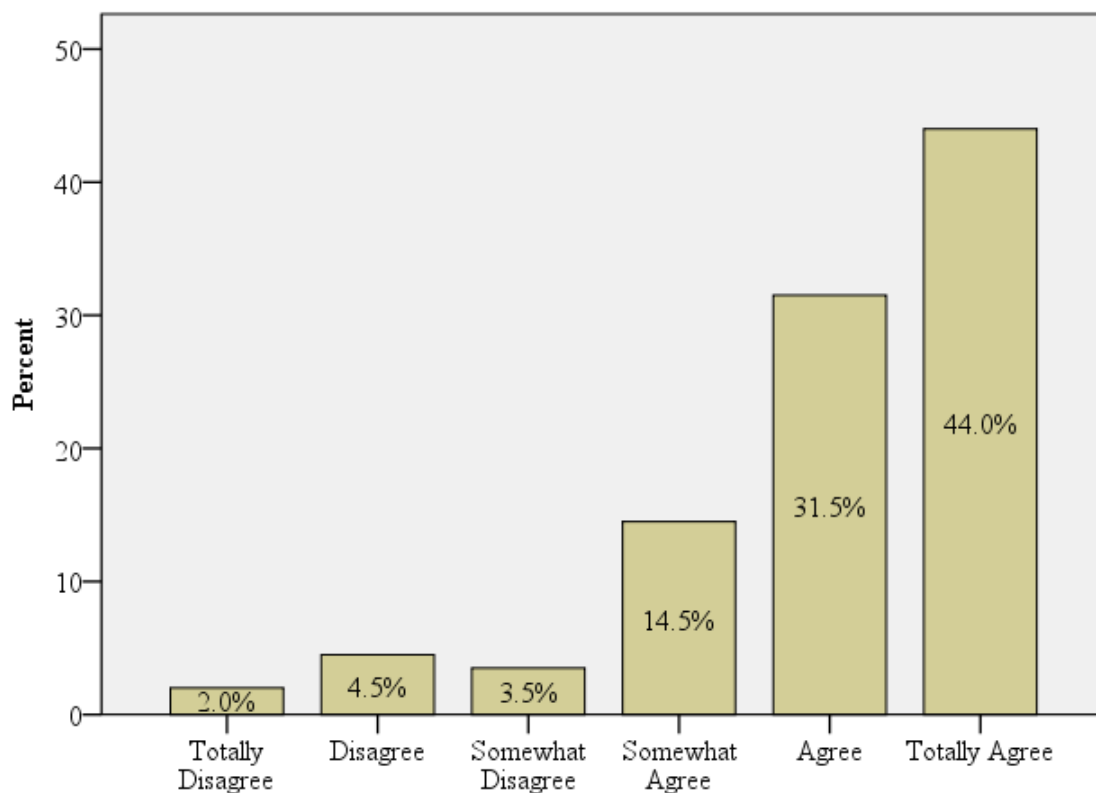
Figure 5.10. The General Law on the Linguistic Rights of Indigenous Peoples was necessary.

Beliefs about Self

Spillane (2006) believes that "changing existing behavior" is "the object of policy" and therefore "affects one's self image" (p. 179). He admitted that how self image is affected by educational reform still needs more research. But Spillane et al. (2002) suggested that "emotional associations are an integral part of knowledge structures used to reason about the world and may affect reasoning" (p. 402) about educational policy. Indeed, they argued that "The affective costs of self-image can work against adopting reforms" (p. 402).

Here I present the results of a number of survey items that center around Mexican teacher educator's beliefs about themselves and their knowledge of the law. When considered in light of the previous survey items and the interview questions, such questions help us to understand how teacher educators see themselves in the bigger picture.

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For the most part, as Figure 5.11 shows, teacher educators believe that they are abreast of the most recent policy reforms. 87.3% believe they were updated. As we see in Figure 5.12, they also feel confident in their abilities to teach future educators in Mexico about educational policy.
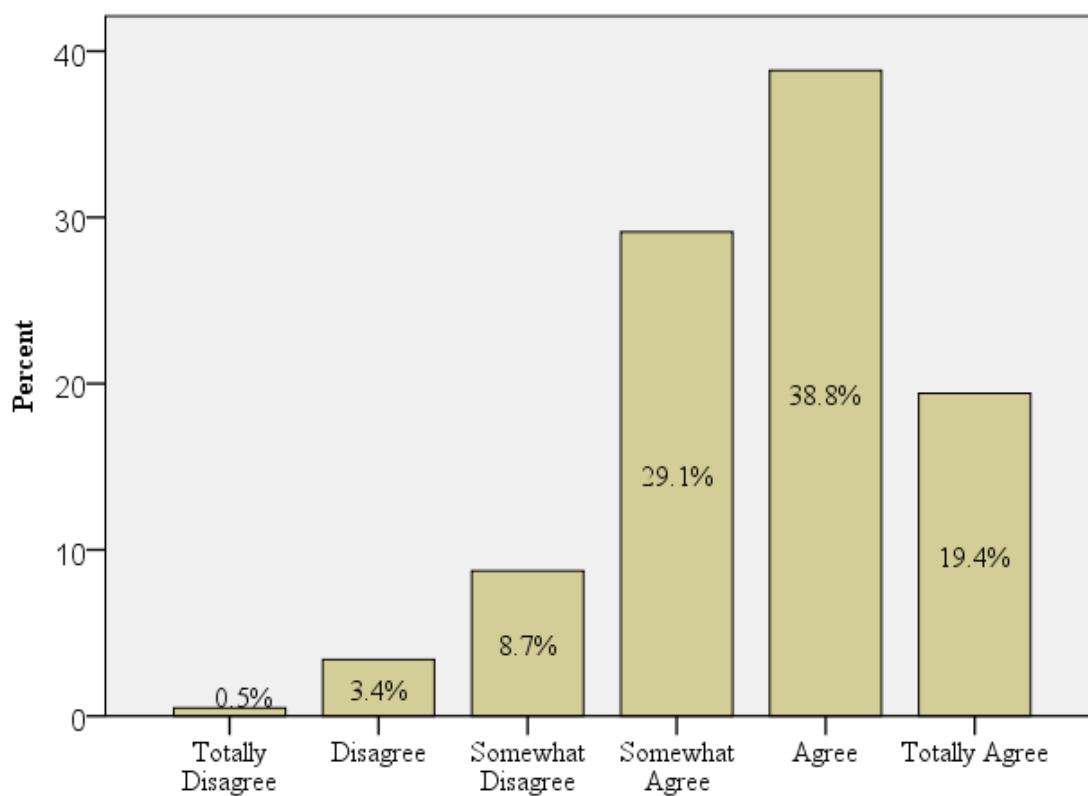
Figure 5.11. I believe I am abreast in recent educational reforms.

In Figure 5-12, we see that 76.9% feel confident that they are trained to teach future teachers about educational policy in Mexico. Yet, this confidence was relatively weak, with only 19.1% totally agreeing on their ability to teach educational policy, while 33.8% agreed and 24% somewhat agreed. This is a noteworthy fact since normal school faculty members are expected to be generalists, and courses that encompass educational policy are taught by a wide cross-section of the faculty. Also, it is important to recall that they are seen as experts in education, and one might expect higher levels of confidence in abilities.
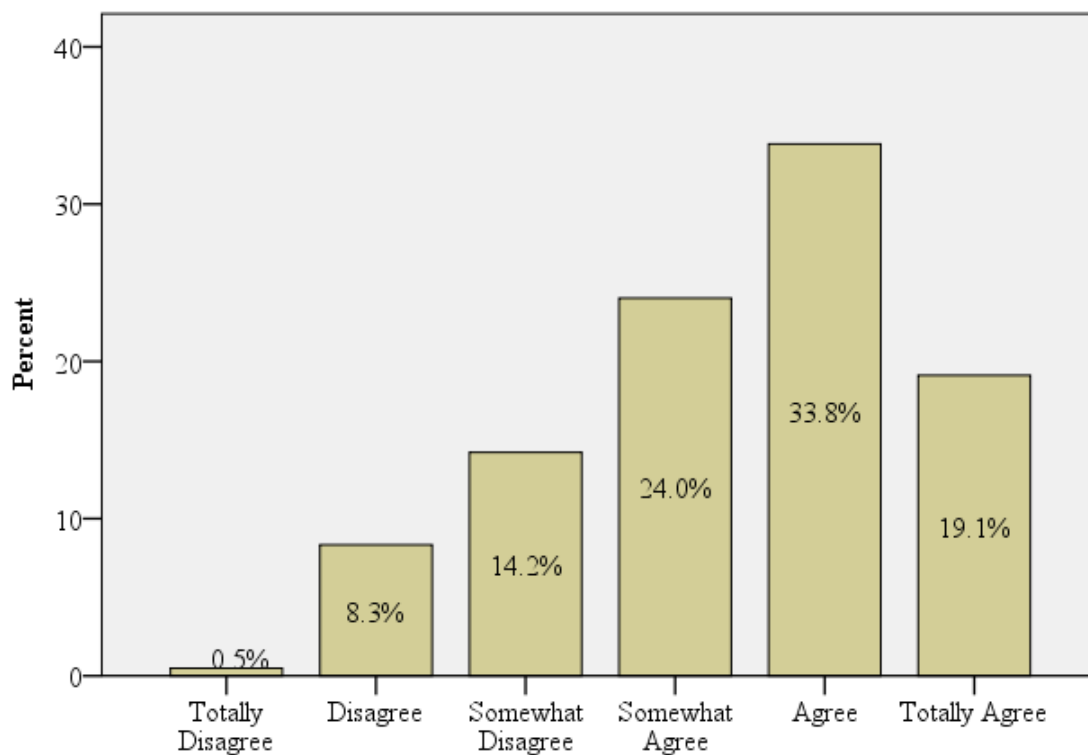
Figure 5.12. If necessary, I can teach future teachers educational policy in Mexico.

Despite their contention that they are abreast of the most recent educational policies and their belief that they are generally qualified to teach it, it seems they know little about the General Law on the Linguistic Rights of Indigenous peoples and how it applies to their own institution. Figure 5.13 indicates that 54.5% of respondents said they did not agree that they were clear on how the new law applies to their institutions, and only 5.9% totally agreed they had a grasp of the law. These results run counter to the interview data surrounding beliefs of both the normal school directors and government officials, who regularly contended in the interviews that the faculty are well-prepared to meet the challenges of this new law and well-informed as to how it applied to them.
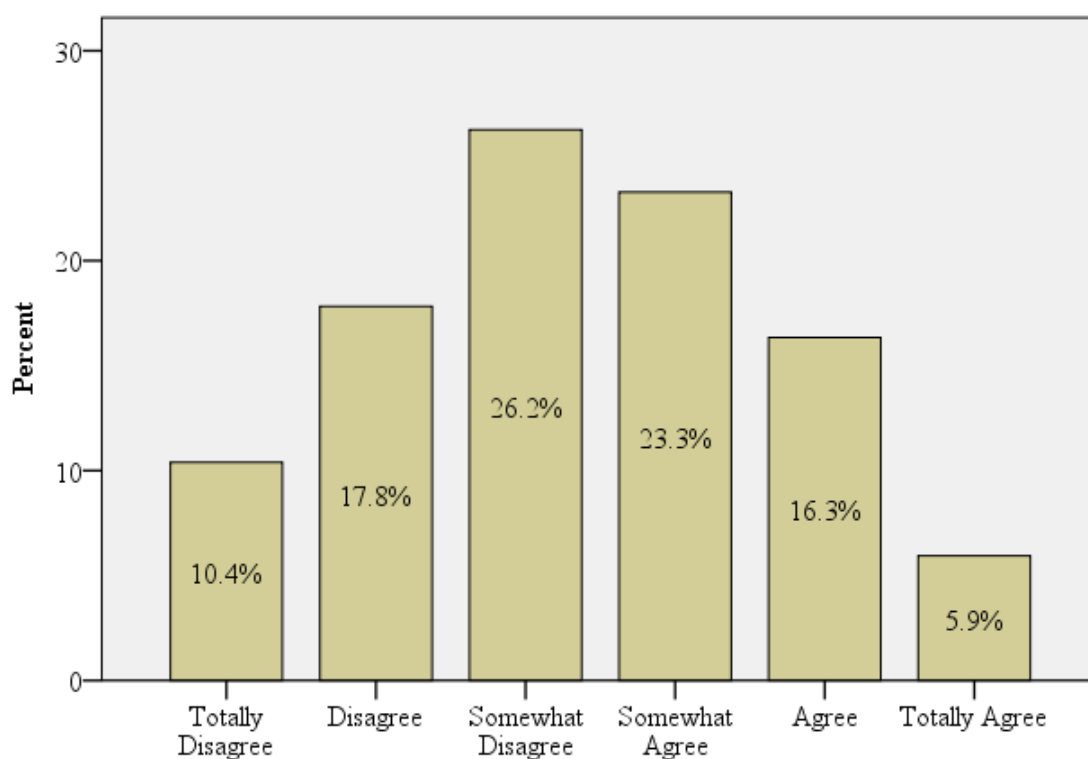
Figure 5.13. I am clear how the General Law on Linguistic Rights of Indigenous People applies to educational policies in my institution.

Since their perception of knowledge went down when asked about a specific policy (as opposed to asking them about their knowledge of general policy), the root of the seemingly contradictory survey data may be in the teacher educators overestimating their knowledge of educational policies. Spillane et al. (2002) called this "the tension between general principals and specific examples in the representation of policy" (p. 416). Policy agents may have an interpretation of the overall policy, but may make different decisions when the policy is broken down into smaller pieces. Another possible explanation may be that indigenous policy is regarded as being less important to them, and while they keep abreast on some policies, they do not see a need to keep up with policies that affect the indigenous population. Consider that Luis, one of the indigenous-oriented teacher educators I profiled earlier, said that indigenous education is often seen as the least-important field of education in Mexico, because indigenous is often

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identified as poverty. Describing how many indigenous youth do not want to work in indigenous schools he said,

> According to the logic of some indigenous, the poor are poor because they are indigenous…so they try to stop being indigenous and when they move up, their sons and daughters no longer want to be indigenous so they can come out ahead. Progress is being not indigenous…so they reject working in the indigenous school system.

Questions remain about how teacher educators, or policy agents in general, can implement something they do not wholly understand. I discuss in this more depth in Chapter Six.

Situated Cognition

In Spillane et al.'s (2002) concept of "situated cognition," context is a crucial aspect of how people make sense of educational policy. "We complicate the human sense-making process by arguing that situation or context is critical in understanding the implementing agent's sense making…multiple dimensions of a situation influence the implementing agent's sense-making from and about policy"(p.389). However, for Spillane et al. the context is not just where the policy implementation and interpretation take place, but rather is a fundamental part of the many factors that come together to form an individual's cognitive sense-making. "Situation or context is not simply a backdrop for the implementing agents' sense-making but a constituting element in that process" (p. 389).

Of particular importance to Spillane (2006) is the organization. He believes that the organization as a concept has received insufficient attention in the literature on policy implementation and interpretation. Contrasting himself with Lipsky (1980) and other rational choice theorists who portray teachers and other public servants as being bound by a number of practical limitations within their institutions, Spillane contends that these types of models "fail to

account for…variation among teachers" within each institution (p. 177). However, he does believe that organizations matter. He wrote "In foregrounding the person it is important not to lose sight of place, where the person is positioned….While organizational structure may not control district policymakers' and teachers' sense-making, it does influence it" (p. 177).

Here I look to see whether or not context makes a statistically significant difference in how teacher educators responded to the survey questions. Since my principal interest in this study centers around indigenous education, I compared the responses between two different types of teacher education programs—ones that offer a program in indigenous education and ones that do not. Note that in Mexico, all teacher educators are generalists, and it is likely teacher educators will rotate through the courses and teach a number of different courses across different programs throughout their career. Therefore, there is no way to delineate precisely those who teach only in indigenous education programs. Indeed, even many of the indigenous language teachers I interviewed reported they taught across different domains, as their language teaching was never full-time. Here, I use 2 x 2 crosstabs to evaluate the association of survey responses between those who teach in institutions that offer indigenous education and those who teach in institutions where no indigenous education program is offered. Tables 5.2 and 5.3 provide information about the breakdown of the different types of institutions and the corresponding number of respondents from each. (For a complete report on methodology, including information on the p-value and phi coefficient, please see Chapter Three.)

Table 5.2
Number of Institutions with Indigenous Education Programs

	Chiapas	Yucatan
Has Indigenous Education Program	2	3
Does Not Have Indigenous Education Program	2	5

Table 5.3.

Survey Respondents for Type of Institution

	Chiapas	Yucatan
Faculty Affiliated with an Institution that has Indigenous Education Program	16	60
Faculty Affiliated with an Institution that does not have an Indigenous Education Program	43	89

Comparative Individual Beliefs and Attitudes of Mexican Teacher Educators

Economics More Important than Culture.

Although teacher educators who were not affiliated with indigenous education programs were less likely to believe economics was more important than cultural preservation, this was not statistically significant. There was no significant relationship between institution type that offered a specialization in indigenous education and those who did not as to whether economic development was more important than preservation of indigenous language and culture (p=.276). Although one would expect that educators in institutions with an indigenous education program would be more likely to emphasize culture than economics, this was not reflected in the survey data (See Figure 5.14).
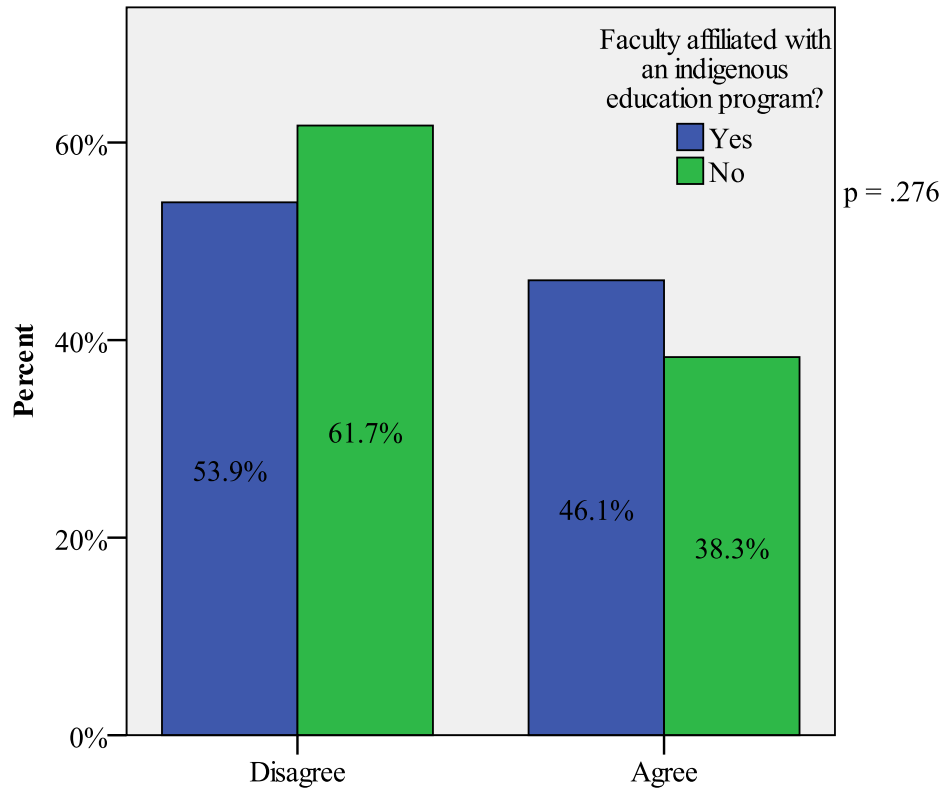
**Figure 5.14. Economic development of indigenous towns
is more important than the preservation of its cultural
and linguistic traditions.**

Learning the English language is more important for our students than learning indigenous languages.

Teacher educators who were affiliated with indigenous education programs were less likely to agree that learning English is more important for their students than learning indigenous languages (see Figure 5.15). However, this was not statistically significant (p=.316). One would expect that those in institutions with indigenous education programs would value the language more. This supports the interview data where indigenous teacher educators often expressed that colleagues do not value their language.[52]
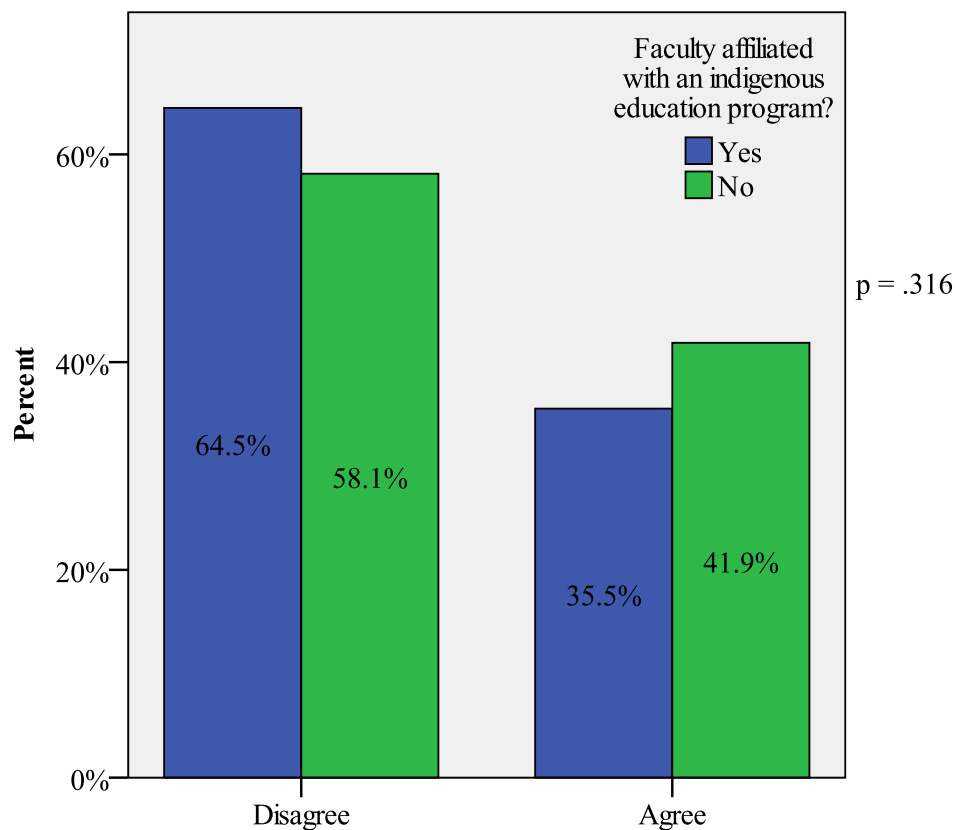
Figure 5.15. Learning English is more important for our students than learning indigenous languages.

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[52] For an example, see Guillermo's comments in Chapter Four.

All Mexican citizens are Mexicans and people should not try to identify themselves as part of a subgroup.

In Figure 5.16, we see that teacher educators working in an institution that offers an indigenous education program were less likely to agree that all Mexicans are Mexican and that people should not try to identify themselves as part of a subgroup (p<.01). This difference is statistically significant. However, the phi of .186 suggests that the effect size, though significant, is relatively small. Thus, the survey data suggests that the faculty of indigenous education institutions have a higher recognition of indigenous subgroups and may be less likely to advocate assimilation.
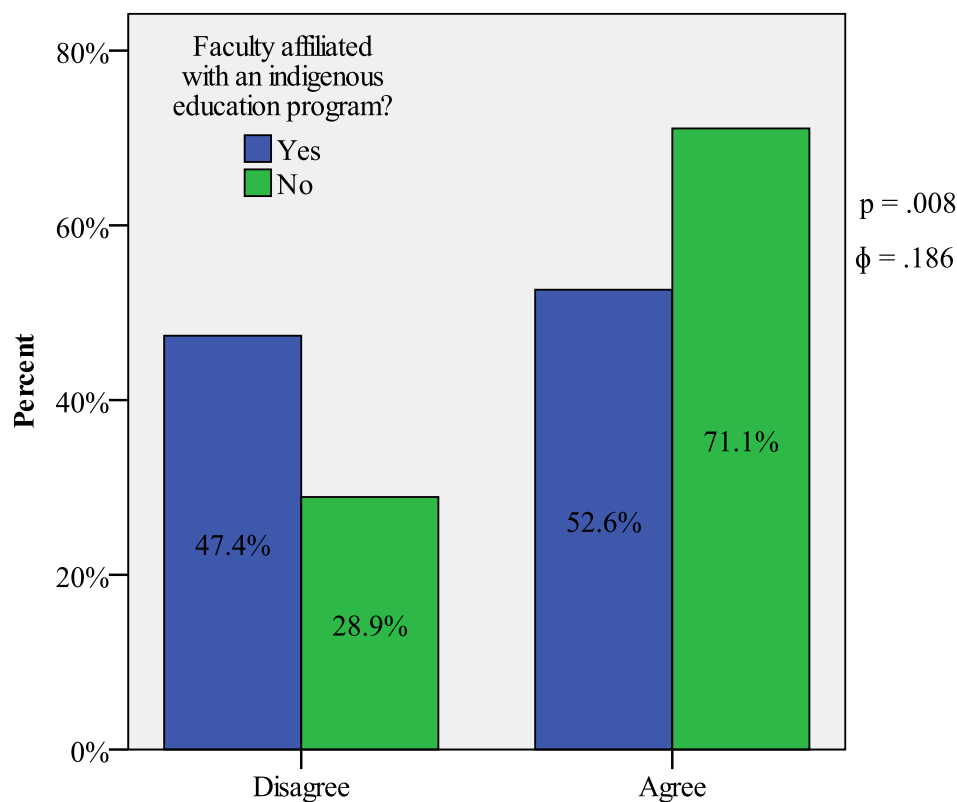
Figure 5.16. All Mexican citizens are Mexicans and should not try to identify themselves as part of a subgroup.

My institution can have an important role in implementing indigenous rights policies.

As Figure 5.17 shows, there was no statistically significant difference in the percentage of faculty between the two types of institutions regarding the role teacher educators feel their institution can play in implementing indigenous rights policy. (p=.504) Both types of institutions seemed overwhelmingly open to a role in implementing indigenous rights policies, suggesting that all teacher training institutions, whether they offer an indigenous education program or not, potentially have positive political climates for initiatives designed to carry out indigenous rights reforms. However, see Chapter Six for possible alternative explanations of this level of support.
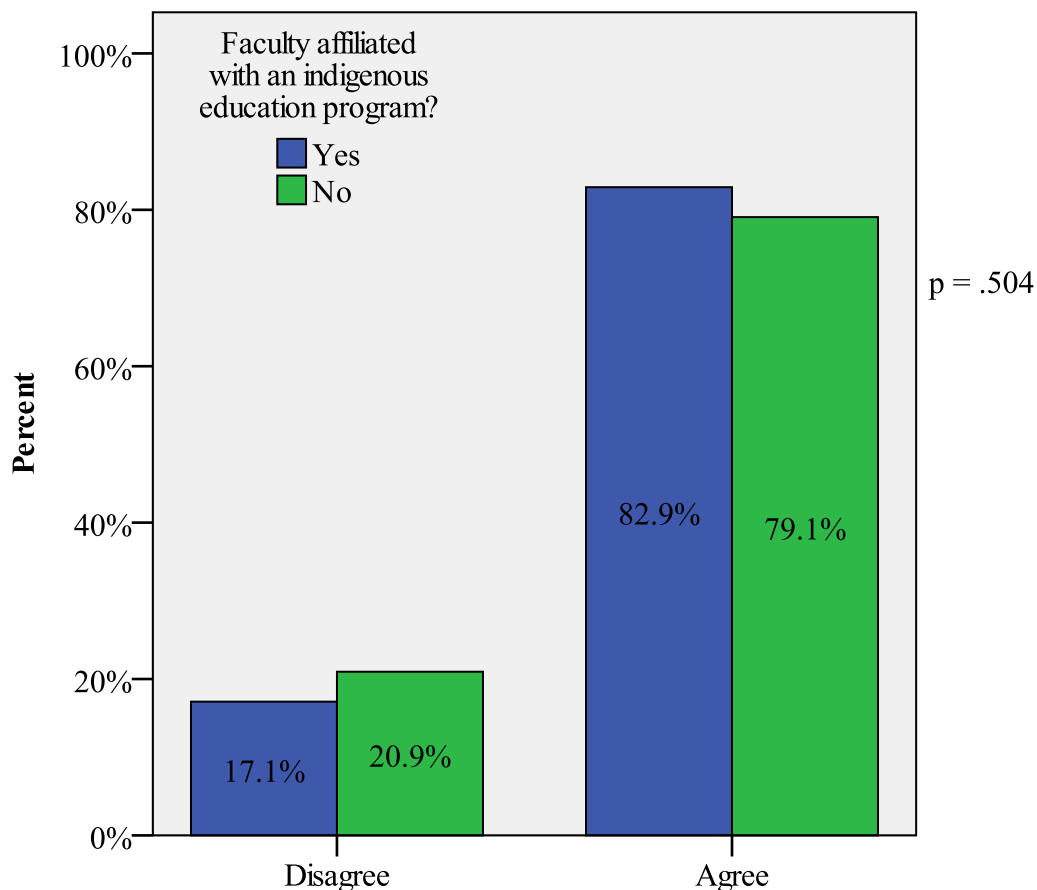
Figure 5.17. My institution can play an important role in implementing indigenous rights policies.

If it were necessary, I am trained to teach students methods about how to teach students to teach indigenous populations.

There was no statistically significant difference in the beliefs of teacher educators in either type of institution in whether or not they are trained to teach future teachers methods of how to teach indigenous populations in Mexico (p=.074). This was minimally significant if we use an alpha of .1 or less, with a phi=-.125 (See Figure 5.18).
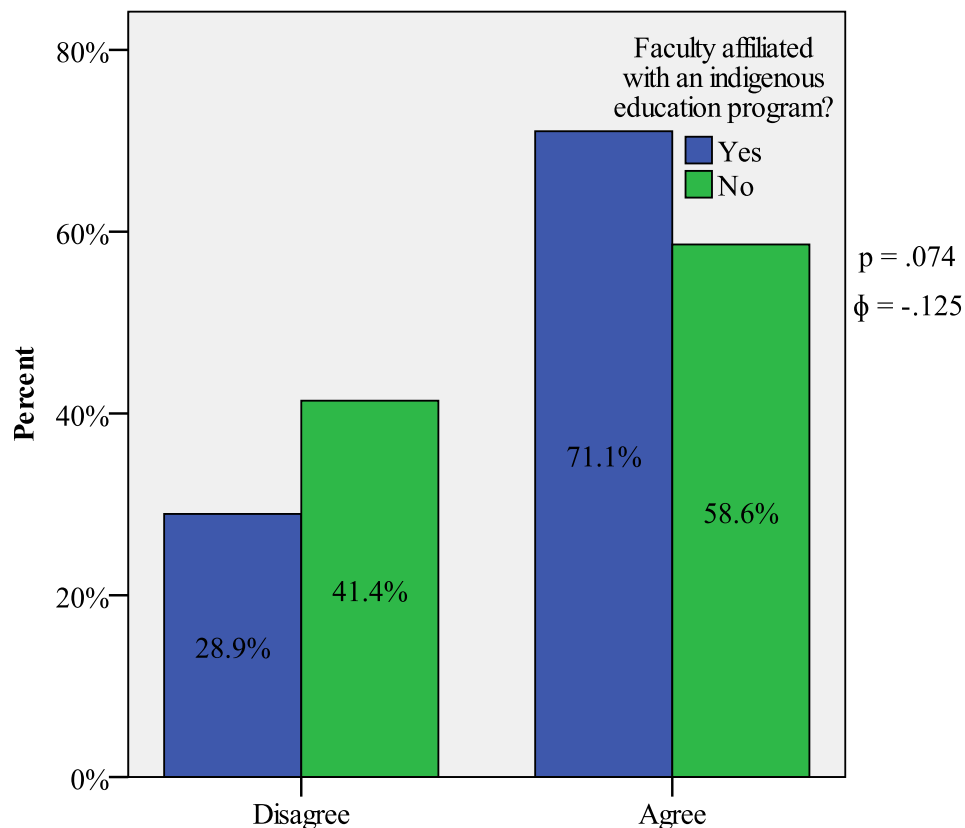
Figure 5.18. I am sufficiently trained to teach students methods to teach indigenous populations.

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The indigenous students in the public primary schools have the same opportunity as any other student.

There was no significant difference in the belief as to whether indigenous students in public primary schools have the same opportunities as any other student (p=.748) as seen in Figure 5.19.
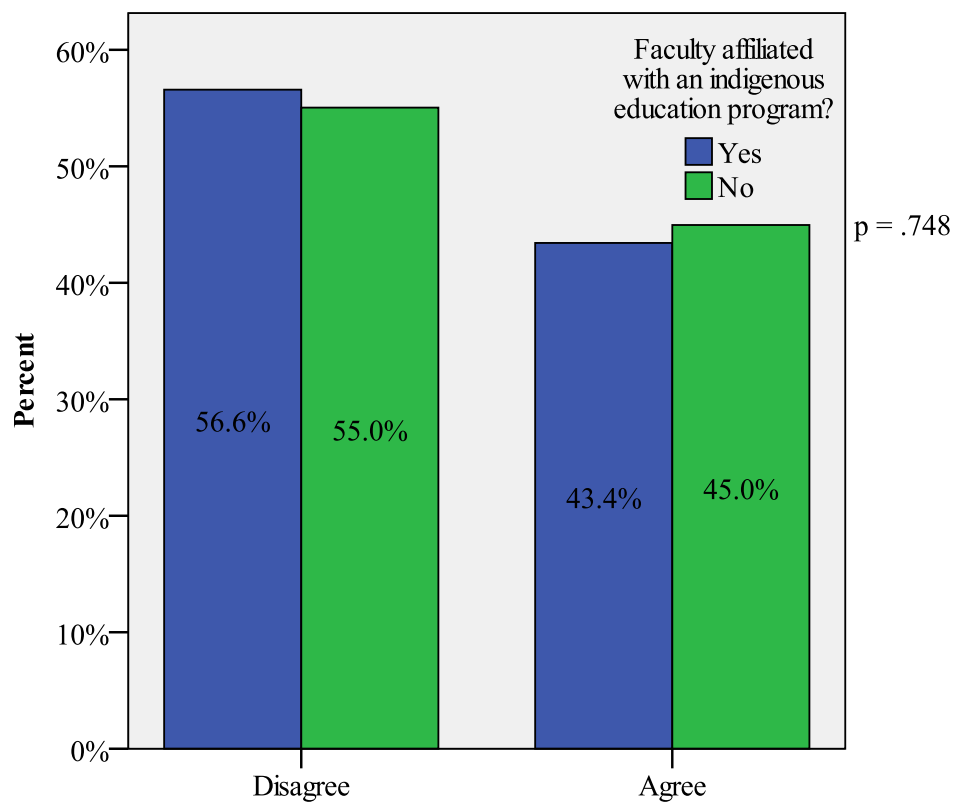
Figure 5.19. Indigenous students in public elementary schools have the same opportunities as any other student.

Our students need specialized preparation if they are going to successfully teach in indigenous communities.

There was no significant difference in the two groups in their belief that students need specialized preparation if they are going to teach in indigenous communities, as seen in Figure 5.20 (p=.634).
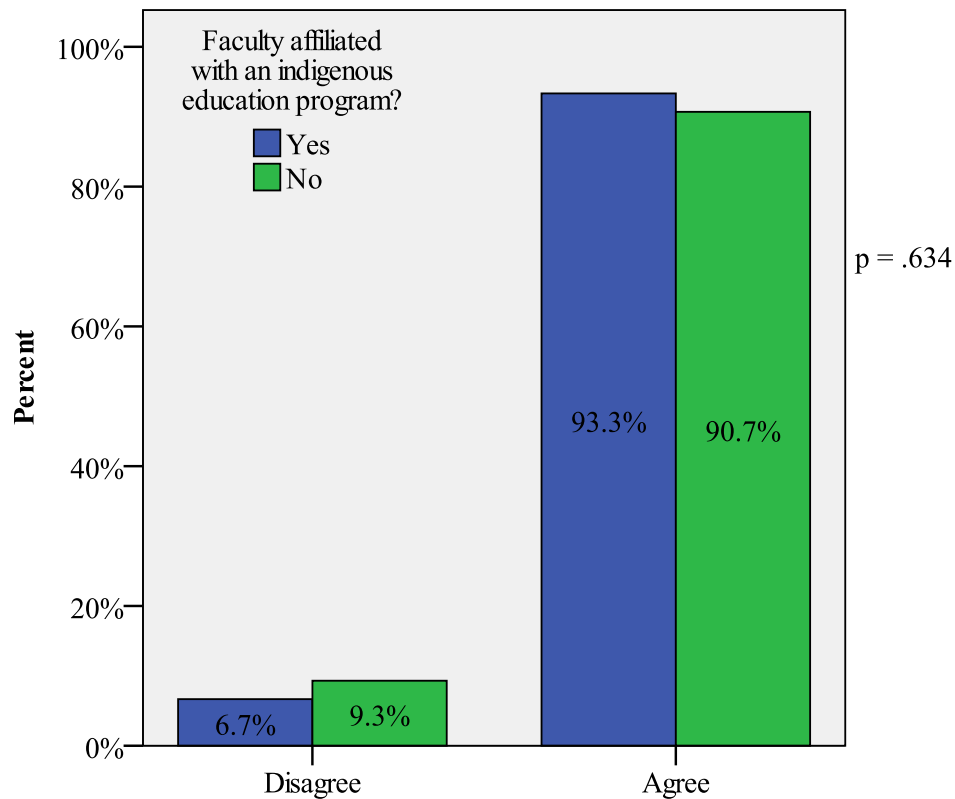
Figure 5.20. Our students need specialized preparation if they are going to successfully teach in indigenous communities.

I regularly integrate topics related to indigenous affairs in my classroom.

In Figure 5.21, we see that faculty who were affiliated with institutions offering indigenous programs were more likely to say they regularly integrated topics related to indigenous affairs in their classrooms, and the difference was significant. (p<.01) The effect size was moderate (phi=-.212).
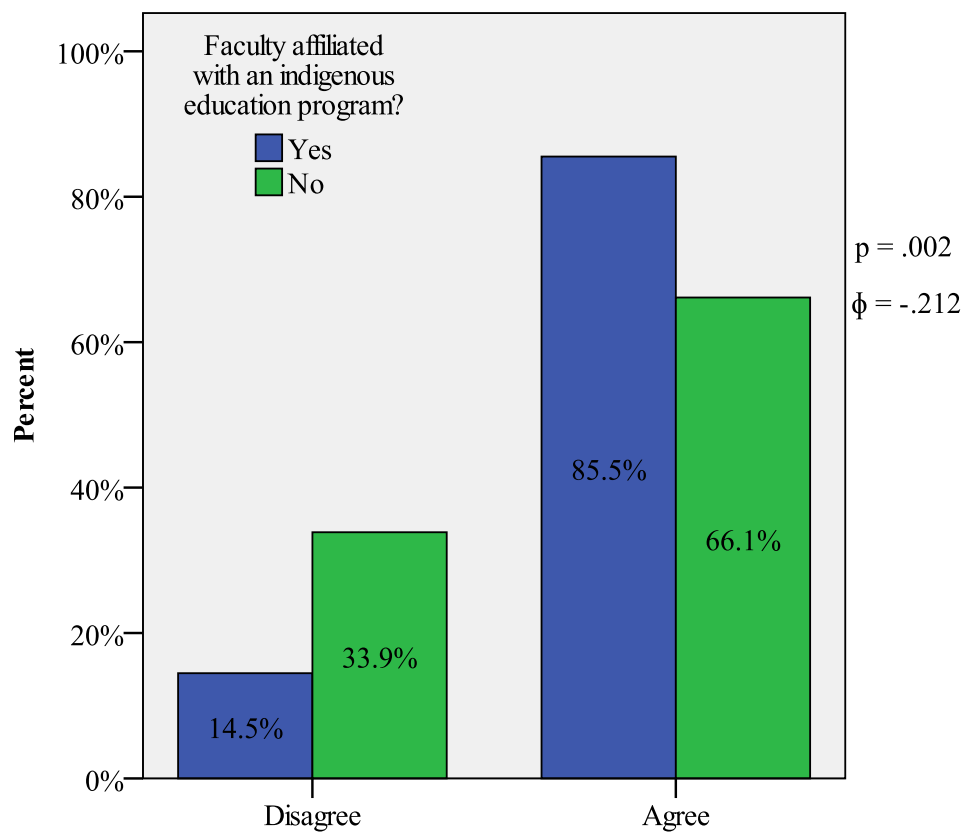
Figure 5.21. I regularly integrate topics related to indigenous affairs in my classes.

I devote the same amount of time to themes of indigenous culture as to the national culture in my classroom.

Faculty who were affiliated with institutions offering indigenous programs were more likely to say they devoted the same amount of time to themes of indigenous culture as national culture in the classroom and the difference was significant (p<.01). The effect size was moderate (phi=-.228). Figure 5.22 shows this relationship.
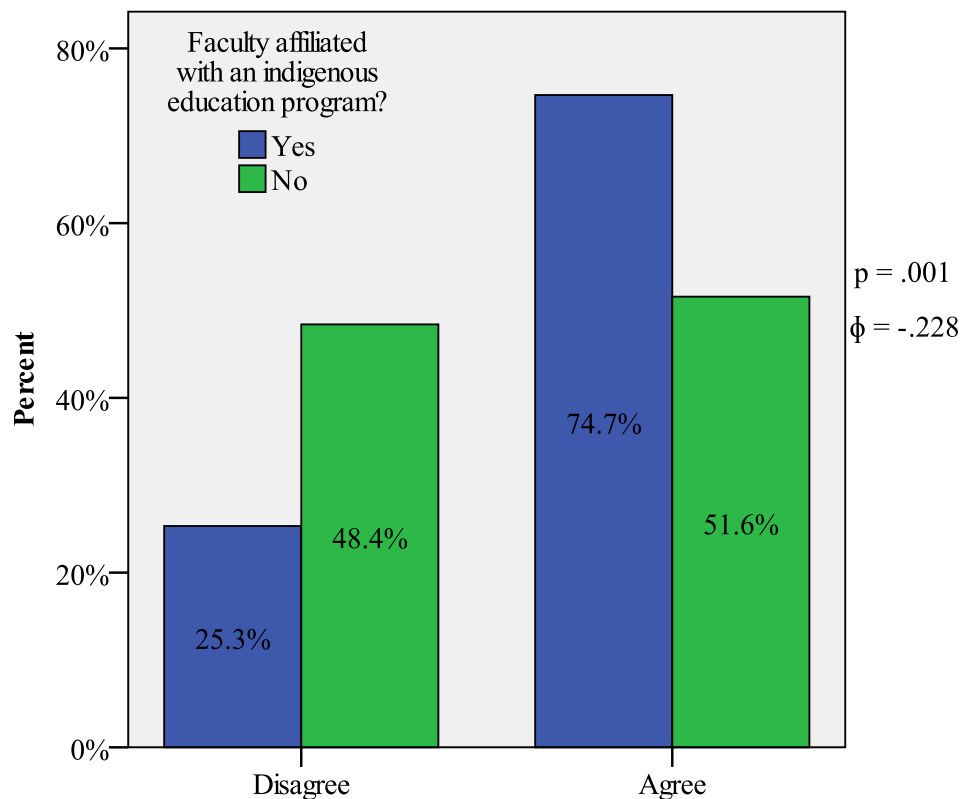
Figure 5.22. I devote the same amount of time to themes related to the indigenous culture and themes related to the national culture in my classes.

Teachers should learn that indigenous students should be taught in the same way as any other student.

Slightly fewer teacher educators in schools that offer indigenous education programs believe that indigenous students should be taught in the same way as any other student, and this difference was significant (p=.011). Again, the effect size was relative small (phi=.188). Figure 5.23 shows this relationship.
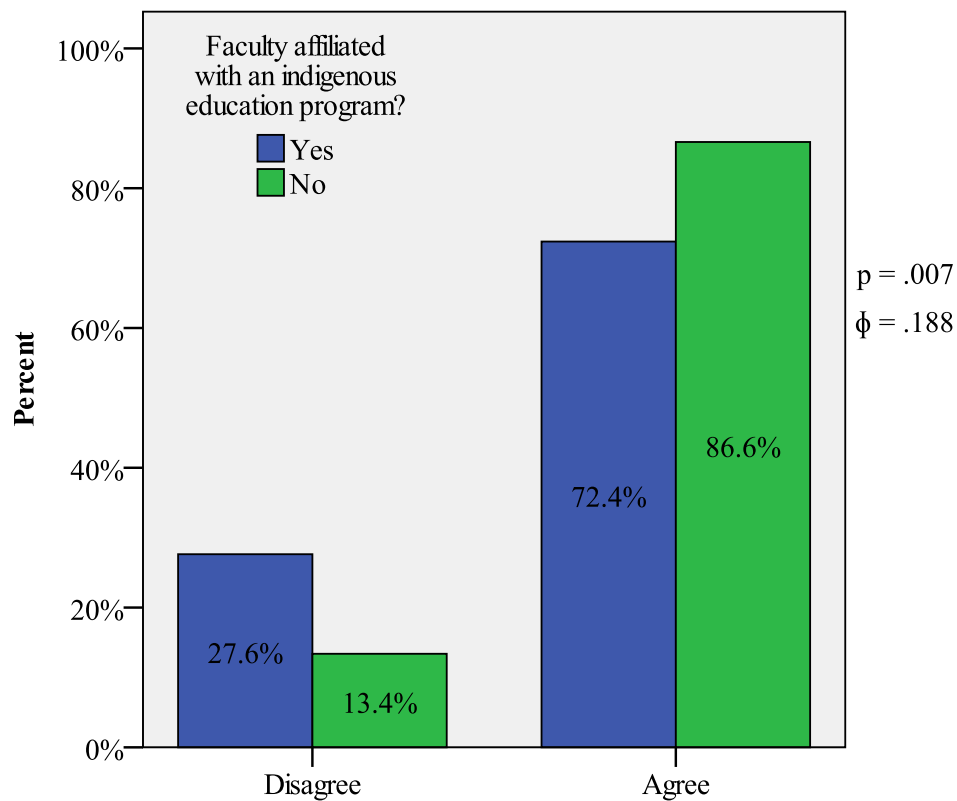
Figure 5.23. Teachers should learn that indigenous students should be taught in the same way as any other student.

Comparing Beliefs about Institution in Different Types of Institutions

My institution regularly offers training to their faculty concerning recent changes in educational policy.

Overall, as seen in Figure 5.24, faculty in institutions that offer indigenous education programs were more likely to feel their institution offers training to its faculty in educational policy than teacher educators in institutions that did not offer such a program and the difference was statistically significant (p=.02), although the effect size was small (phi=.162).
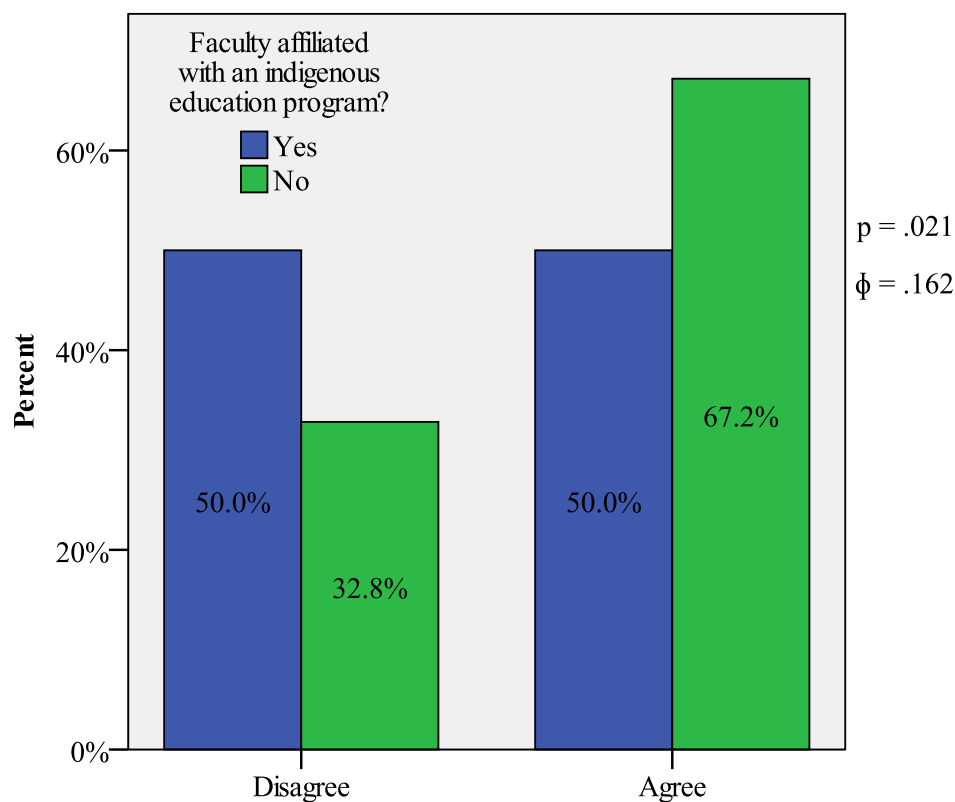
Figure 5.24. My institution regularly offers training to their faculty concerning recent changes in educational policy.

I have participated in workshops supported by institution related to changes in federal educational policies in the past year.

Figure 5.25 shows there was no significant difference in those who participated in workshops related to changes in federal educational policy between the two types of institutions (p=.277).
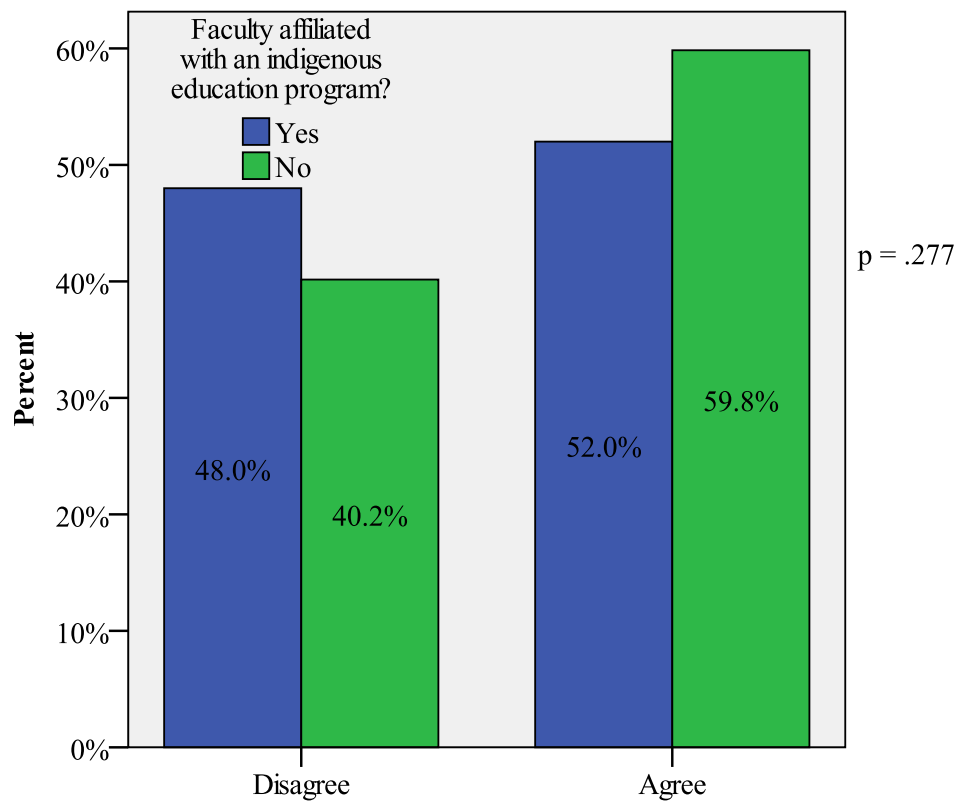
Figure 5.25. I have participated in workshops supported by my institution related to changes in federal educational policies in the past year.

The federal authorities from the Secretary of Public Education understand how to improve the training of new teachers.

Teacher educators who were affiliated with indigenous education programs were even less likely to have confidence in the Secretary of Education's understanding of how to improve the training of new teachers, but this was not statistically significant (p=.366). Refer to Figure 5.26.
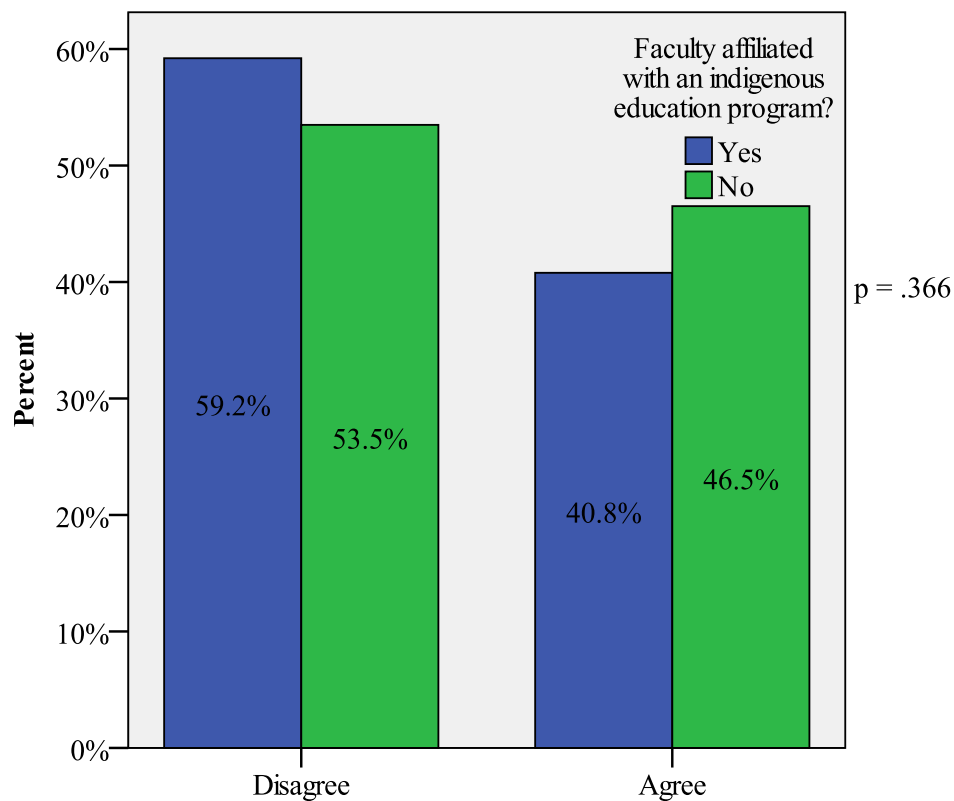
Figure 5.26. The federal authorities from the Secretary of Public Education understand how to improve the training of new teachers.

I have sufficient resources to do my job well.

Interestingly, as Figure 5.27 shows, there was no significant difference between the

faculties at the two types of institutions in believing they have sufficient resources to do their

jobs well (p=.839).
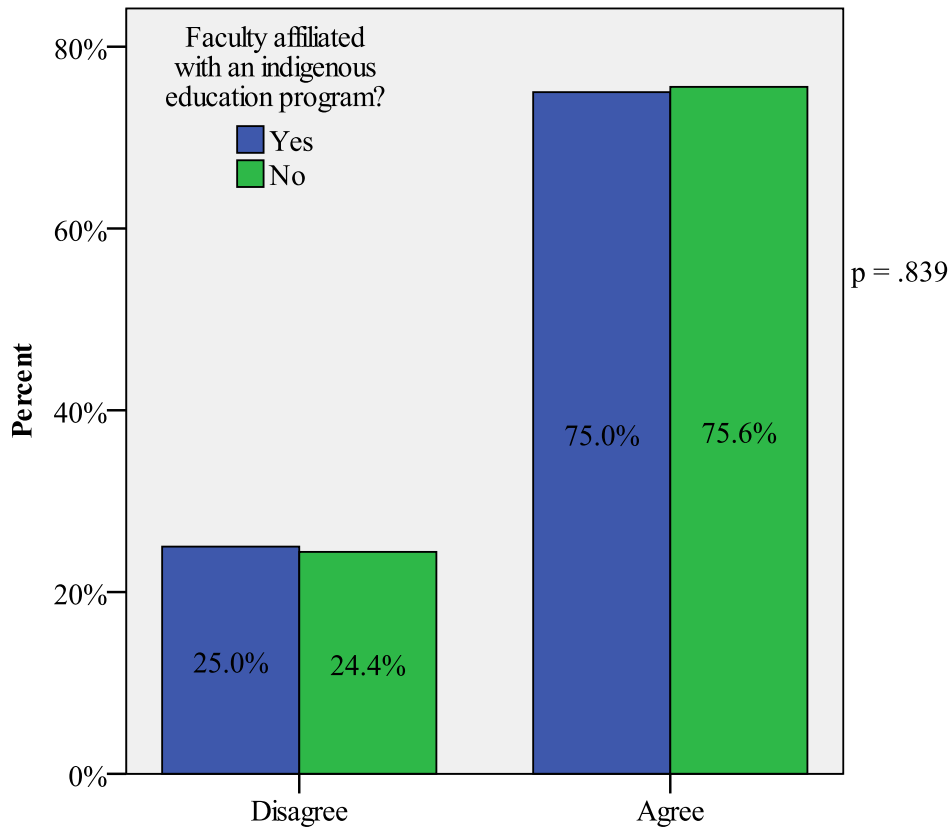
Figure 5.27. I have sufficient resources to do my job well.

I have the independence necessary to teach the courses I am assigned.

Similarly, in Figure 5.28, we see there was no relationship between the type of institution and the feeling of independence among teacher educators (p=.672).
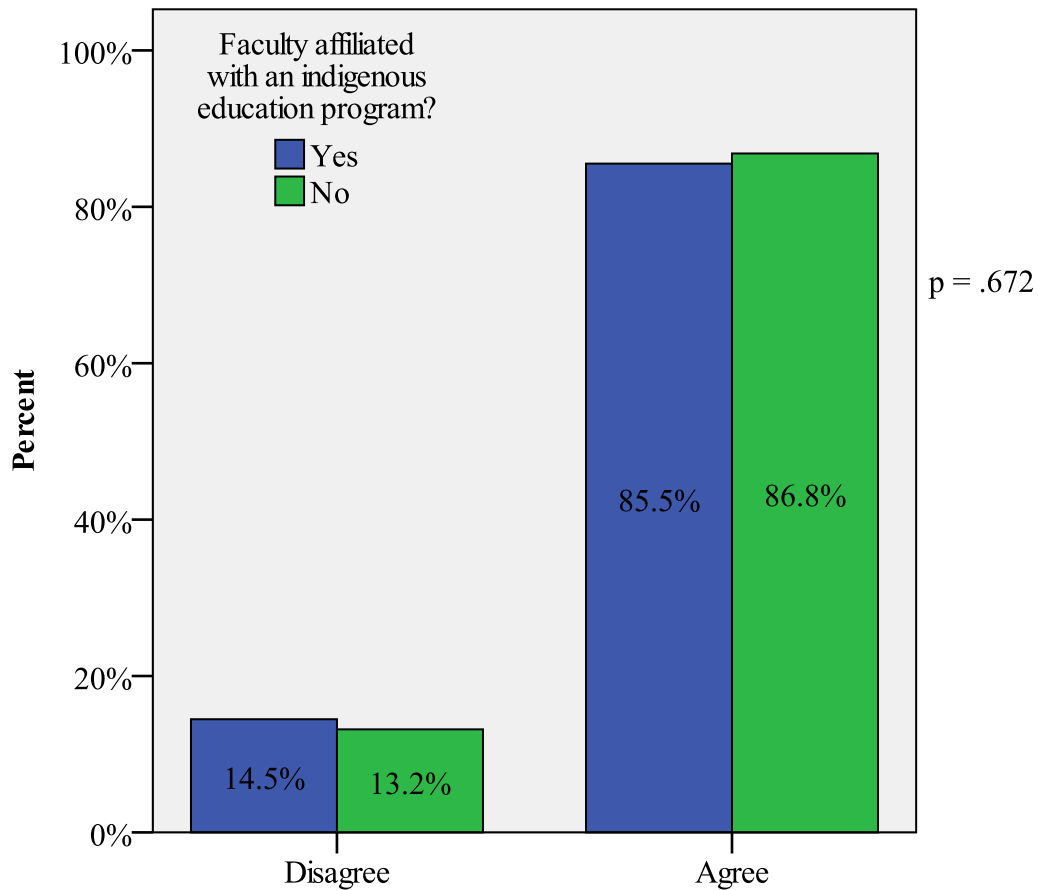
Figure 5.28. I have the independence necessary to teach the courses I am assigned.

I have the ability to interpret and implement educational policies in the manner that best adapts to the local context in which I work.

There was no statistically significant difference in the belief of teacher educators in either type of institution in their ability to interpret and implement educational policies in the matter that best adapts to the local context, as Figure 5.29 shows (p=.270).
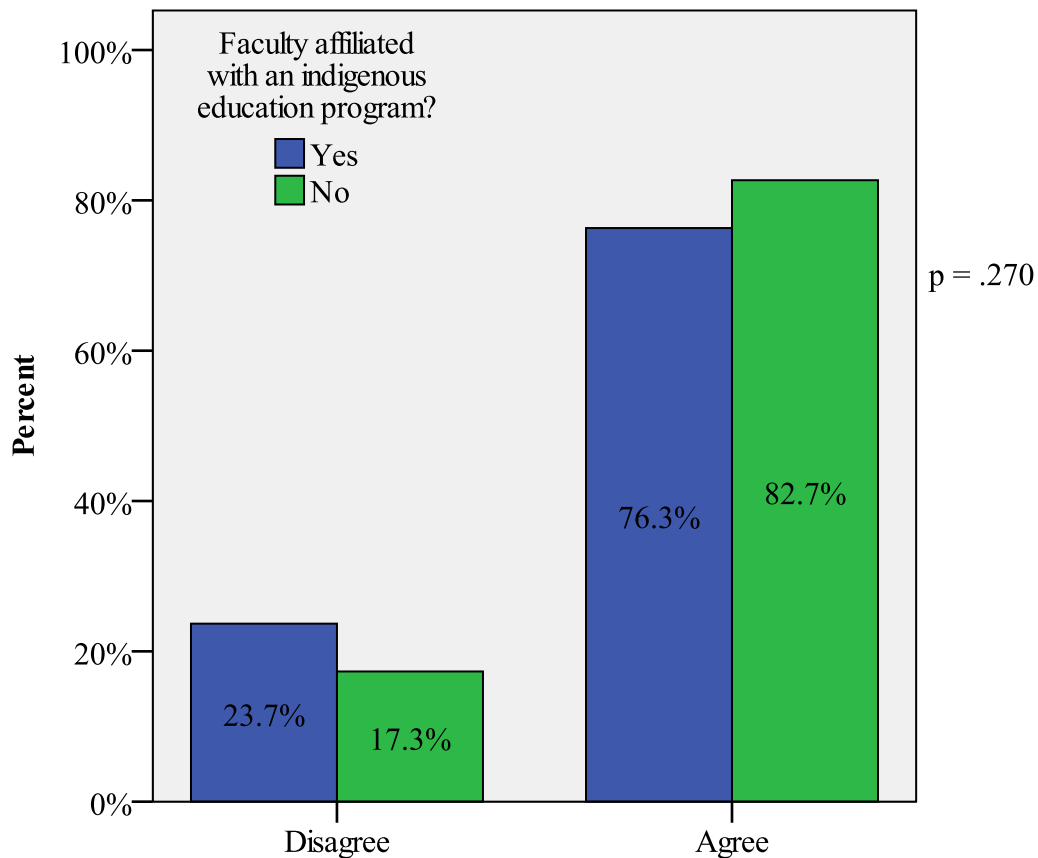
Figure 5.29. I have the ability to interpret and implement educational policies in the manner that best adapts to the local context in which I work.

Our Institutions' graduates are prepared to work with the indigenous population.

Overall, as Figure 5.30 displays, a greater percentage of teacher educators working in institutions that offer an indigenous education program expressed confidence that their graduates were well-prepared to work in indigenous communities and this was statistically significant (p=.016). The effect size was small, however (phi=-.166).
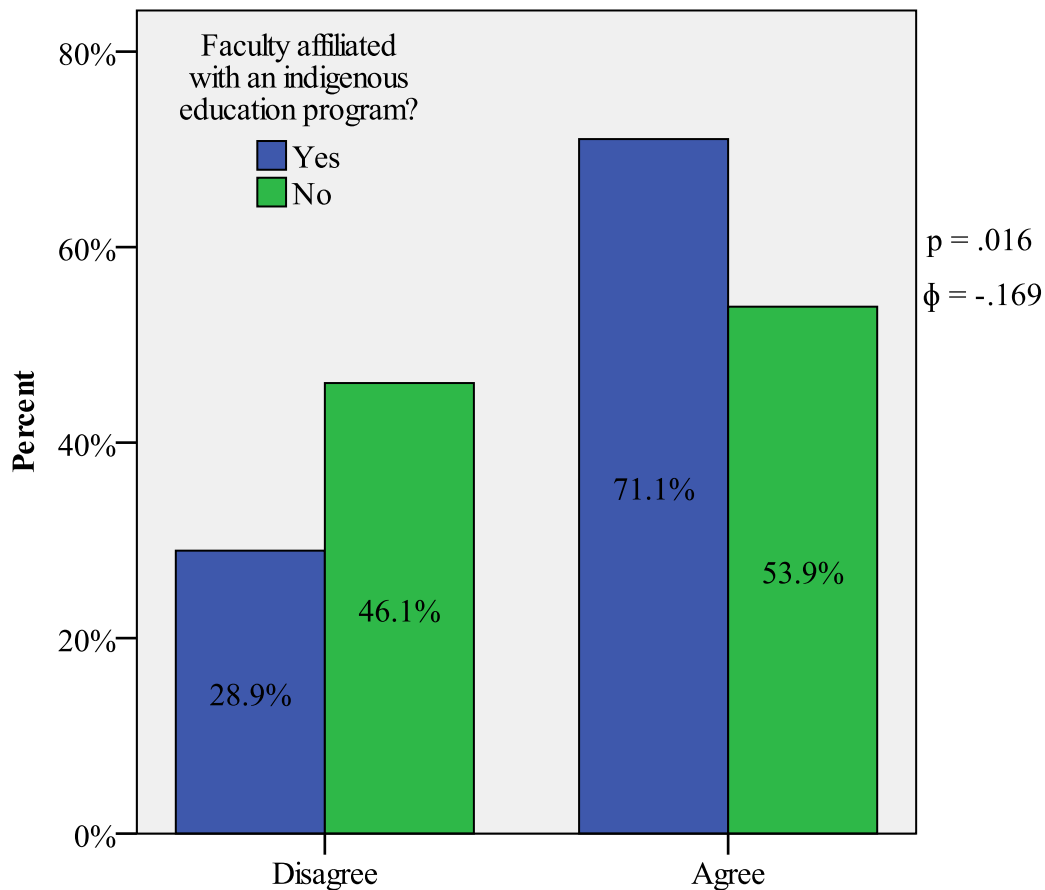
Figure 5.30. The graduates of my institution are well-prepared to work with the indigenous population.

Our institution offers sufficient training in indigenous languages for our students that are going to work in indigenous villages.

There is a statistically significant difference in the faculty from the two types of institutions and their perception of whether their school offers sufficient training in indigenous languages (p<.01). The effect size was borderline small/moderate (phi=-.196). Figure 5.31 shows this relationship.
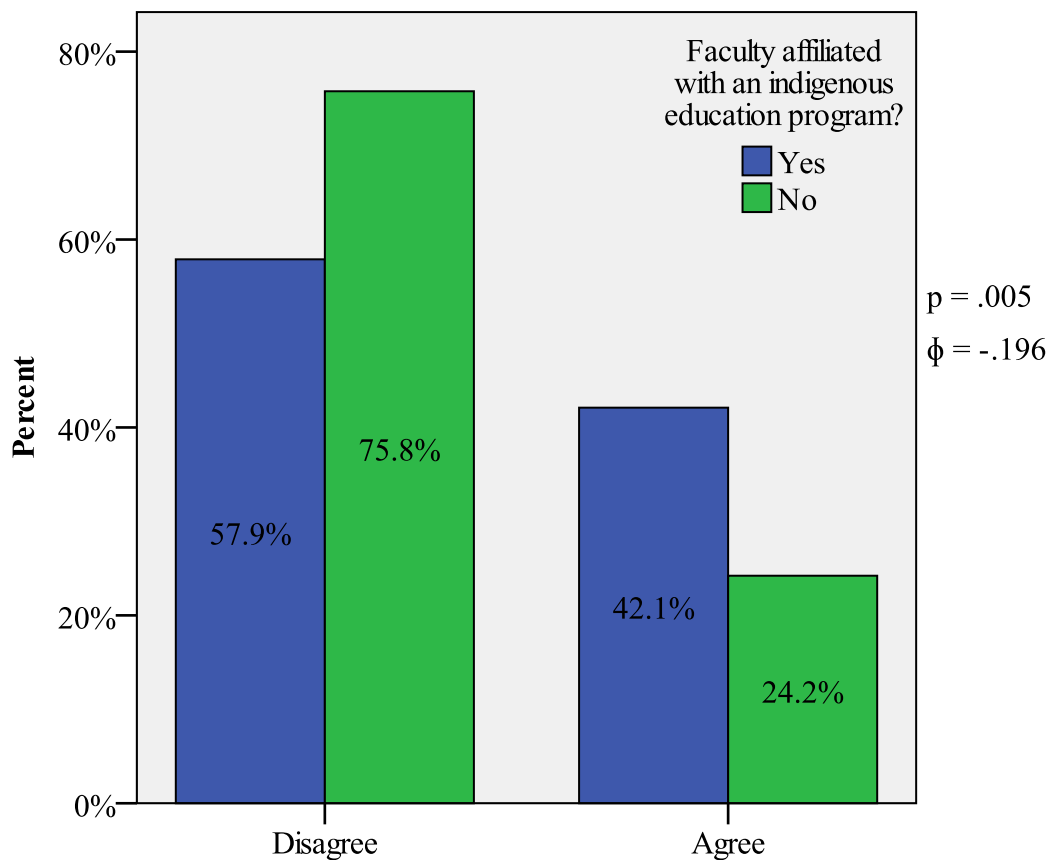
Figure 5.31. Our institution offers sufficient training in indigenous languages for our students that are going to work in indigenous-speaking villages.

The General Law on the Linguistic Rights of Indigenous People was necessary.

There was no statistically significant difference in support of the law between faculty in an

indigenous education program and those who are not in such an institution (p=.513). See Figure

5.31.
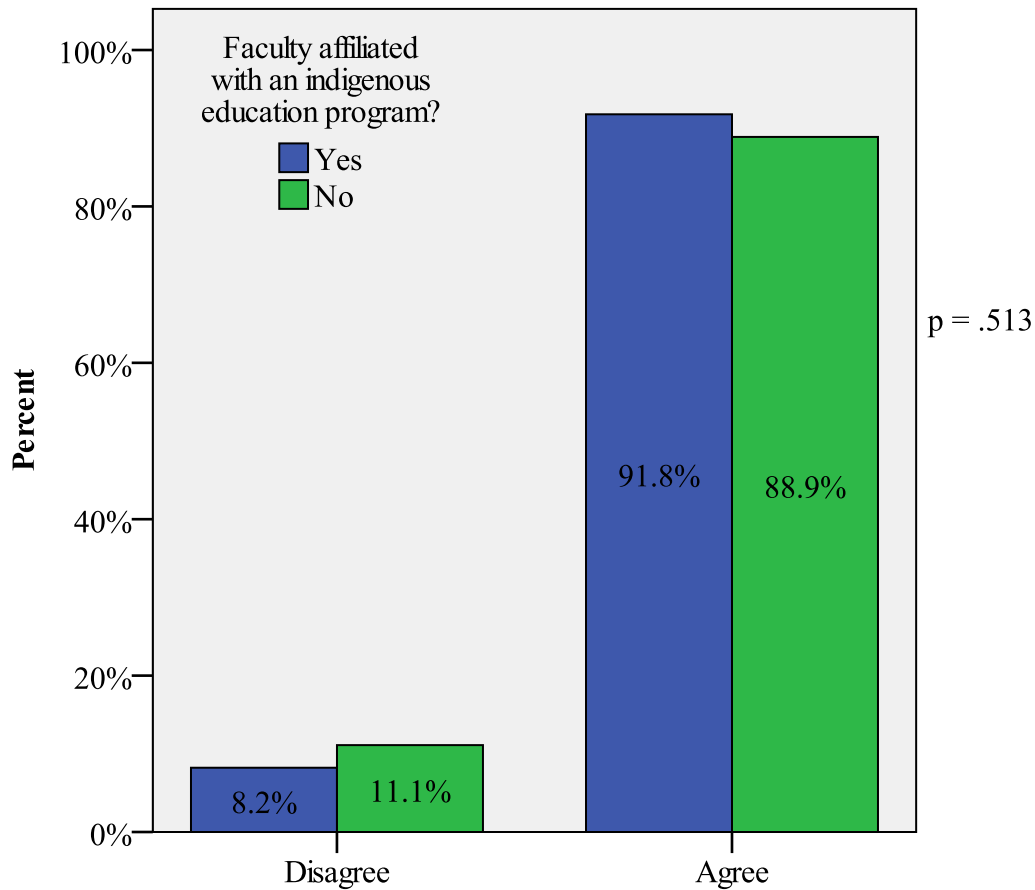
**Figure 5.32. The General Law on the Linguistic Rights
of Indigenous People was necessary.**

I believe that the teachers who are currently working in indigenous areas are well-prepared.

As shown in Figure 5.32, there was no significant difference in the two types of institutions in their beliefs about whether the teachers currently working in indigenous areas are well-prepared (p=.837).
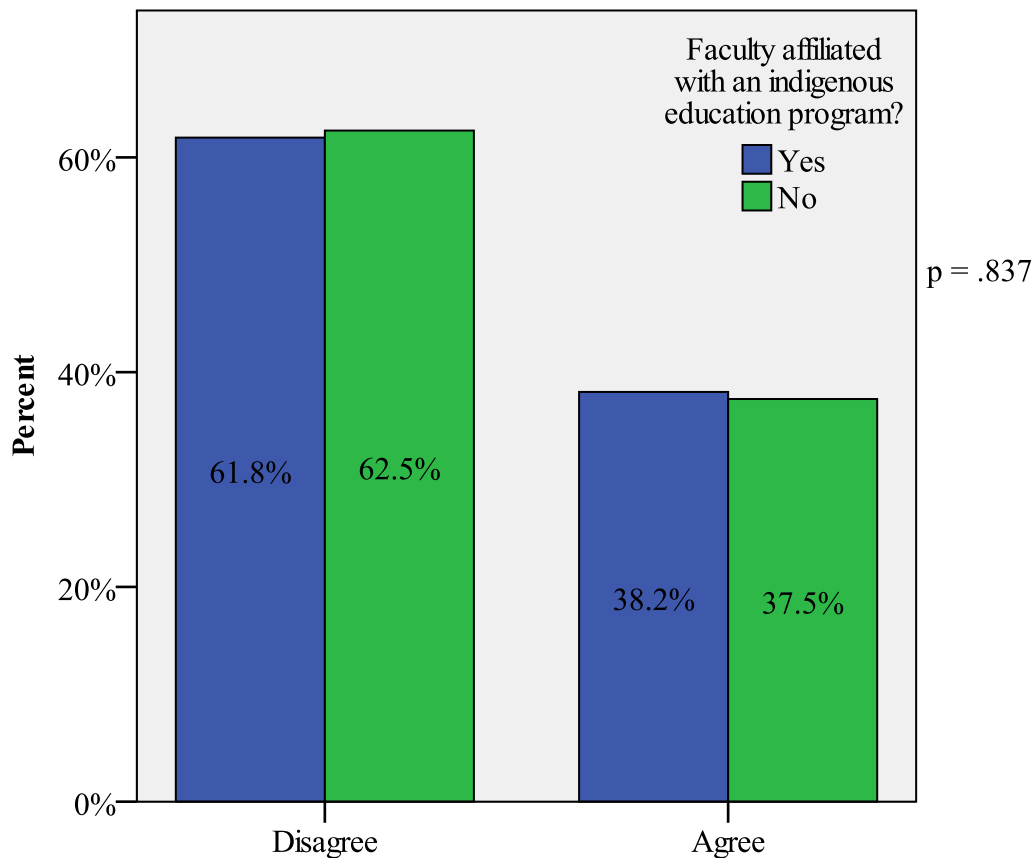
Figure 5.33. I believe that the teachers who are currently working in indigenous areas are well-prepared.

Comparing Self Belief

I believe I am abreast in recent educational reforms.

There was no significant difference between the type of institutions and their self-assessment of whether they were abreast on the most recent educational reforms (p=.099). It is worth noting that while this was not significant at the p<=.05 level, it was minimally significant at the p<=.1 level, with a small effect size phi=.115. This relationship is shown in Figure 5.34.
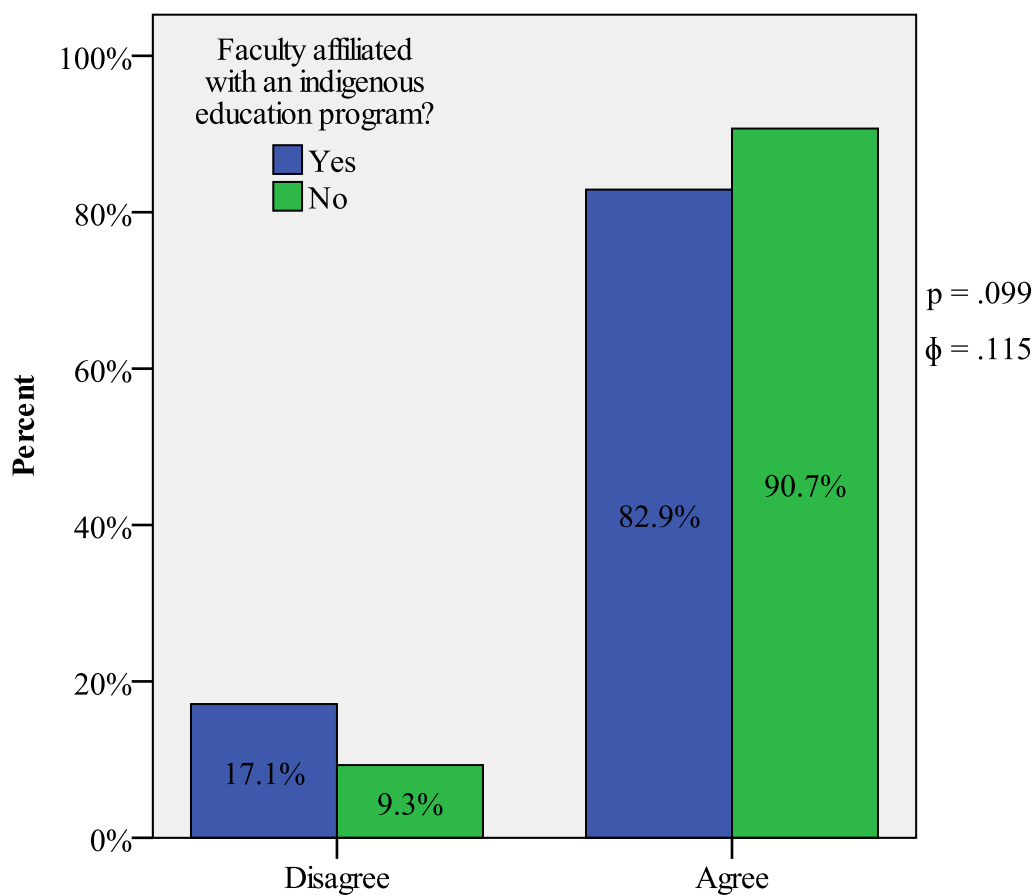
Figure 5.34. I believe I am abreast in recent educational reforms.

If it were necessary, I am trained to teach future teachers about educational policy in Mexico.

There was no statistically significant difference in the belief of teacher educators in either type of institution that they are trained to teach future teachers about educational policy in Mexico (p=.890). (see Figure 5.35).
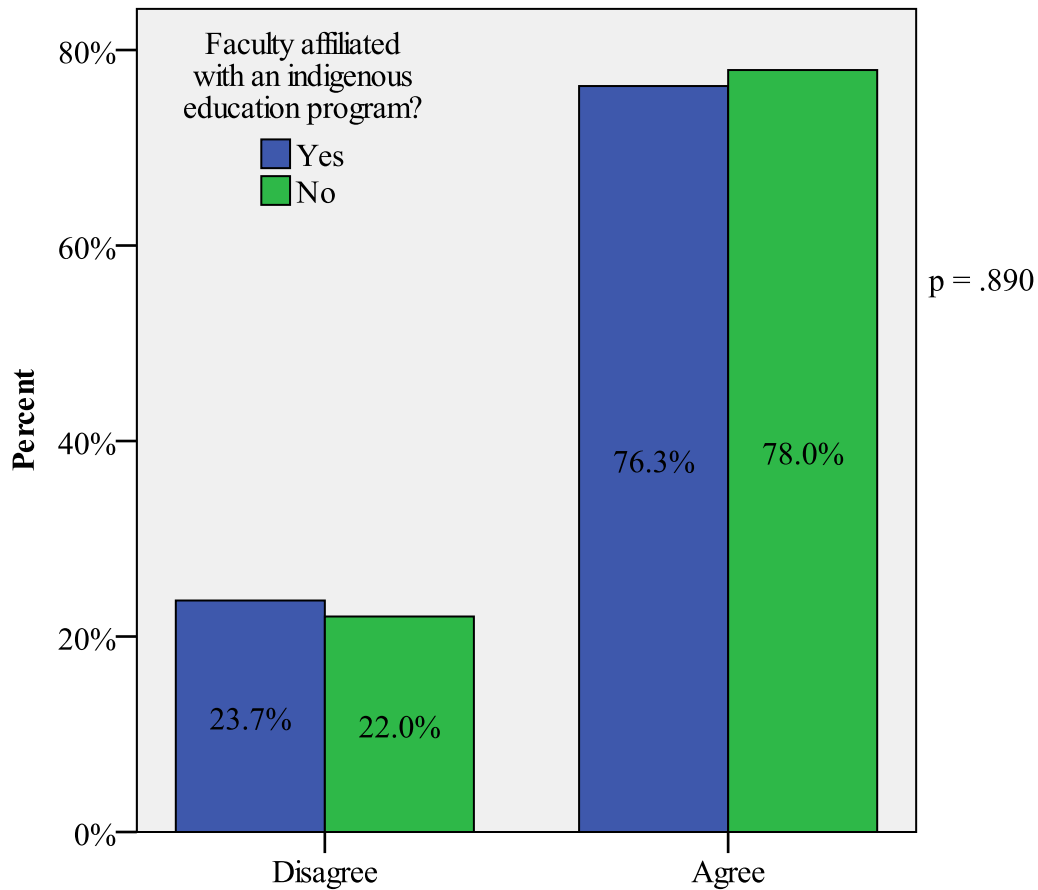
Figure 5.35. I am sufficiently trained to teach future teachers about educational policy in Mexico.

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I am clear on how the General Law on the Linguistic Rights of Indigenous People applies to the educational policies in my institution.

Teacher educators working in institutions that offer indigenous education programs claimed to have a much stronger knowledge of the General Law on the Linguistic Rights of Indigenous Peoples than did faculty members in institutions that do not have indigenous programs (p<.01). The effect size was moderate (phi=-.272). See Figure 5.36.
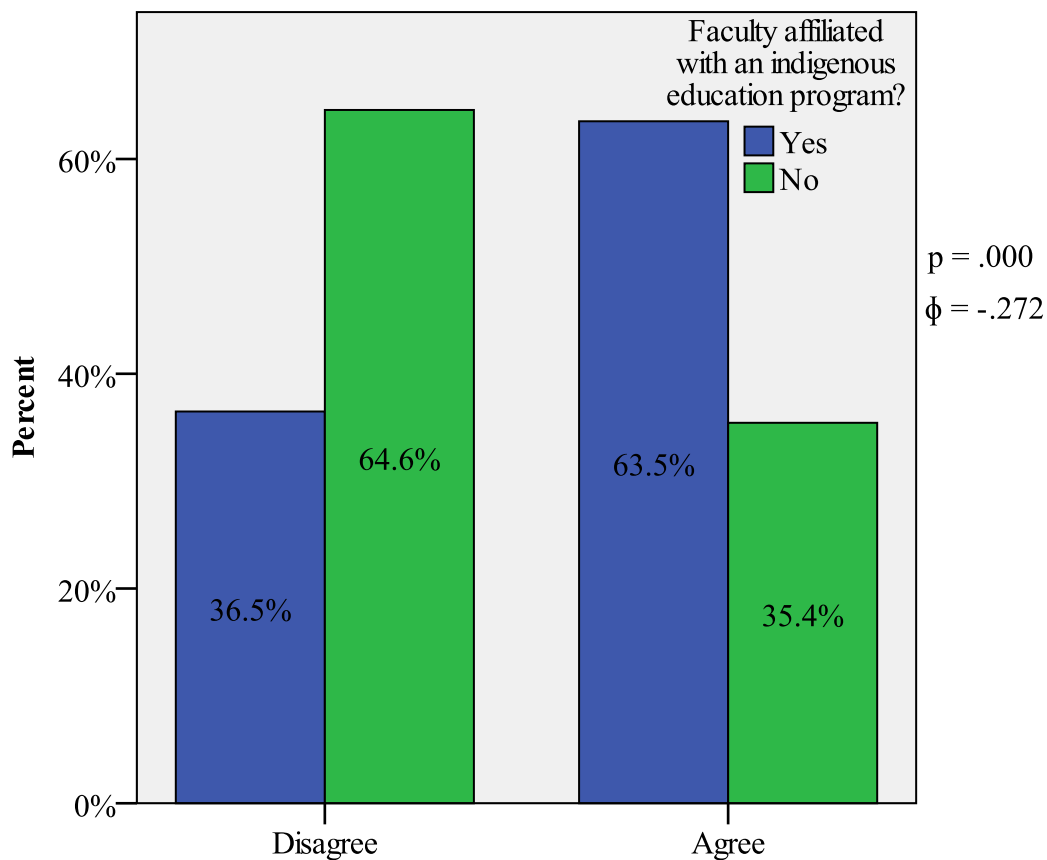
Figure 5.36. I am clear on how the General Law on the Linguistic Rights of Indigenous People applies to the educational policies in my institution.

Does Institution Matter?

Overall, then, does the type of institution matter? The survey suggests that context does matter, at least in some areas. There were several questions that showed an association between the institution type and the response. In particular, faculty members were more likely to report that they include indigenous education in their classrooms in teacher-training institutions that have an indigenous education program (See Figure 5.21). Inclusion of indigenous culture in the teacher-training curriculum is one of the key requirements of the new General Law on the Linguistic Rights of the Indigenous Peoples. Teacher educators who work in institutions that offer an indigenous education program were also more likely to indicate they give indigenous culture equal time with the national culture in their classrooms (see Figure 5.22). This, of course, is an expected finding since one would reasonably assume that an institution with an indigenous education program would be more likely to spend time covering indigenous issues than one that did not. Again, it is important to remember that in each institution, indigenous education students are a relatively small minority of the overall student population. [53] Further, it should be remembered that instructors at teacher training institutions are generally expected to be generalists and usually teach across programs and fields.

Additionally, we see that there was a significant difference in the number of faculty members who believed that "all Mexican citizens are Mexicans and should not try to identify themselves as part of a subgroup." That is, teacher educators who worked in institutions that offered an indigenous education were less likely to oppose self-identification by subgroups (see Figure 5.16). This suggests, given our earlier discussion in Chapter Four about the centrality of the right of self-identification to the indigenous rights movement, and given the history of the

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[53] For exact statistics on the enrollment in indigenous education programs vs. other areas of education, see Chapter One.

assimilation policies aimed at Mexico's indigenous policies in Chapter Two, that the teacher educators at institutions with an indigenous education program were likely to have a slightly more favorable view of the indigenous rights movement, at least as it relates to issues of identity. Faculty members at institutions with indigenous education programs were also less likely to suggest that teachers should learn that indigenous students should be taught using the same methods as other students (see Figure 5.23), more likely to agree that graduates of their institutions are well-prepared to work with indigenous students (see Figure 5.30), more likely to believe that their institution offers sufficient training in indigenous languages for students who are going to work in indigenous villages (see Figure 5.31), and more likely to believe they are sufficiently trained to teach students methods of teaching indigenous populations (see Figure 5.18). Further, teacher educators in institutions with indigenous education programs were more likely to profess to having a clear understanding of the General Law on the Linguistic Rights of the Indigenous Peoples (See Figure 5.36).

In other areas, however, it seems that institution did not matter when comparing institutions that offered an indigenous education program and institutions that did not. There was no significant difference between faculty members of the two types of institutions in the belief that economic development of indigenous towns is more important than preserving its cultural and linguistic traditions (see Figure 5.14) or in English being more important than learning indigenous languages (see Figure 5.15). Further, there was no difference in the belief that indigenous students in public schools have the same opportunities as everyone else (Figure 5.19), in faculty participation in workshops in educational policy (Figure 5.25), and in perceptions of the federal education authorities (Figure 5.26). There were also no significant differences in teacher educators' perceptions of their available resources (Figure 5.27), their independence

(Figure 5.28), their ability to interpret and implement policy (Figure 5.29), or their support for

the General Law on the Linguistic Rights of Indigenous Peoples (Figure 5.32). Additionally,

their assessments of their ability to teach future teachers about educational policy (Figure 5.35)

and teachers currently working in indigenous areas (Figure 5.33) did not significantly vary.

The Relationship Between State and Teacher Educator Orientation

As previously noted, this study took place in two states in the south of Mexico, Yucatan

and Chiapas.[54] Given the attention Spillane (2006) and other scholars of implementation research

have given to the importance of context, it is crucial to consider whether the teacher educators in

the two states had notable differences in their attitudes and beliefs based on their responses to the

surveys. My earlier research had suggested that the implementation of bilingual education and

laws such as The General Law on the Linguistic Rights of Indigenous Peoples were substantially

more difficult to implement in Chiapas, given the wide array of indigenous languages spoken in

that state. Although Yucatan's indigenous population consists nearly exclusively of Yucatec

Maya speakers, Chiapas is comprised of a number of ethnic groups that speak a dozen languages.

One state-level education official whom I interviewed in Chiapas stated that there were

frequently resources available to hire indigenous-language speaking teacher and for developing

indigenous-language education material, but noted it was often difficult to find individuals who

had both the language ability and the subject matter knowledge to fill such positions. He noted

that his office office worked with schools that offered bilingual programs in eight different

languages: Cho'ol, Kaqchikel, Tzotsil, Mam, Tzeltal, Tojolab'al, Mocho, and Zoque. And

although all eight except for Zoque are part of the Mayan language family, they are generally not

mutually intelligible. Many difficulties some educational officials claim to have are largely

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[54] For an overview of each state and the reasons for selecting them for this study, see Chapter
Three.

supported by fact: Chiapas' State Center for Indigenous Language, Art, and Literature reports that of the 12 languages spoken in Chiapas, eight are in danger of extinction, and the least-spoken has only 500 speakers, all of them over the age of 50 (Notimex, 2009).

In contrast to my assumptions about this, I ran crosstabs for all 23 questions in the survey, and none of the 23 questions showed statistically significant differences between Chiapas and Yucatan at the $p \leq .05$ level. Only one question showed a marginal association ($p=.06$) between state and response: Teacher educators in Chiapas agreed more often (72.9%) that they were sufficiently trained to teach teacher education candidates methods of teaching indigenous populations than did the teacher educators of the Yucatan (58.9%), but the effect size was minimal (phi=.13).

I found the lack of statistical significance in differences in the responses somewhat surprising given that my pre-dissertation research suggested that Yucatan, with only one indigenous language, had made more progress in creating a system of bilingual, intercultural teachers than had the multilingual Chiapas, given the complexity of Chiapas' diversity. In the dissertation stage, however, the interviews suggest that there was substantial improvement in Chiapas' ability to produce material in indigenous languages. Further, I found that teacher educators in Chiapas appeared to be more familiar with the General Law on the Linguistic Rights of Indigenous Peoples than they had been in my previous visits doing pre-dissertation work. It is particularly interesting that there was no statistically significant difference in responses to the question "Our institution offers sufficient training in indigenous languages for our students that are going to work in indigenous speaking villages" when Chiapas clearly has a more challenging situation, given the multitude of languages spoken in the state. Despite the interview above with an educational official from the State of Chiapas who identified nine different languages of

instruction in his portfolio, only the two most commonly spoken indigenous languages were offered in the teacher training institutions in Chiapas that I visited (Tzotsil and Tzetal), and the interviews suggested they were very limited in scope. As in Yucatan, the indigenous languages were not a part of the official curriculum but were offered as "workshop." It should be noted, however, that teacher educators in both Chiapas and Yucatan (71.2% and 68.5%, respectively) disagreed that their institution provided sufficient training in indigenous languages.

Does Context Matter?

Does context matter? The data suggest that yes, context does matter, although some elements of context matter more than others. Here, we note that in my data the type of institution seems to have a greater effect on teacher disposition than does the state in which the institution is located. And although the effect size of those I have shown to be significantly associated with type of institution is relatively modest, Spillane (2006) pointed out that context is an influence in the sense making process, but does not wholly determine it. In this sense, background and already existing attitudes and beliefs are likely more important. Context is a complex and multifaceted concept that factors in many things, each contributing a small piece to the sense making puzzle. In the coming chapter, I discuss this issue in more detail.

The Importance of What Gets Taught

Spillane (2006) noted that what gets taught is important. My survey asked 209 Mexican Teacher Training Institution Faculty to rank the following 12 abilities and themes that they believed were the knowledge and abilities that are most important for their teacher education students to know, with one being the most important followed by 2, 3, 4 etc. until successively numbering all 12. Table 5.4 shows the rankings, with their reported school faculty ranked the categories in the following order, with one being the most important:

Table 5.4
Mexican Teacher Educator Ranking of Important Knowledge and Abilities for Teacher Education Candidates

Ranking	Abilities and Knowledge	Average Ranking
1	Methods of general pedagogy	3.45
2	Subject matter knowledge	4.04
3	Spanish language ability	4.39
4	Methods to work with the multilingual/multicultural population	5.99
5	Mathematics	6.34
6	Regional history and culture	6.69
7	Indigenous language ability	7.02
8	Indigenous history and culture	7.10
9	National history and culture	7.43
10	Differentiated Instruction	7.51
11	World history and culture	8.74
12	English language ability	9.31

It is noteworthy that the normal school faculty ranked the Spanish language much higher than the indigenous languages, and regional history trumped both indigenous and world history and culture. In fact, the top three answers methods of general pedagogy, subject matter knowledge, and Spanish language ability were consistently chosen in the top three, while other answers varied greatly among the remaining nine answers. While Spanish language ability achieved an average rank of 4.39, indigenous languages ranked at 7.02. Likewise, indigenous history and culture at 7.10 was only slightly higher ranked than national history and culture at 7.43.

The importance of this question cannot be overstated. The General Law on the Linguistic Rights of Indigenous Peoples has a number of mandates, as previously mentioned. However, among the clauses that are perhaps most measureable include the clause that requires the inclusion of indigenous education themes in all curriculums and the requirement that teachers teaching in indigenous communities can speak and write the language of the community in which they teach and have a knowledge of the indigenous culture of the students they are teaching. Theoretically, one could obtain the amount of time teachers spend on indigenous

themes in a number of ways: through direct observation, by videotaping the class, through a time study, etc. Further, one could reasonably create an assessment to measure the ability of a teacher to speak and write the language of the indigenous community. In fact, while not standardized, such assessments already exist. A test of cultural knowledge may be more difficult, but certainly achievable, and would likely include items such as indigenous history and languages.

This section of the survey, although it does not give us the same amount of data as might a time study or a series of tests, does give us insight into how teacher educators value certain things that they feel their students should know. As discussed elsewhere in the dissertation, if a teacher educator does not believe that indigenous culture is an important topic, they are unlikely to include it in their own classroom (although this was also be excluded due to a lack of interest in or a lack of knowledge on the topic). Maynard-Moody & Musheno (2003) considered this to be the area where teachers often had the most policy influence—behind the closed classroom door, making such decisions about what will be taught. In Table 5.4, general pedagogy is ranked as number one, which is not a surprise given the generalist nature of Mexico's teacher education system, which assumes that the teacher education candidate arrives at the institution with sufficient subject matter knowledge (Garcia, Flores, & Gallegos, 2006). We also see that the supremacy of Spanish is undeniable, and it ranks higher than math, multicultural and bilingual teaching methods, and indigenous languages. However, indigenous languages are valued more than English. While I found it encouraging that indigenous history and culture were given greater value than national and world history (even if only slightly), differentiated instruction was relatively low ranked. Overall, these rankings, while confirming the dominance of Spanish, give some hope that teacher educators may be open to increasing the amount of time teacher educators spend on indigenous culture. Indeed, one teacher educator approached me after taking

the survey and pointed out that to people who truly value indigenous culture, like himself, regional culture and indigenous culture are indistinguishable, and therefore it is difficult to rank one over the other.

In this chapter, I have a presented a large amount of survey data that suggests that there is broad variance among Mexican teacher educators' beliefs and attitudes toward a number of issues and themes that directly relate to indigenous education and policy in Mexico. I have also shown data that suggests that while type of institution likely makes a difference, similarities between states are more common in the survey responses than differences between states. I concluded with data that indicates indigenous culture and languages are not ranked in the top half of concepts that Mexican teacher educators hold to be important for their students to know, although the concept of methods of working with multilingual and multicultural students fared slightly better. In Chapter Six, I discuss the most salient findings of this work and discuss its implications and significance.

CHAPTER SIX

CHALLENGES AND OPPORTUNITIES FOR THE GENERAL LAW ON THE

LINGUISTIC RIGHTS OF INDIGENOUS PEOPLES

Overview

In this final chapter, I review the purpose of the study and the research questions and methodology. I also summarize the five principal findings of the study and discuss their implications for both further research and practical policy. I conclude by suggesting further research possibilities.

I previously stated that the goal of this study was to consider how teacher educators in two southern Mexican states interpret and understand indigenous rights reform in the country's teacher training institutions. Specifically, I was interested in how teacher educators interpret and make sense of Mexico's General Law of the Linguistic Rights of Indigenous Peoples, a 2003 law that contains a number of decrees that have impacted teacher education in Mexico. Among the most important parts of the law that affect teacher education include a requirement that the normal schools implement bachelor's degree programs in Intercultural, Bilingual Education (IBE). It also requires primary school teachers who teach in a bilingual indigenous school to speak and write the language of the community in which they teach, and it requires that they are also knowledgeable about the culture of the indigenous populations they work with. Further, faculty members at teacher training institutions are required to integrate indigenous-related themes in their classroom instruction.

The information was gathered during a 15-month stay in Southern Mexico, working among the local populations and spending time in the local teacher training institutes conducting both interviews and surveys with teacher educators. After completing 90 interviews with normal

school faculty, selected government officials, and selected members of the university community, initial interview analysis was used in the construction of a four-part survey designed to assess faculty member's beliefs and attitudes toward a number of policy-related concepts, ideas, and practices. The survey was then administered to 209 teacher educators in 12 different teacher-training institutions in two different states (Yucatan and Chiapas).

As I previously stated, this is not a policy implementation study, for I believe the shelves of our libraries are full with more than enough of these. Rather, it is a genuine effort to look at how a specific population (teacher educators) that plays a key role in teacher policy makes sense of a reform, their institutions, their context, and their own beliefs and values. It is an attempt to examine a law not only as a series of legal requirements, but rather as an effort to change fundamental attitudes and beliefs about a segment of society (Mexico's indigenous populations) that has long been marginalized by the educational system.

Recalling my principal research questions: How do teacher educators make sense of the General Law on the Linguistic Rights of Indigenous Peoples and the issues that surround indigenous language reform in Mexico? What are some common beliefs and attitudes among Mexico's teacher education population? What are some common traits in indigenous-oriented teacher educators in Mexico? How do teacher educator orientations differ according to context?

Salient Findings

1. There are wide differences in the attitudes and beliefs of teacher educators, but there is a high number of teacher educators who possess positive orientations that are conducive to at least a partial, if not total, implementation of the General Law on the Linguistic Rights of the Indigenous Peoples.

In spite of this, however, my data raise the possibility that the total implementation of the General Law on the Linguistic Rights of the Indigenous Peoples may be hampered by large sections of the teacher educator population who harbor beliefs and attitudes that are inconsistent with the spirit of the law.

2. Context matters, but only to a moderate degree. Several measures of attitudes and values toward the indigenous populations show statistically significant differences when comparing faculty at institutions who offer a degree in IBE and those who do not. However, there is no statistical significance in comparisons between the states of Yucatan and Chiapas. On many items, context—either institutional or state, did not appear significant.

3. Despite Mexico's highly centralized educational system, teacher educators in Mexico rely on a wide variety of resources to keep informed of changes in the latest educational policy reforms and rarely rely on the advice of their superiors. Many teacher educators expressed discomfort at the possibility of having to teach educational policy or working with the indigenous population, and knowledge of the General Law on the Linguistic Rights of Indigenous Peoples was low.

4. The Mexican teacher training system still faces many barriers in fully implementing the law, particular as it relates to developing teachers with sufficient language skills, incorporating indigenous topics into the curriculum, and ensuring their graduates' knowledge of indigenous language and culture. However, the General Law on the Linguistic Rights of Indigenous Peoples still provides teacher educators and their planners with a set of goals that are widely accepted throughout the teacher education

population, and it still offers hope for improving teacher training institution capacity to work with the indigenous population for future enrollees at Mexico's normal schools.

5. Although teachers who work in indigenous communities have more resources (at least in the sense of didactic materials) than ever before, the General Law on the Linguistic Rights of the Indigenous Peoples has not been sufficient to create the number of highly-qualified bilingual teachers necessary to work with Mexico's indigenous populations, and graduates going to the indigenous areas still face a variety of linguistic and cultural challenges in effectively educating this marginalized population.

Discussion

Mexico's General Law on the Linguistic Rights of Indigenous People was enacted to give Mexico's indigenous minority at least some level of protection against language discrimination in the public sphere, particularly in education but also in the legal and administrative arenas. From the teacher educator perspective, it requires normal schools to begin a specialized program in indigenous education, requires teachers to speak and write the language of their community, mandates teachers to have cultural knowledge of their community, and requires increased focus on indigenous culture in all classrooms, both public and private. Judging the effect of the law, however, is difficult. Spillane (2006) himself noted there is little agreement on what constitutes successful policy implementation.

At the heart of Spillane et al.'s (2002) cognitive sense making approach to policy implementation is the notion that any national or state level reform requires policymakers to "ask local implementing agents…to change their behavior and do things differently" (p.419). Indeed, the successful implementation of the General Law on the Linguistic Rights of the Indigenous would require a substantial change in attitude among Mexico's population in general and

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Mexico's teacher educators, specifically. It would certainly fall under the "many reform ideas

that, to be successfully implemented, would require tremendous reorganizing of most

implementing agents existing schemas" (p. 419). Such schemas do not change abruptly, but

rather are based on already existing understandings (and misunderstandings). Thus, Mexico's

indigenous populations, who have been treated as second class citizens for over 500 years, face a

complicated structure of both institutional and individual racism and ignorance. Consider the

teacher educator from Chapter Four who, when faced with the question about interculturalism,

offered up the tales of her vacations in Europe. Spillane et al. (2002) said that this is a frequent

danger of how individuals interpret reforms, particularly reforms that require major shifts in

mental modeling—"People often rely on superficial similarities when accessing related

information" (p. 396). In the case of our European traveler, she saw various cultures during her

trips; hence, technically it was to her "intercultural," but she missed the broader points of the

two-way interaction that interculturalism requires and the respect for diversity it entails. She did

not see the debate on educational diversity revolving around the term "interculturalism" in her

own country and her own institution, and when asked to apply the term to the local population,

she briefly mentioned the city she lived in and compared it with Portugal.

As Spillane et al. pointed out, given the goal of many educational policies to change

fundamental teacher attitudes and beliefs, these attitudes and beliefs are often useful as a

measure of policy success, or at least as a measure of policy influence (Spillane et al., 2002).

Indeed, I identified a group of 12 indigenous-oriented teacher educators who share a valuation of

indigenous culture and language, recognize the differences in diverse groups of learners, identify

with the indigenous populations, promote the diffusion of indigenous ideas, and think critically

about their institutions and society. However, we also saw that when we examined the overall

population of teacher educators based on the survey results, there was a wide variety of values and beliefs. It seems difficult to believe that the 64.3% of teacher educators who on the survey expressed belief in a uniform, standard "Mexican" identity that does not allow for identification in a subgroup could implement a law that celebrates the recognition of the various indigenous peoples and their right to celebrate their own linguistic heritage. And it seems difficult to teach what one does not recognize—so it seems likely they would have difficulty integrating indigenous-related topics into their classroom, in much the same way a faculty member who is among the 80.8% who suggest that indigenous students should be taught using the same methodology as other children might have difficulty in creating a lesson plan on differentiated instruction.

Challenges to and Limitations of the Implementation of the General Law on the Linguistic Rights of Indigenous Peoples in Mexico's Teacher Education System

Without a doubt, Mexico's teacher education faculty are comprised principally of dedicated, smart, and compassionate individuals who possess a sincere concern for their students, the teacher education process, and Mexico's educational future. Still, there are a number of important challenges and limitations that likely to impact the implementation of the law.

Challenge #1: Differences in Attitudes and Beliefs of the Teacher Educators.

As noted previously, there is wide variance in teacher educator attitudes toward issues surrounding Mexico's indigenous population, indigenous education, and educational policy. Recall that we previously discussed the clear role values and beliefs have, not only in teacher education, but in making sense of educational policy. As Spillane (2006) and others noted, policy is often an attempt to change those values and beliefs. We saw in Chapter Four a number of

"indigenous-oriented" teacher educators who exemplified the kind of values and beliefs that together form the ideal disposition for implementing indigenous rights legislation such as The General Law on the Linguistic Rights of Indigenous People, who distinguished themselves with their appreciation of indigenous contributions to the region's history, culture, and language, their identification with the indigenous population; their recognition of indigenous peoples' right to self-identify and follow their traditional customs; their diffusion of indigenous culture and language, and their critical thinking skills.

Yet, the faculty of nearly every institution was clearly divided on issues such as the value of indigenous education, the importance of students learning indigenous languages, and the importance of recognizing the contributions of the indigenous population. Not only did the surveys show that there was variance among the opinions of the teacher educators, the interviews showed deep divisions between the leadership and the faculty and among the faculty themselves. While the surveys may have demonstrated a difference in beliefs, the interviews illustrated the fact that such differences are longstanding, bitter, and perhaps even irreconcilable. Such division took place across a broad range of issues and was not only limited to educational attitudes and beliefs but also to politics and preferences, and the divisions were deep and often very personal. One teacher educator described the relationship between his colleagues like this:

> Conflict. There is a division between the groups. It's very marked. One group doesn't get
> involved with the other group and vice versa. Between the groups, there is no getting
> along with each other. Parties? One group has a party but only among themselves.
> There's no camaraderie.

Conflict often happens in Mexico's normal schools not only among individual faculty members, but between students and faculty and between the institution and government entities.

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Some conflicts end in tragedy. In several schools, particularly in rural areas, students regularly protest the conditions. In December of 2011, protesting normal school students blocked the entrance to a highway in the State of Guerrero in order to demand a director who had the "professional profile" of a teacher educator and to demand the opening of enrollment, among other things on their petition. Police opened fire on the students, killing three and leaving at least 27 injured (Augustin Esteban, 2011).

Further, comments from some indigenous-speaking teacher educators such as Sergio from Chapter Four, who noted others were frequently bothered if he spoke an indigenous language in the workplace, suggests the environment at the normal schools has room for improvement. Indeed, the teacher educators who often displayed the most thoughtful approaches to indigenous education are not evenly distributed, and more effort needs to be made to utilize the indigenous-oriented teacher educator's commitment to the region's indigenous population and the knowledge they have of the everyday challenges indigenous students in the Mexican education system. Thus, values are not uniform, and there seems to be a strong lack of collegiality and trust in most institutions.

Challenge #2: There are Insufficient Numbers of Indigenous Language Speakers Working in the Normal Schools and in the Government Bureaucracy.

One high-level government official I interviewed in an agency charged with a number of important matters related to indigenous languages said she doesn't speak an indigenous language but she "hopes to" in the future. She said she has been thinking about studying an indigenous language, but it seemed "too difficult." That was a frequent theme in the interviews—too few indigenous language speakers actually participate in the design, implementation, and assessment of the very programs that are designed to preserve and celebrate their language. The model in

place does a poor job of attempting to recruit indigenous language speakers to various positions that require the knowledge of an indigenous language. The model, consequently, is based on teaching indigenous languages to the dominant majority. Nowhere is this more evident than in the normal schools, where principally non-indigenous speaking students are recruited to enter programs in Intercultural Bilingual Education (IBE) teacher education programs. When asked if any of the students he has encountered spoke an indigenous language, one indigenous-speaking normal school faculty member said "One, that I know of. He spoke Maya more or less." Normal school entrance is theoretically based on the results of a standardized, national entrance exam that is administered by Mexico's National Center for the Evaluation of Higher Education (CENEVAL), a nonprofit association that conducts both entrance examinations and in-service assessments for a number of institutions, including the normal schools. However, some programs in Intercultural Bilingual Education require their students to also take an exam in an indigenous language prior to admission. Unfortunately, according to one indigenous-language speaking faculty member who was in charge of overseeing the testing for one of the program's incoming classes, the requirement is meaningless. "It isn't enforced," he said. He noted that in theory those who enter should have high scores on both the entrance exam from CENEVAL and the indigenous language test, but he said the latest entering class (and the first one to be tested) fell short.

> With a high score, well, in this group I think there were only 2 people who speak the indigenous language—it was their native language and another only understood the language. All the others failed. I mean, they didn't even get half way, not even 50%. Well, because 35 students have to enter, even though they all failed the language exam they all entered [the program]…The exam isn't used…It's just to show society that they

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are paying attention so it gets printed in the newspaper. But in reality it's not used correctly."

However, controversies over the admissions process are ubiquitous across institutions. And it was not just the language exams or the IBE programs—many claimed individuals failed the CENEVAL exam but still wound up enrolling in the school. Another teacher educator said, "This past year they had the exam to select who was going to be in the first year class. There are a lot of students that entered and didn't pass the entrance exams—they're not on the list. And I recognize some who I know entered because of 'dedocracia'[55] from above, by the state's political machine."

Challenge #3: Insufficient Training and Information.

As I previously suggested, in-service training for normal school instructors often proved inconsistent in its coverage. They were difficult to program given the part-time schedules of many faculty members, and many felt that the in-service training of teachers offered better opportunities for learning about recent educational reforms than the training presented by the normal school's system.

Further, most teacher educators feel they have little information about the General Law on the Linguistic Rights of Indigenous Peoples. And it showed in the interviews. Even many of those who stated they knew about the law were rarely able to provide examples of any of the clauses it contains or to discuss it with any degree of depth. If asked if they could tell me an important aspect of the new law, or about indigenous rights in general, they often simply

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[55] A term that does not really exist in English but that refers to someone being selected or promoted through abuse of power or authority. The term combines "dedo" the Spanish word for "finger" with "cracia" or government by, as in "democracia"--democracy. The term suggests "government by the finger", or rule with arbitrary selection from higher powers. The term was often used to describe the Mexican presidents under PRI rule, who frequently hand-picked their successors.

repeated the question in the form of a statement or answered with a vague "it is important" or some similar comment.

Yet, both the interviews and the surveys suggest that Mexico's teacher educators are hungry for information. They place high value on being well-informed and take personal responsibility for achieving it on their own. However, they often present differing and sometimes confusing explanations for the same concepts and policies, even ones that are at the level of their own institution, and they often express a desire for a more efficient way to obtain educational policy information than searching the internet.

Challenge #4: "This Isn't about Me".

After one teacher educator expressed her support of the General Law on the Linguistic Rights of Indigenous Peoples, I inquired about what she does in terms of one of the law's most notable clauses, the inclusion of indigenous themes in the classroom. Her reply: "I don't work in indigenous education. This isn't about me." Of course, the law applies to all school curriculums, not just those in indigenous education programs. Yet such thoughts as hers were speckled throughout every institution in every field. While it is true that the teacher who said, "This isn't about me," taught in a normal school that did not offer an Intercultural Bilingual Education (IBE) program, they *did* teach in a school where the administration estimated that of those who got *plaza*s in the previous year, nearly all of them (80-90%) got them in rural areas outside of the city with the majority of them in indigenous-language speaking villages. This is due to the previously discussed lack of availability of urban teaching positions and the low turnover rate of urban teachers. Thus, the issue of which institutions are actually training teachers for indigenous schools is not a clear cut issue. The reality is, the overwhelming majority of teachers in indigenous schools are not graduates of indigenous education or related programs, and do not

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have specialized training related to indigenous education. While a few schools, such as the National Pedagogical University (UPN), embrace their role as educators of teachers for Mexico's indigenous population, as some other programs in IBE, most expressed the belief that it is not their job to prepare teachers to work with the indigenous population—it is always the job of the teacher in the room next door, or the responsibility of the normal school that is located down the highway. Furthermore, normal schools frequently have insufficient data about graduate placement.

One reason for this lack of attention given to indigenous education may be the relatively low status given by some to indigenous education. In Chapter Four, I mention Luis's comments about the low status of indigenous education and the fact that the indigenous education field suffers from a common perception that because indigenous is equated with poverty, it is assumed that someone specializing in a field that serves indigenous populations is likely themselves to lead a life of poverty. This frequently results in parents often discouraging their children from entering the indigenous education field.

Challenge #5: Ineffective Policy Leadership at the Institutional Level.

My experience with the normal school directors was universally positive. I found them without exception to be welcoming, engaged, and with a sincere interest in improving their institution and teaching force. They are a diverse group and it is difficult to generalize about them. The scope of this study is limited and does not allow me to make an overall judgment of who might be considered a "good director." I have no basis to analyze how well the normal school directors manage their budgets, organize their institution, or handle the other day-to-day affairs of running a normal school. There is sufficient evidence, however, to suggest that many (though certainly not all) are viewed by substantial portions of the teaching faculty as political

creatures, and this weakens their standings as conduits of policy. Alhough there are clearly directors who are respected for their policy knowledge, the interview data suggests that the majority of normal school directors are not unifiers, but rather are polarizing figures who evoke strongly negative and (rarely) strongly positive feelings in the interviews. In the surveys, faculty members expressed that administrators of teacher education institutions are among the least important sources of information, being ranked only above the radio, friends, and family, and labeled as only half as important as the internet (See Table 5.1).

Such low standing of directors among teacher training institution faculty, particular when combined with the perception by many faculty that they are principally recipients of political favoritism (whether that is real or imagined), is likely to hinder greatly the ability and credibility of directors to serve as their institution's principal policy leaders and informers, even though many seem to envision that as their role. Academic subdirectors, often considered number two in the normal school organization, might have been a reasonable option, but they actually fared slightly worse than the directors. Therefore, it seems reasonable for the director to find a suitable faculty member who is able to meet the rigorous challenges of uniting, rather than dividing, the faculty. The interviews suggest that there are leaders within many normal school faculties who hold other leadership positions (such a coordinator of teaching practice) who are far less polarizing than many directors.

Challenge #6: The Conflict between Indigenous Cultural Identity and Economic Development.

As I demonstrated with the comments of Luis and others in Chapter Four, there is frequent conflict between the indigenous cultural identity and economic development. Though internationally indigenous peoples are diverse groups who have different experiences with

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oppression, globalization has led to a common threat to the cultural and knowledge systems of

indigenous peoples (Stewart-Harawira, 2005). In the south of Mexico, indigenous peoples of

various Mayan groups frequently find the best opportunity to participate in the global economy is

to obtain work in the tourist industry in Cancun and the surrounding area, though their

employment often forces them to abandon speaking their native language, practicing their native

rituals, and wearing their traditional clothing (Castellanos, 2010). Such pressure from

globalization often comes in conjunction with pressure from dominant religious groups who see

indigenous people leaving their roots and joining the dominant Mestizo Christian community as

a goal of their conversions efforts (Early, 2012). Berruecos (2008) suggested that globalization

has torn the social fabric of many communities and led to increased alcohol consumption and

income inequality for many indigenous peoples. Further, he stated that in some indigenous

communities, traditional ceremonies and music largely have been replaced with gambling,

alcohol, and soap operas (Berruecos, 2008). More research needs to be done as to the effects of

globalization on Mexico's indigenous people. However, we do know there is a substantial

conflict between the global economy and traditional indigenous language and culture. The

surveys and interviews remind us of how the trade-offs at an individual level make the policy's

seeming clarity far more complex.

Challenge #7: "The Tension between General Principals and Specific Examples".

We previously discussed what Spillane et al. (2002) called the "the tension between

general principals and specific examples in the representation of policy" (p. 416). This occurs

when someone makes sense of a larger policy one way, but often makes sense of the finer points

of a policy in a way that is different or even contradictory. Spillane et al. wrote, "It is well

known that many teachers characterize their teaching as consistent with the reform when the

judgment of observers is discrepant with their characterization" (p. 416). Here, we see what may be some evidence of this in the inconsistency of the answers given in the survey. Although 90% of survey respondents expressed their support for the General Law on the Linguistic Rights of the Indigenous People, underlying survey data contradicts this overwhelming agreement with the law. For example, 64.4% of teacher educators agreed that "Mexicans are Mexicans and should not try to identify themselves as part of a subgroup" (see Figure 4.3). Meanwhile, large populations of teacher educators claimed English was more important than indigenous languages (see Figure 4.2), showed limited confidence in their ability to prepare students methodologies to work with indigenous students (see Figure 4.5), did not recognize the challenges indigenous students faced in the classroom (see Figure 4.6), and reinforced the dominant culture in their classrooms (see Figure 4.9). This suggests they while many teacher educators state they support the law in general, they may not support specific parts, creating what Spillane et al. (2002) called "lethal mutations" that occur when a teacher "adopts a practice without understanding or fully constructing the underlying idea" (p. 416). This may be in part due to the previously discussed observation that teacher educators receive their policy information from a wide variety of sources. Spillane (1998) says "segmentalism" occurs when different policy actors take different approaches to the same policy (often because they rely upon different sources of information), and this may present a major challenge to successful policy implementation.

Further, the federal government of Mexico itself often sends mixed policy signals. Much like some of the individual teacher educators, the government broadly claims it supports indigenous education but often does not support the finer points of indigenous education reform, such as financing. On the one hand, it continues to trumpet indigenous rights legislation that professes to promote the education of its indigenous population. On the other hand, Mexico has

failed to provide the necessary funding to make quality education for the indigenous population a reality. The annual report by the noted International Work Group for Indigenous Affairs noted that Mexico's indigenous schools lacked teachers and had "culturally inadequate plans, programs, and materials" (Mikkelsen, 2012, p.71). Additionally, "more than 50%" lacked "access to electricity, water, equipment, and [internet] connectivity" (p. 72). And it is hard to see how things might improve after Mexico slashed the budget of DGEI, Mexico's Department of Indigenous Education, by 32% between 2011 and 2012 (Mikkelsen, 2012).

Still, all is not lost. In spite of the challenges reforms such as the General Law on the Linguistic Rights of Indigenous Peoples face, there are a number of opportunities that can contribute to the success of the law and to reforming teacher education in Mexico:

Opportunities for The General Law on the Linguistic Rights of Indigenous Peoples

Opportunity #1: The Strong Core of Teacher Training Institution Faculty.

Without exception, there exists a strong core of faculty at the teacher education institutions which I studied, among them the indigenous-oriented teacher educators I profiled in Chapter Four. They could be utilized as a core that each institution can build around. One might even find ways of identifying those who possess such attitudes and values and attempt to distribute them more evenly throughout the system.

Opportunity #2: A Vibrant Community of Indigenous Scholars and Supporters.

In both the Yucatan and Chiapas, there are a number of outstanding scholars on the issues that affect Mexico's indigenous education. For example, the Autonomous University of the Yucatan's Social Sciences Units operates the Center for Regional Research, an internationally renowned center for the study of the Yucatan and its people, and it features some of Mexico's most distinguished scholars on indigenous affairs. Individually, scholars such as Esteban Krotz,

Miguel Guemez, Hilaria Maas Colli, Alejandra Garcia and other have worked not only to distinguish themselves as eminent individual scholars, but collectively they are building a large body of research on indigenous language, culture, politics, and history. They could be utilized for their knowledge.

Furthermore, in many areas, particularly in cities like Merida and San Cristobal de las Casas, there is an increasing number of thriving indigenous-speaking communities of linguists, writers, artists, and educators who, even though they may not become teachers or join the ranks of the government bureaucracy, could contribute to the system's effort.

Despite many limitations, as I pointed out previously, many faculty seem to have a genuine interest in improving their capacity as teacher educators and most at least openly supported the General Law on the Linguistic Rights of Indigenous Peoples. Most teacher training institutions are sharply divided on party lines.

As I have shown here, teacher educators have a wide range of beliefs and values that ultimately affects how they make sense of and implement national policies on a local level. Alhough this study took place in 12 institutions in the south of Mexico, the issues they confront exist in a wide variety of nations. Australia, New Zealand, Canada, the United States, Norway, Sweden, Bolivia, Peru, Guatemala and Ecuador are just a few of the nations that have struggled to provide quality teachers and quality education for its indigenous peoples (Castellano, Davis, & Lahache, 2000; Corson, 2001; Francis & Reyner, 2000; Hornberger, 2008).

There is undoubtedly a need to understand better teacher educators' beliefs, values, and orientations and their effect on policy and more research is needed in this area. Here, I hopefully have started this process. We must continue to investigate the under-researched yet crucial area of how teacher educators make sense of national policy and, ultimately, implement them in the

teacher education classrooms. In the case of Mexico, more research is required as to how to train more indigenous-language speaking teachers. More analysis needs to be done on existing programs, such as CONAFE's Community Instructor program, the initiative discussed in Chapter One that places youth in indigenous speaking areas for two years in a teaching capacity. The program has been roundly criticized for hiring students, rather than qualified teachers, to work in indigenous schools. However, we are uncertain how this affects student outcomes versus other alternatives when no teacher is available. Further, we need to better understand the link between positive orientations, such as the 12 I highlighted in Chapter Four, and its effect on classroom performance to determine whether such attitudes and beliefs have real impacts in the teacher education classroom. In short, as nations continually look to improve their education systems and increasingly expect teachers to shoulder a new burden in the policy arena, we must give due consideration to the vital formation of teachers as policy actors, a process that begins at birth but is likely heavily influenced by preservice teacher education.

APPENDICES

REPRESENTATIVE INTERVIEW PROTOCOLS

Representative Interview Questions-English

1. Can you tell me about yourself? Where were you born? Where did you grow up? What is your age? What did study and where?

2. Do you speak any language other than Spanish?

3. What studies did your parents have?

4. Can you tell me how you started out as a teacher and how you started out in this position at the normal school?

5. Can you explain something about the normal school? How many students do you have? How many teachers are there? What degrees do you offer?

6. What do your students do student do after graduating? How many receive *plazas* in public schools? What percentage? In what kind of school do they find employment?

7. What classes do you teach?

8. In your experience, how do the dynamics of the classroom change when there are students who speak an indigenous language?

9. How long have you been in your position? What are your current responsibilities? What is the history of the normal schools in your state?

10. What do you think is the biggest success of your institution? Are there some areas that need improvement? In what respects?

11. What is the relationship between the normal schools and the National Pedagogical University? What is their relationship with the institutes of indigenous languages?

12. In the classes you teach, do you cover issues related to Indigenous education? How? What percentage of your classes is devoted to these topics?

13. What does your university do to prepare students to work with the indigenous population?

14. According to your opinion, what are the most important things a teacher should know about the subject area in which he or she teaches?

15. According to your opinion, what do you think are the most important problems facing indigenous education in Mexico today? What are the problems faced by teachers working with the indigenous population?

16. What is your understanding of the new General Law on the Linguistic Rights of Indigenous Peoples? What do you think are the most important points of law?

17. Do you think the law was needed? Why do you believe the government passed this law?

18. Do you think this new law has been successful in achieving its goals? Why or why not?

19. Why do you think this law was not passed before?

20. What do you think is the greatest contribution of the new law to education? What is the biggest weakness?

21. What is the role of the normal school in implementing the new General Law on the Linguistic Rights of Indigenous Peoples?

22. What other agencies or organizations you think are responsible for the implementation of linguistic rights law?

23. Who do you think are individuals/organizations who support the law? Who are the individuals/organizations that oppose the law?

24. What problems and challenges has your institution had in implementing the new law?

25. Are there any programs that seek to integrate indigenous language speakers to work or study in your educational institution?

26. The normal school has a class called "regional course." What is it like?

27. How do you perceive the difference between the normal school and the National Pedagogical University? What are the similarities and differences in the curriculum of the normal schools and the National Pedagogical University?

28. Who do you see as the most important allies in promoting indigenous rights? Who are the most important actors for the implementation of indigenous rights policies? And who are the most important actors in implementing education policies aimed at promoting indigenous rights?

29. How do you perceive the normal school system and their ability to produce teachers who are qualified and competent to teach in indigenous communities?

30. What is the state doing so teachers understand the new law? What is the federal government doing?

31. Do you think current teachers in Mexico are sufficiently prepared to work with the indigenous population? What about the teachers in your state?

32. How do you think teachers in your state are prepared to work with the indigenous population compared with teachers from other states? And compared with the overall teaching population in Mexico?

33. What are the elements that you think make up a good school? What are the elements that you think define a good teacher?

34. Do you see teachers as individuals who play a role in implementing federal policy? Do you see the normal schools as entities that play a role in implementing federal policy?

35. What kind of training is offered to people who are already teaching in Indigenous schools to understand the new law on indigenous rights?

36. How do you think your faculty members learn about new educational policies? Do you believe that you teachers are current in education policy?

37. Has your institution had any training workshops to inform their teachers about changes in education laws? Were they about federal, state, or local laws? Did any discuss the General Law on the Linguistic Rights of Indigenous Peoples?

38. Do you believe there is a difference on how normal schools implement the laws at the local level and the goals of the lawmakers (i.e.,The Mexican Congress)? How?

39. What processes exist in your school to inform teachers of new educational policies?

40. How, in your institution, are educational policies communicated to teachers? How do they decide which policies faculty need to know?

41. Are there other individuals in your institution I should speak to? Are there any other institutions/agencies I should visit?

42. Would you be willing to have another meeting again in the future if I have further questions?

43. Do you think your colleagues would be willing to talk to me in the future?

44. Do you have any printed information or documents that you think I should read?

45. Do you have any last comments you would like to make?

Representative Interview Questions—Spanish

1. Puede hablarme sobre usted, Donde nacio usted? Donde crecio? Su edad? Que estudios tiene y donde estudio?

2. ¿Usted habla algún otro idioma aparte de español?

3. ¿Qué estudios tenían sus padres?

4. ¿Me puede decir cómo se inicio como maestro y también en este puesto de la LA NORMAL?

5. ¿Puede explicarme algo sobre la LA NORMAL? ¿Cuantos alumnos tiene? ¿Cuantos profesores? ¿En licenciatura? ¿Postgrado?

6. ¿Que hacen los estudiantes después de terminar sus estudios? Reciben *plaza*s en escuelas publicas? Cual porcentaje?

7. ¿Que clases imparte usted?

8. En su experiencia, como percibe la dinámica en el salón de clases cuando hay alumnos que hablan la lengua Maya?

9. ¿Cuanto tiempo lleva usted en su puesto? ¿De que se carga usted? ¿Cuál es la historia de la LA NORMAL en Yucatán?

10. ¿Cuál cree usted que ha sido el mayor éxito de la LA NORMAL? Existen algunas áreas que necesitan mejorar? En cuales aspectos?

11. ¿Como están relacionada la LA NORMAL con la UPN? Con los institutos de lengua maya?

12. ¿ En las clases que usted imparte, ¿Cubre usted temas relacionados con la educación indígena? ¿Como? ¿Cuál porcentaje de sus clases son dedicadas a estos temas?

13. ¿Que hace su universidad en la preparación de los alumnos para trabajar con la población

indígena?

14. Según su opinion ¿Cuáles son las cosas más importantes que un maestro debe saber sobre el area en que imparte clases?

15. Según su opinion, ¿Cuáles cree usted que son los problemas más importantes que enfrenta la educación indígena en el México actual? Y los problemas que enfrentan los maestros que trabajan con la población indígena?

16. ¿Cuál es su conocimiento sobre la nueva Ley General de Derechos Lingüísticos de los Pueblos Indígenas? Cuál cree usted que son los puntos más importantes de la ley?

17. ¿Cree usted que la ley era necesaria? Porque cree el gobierno paso esta ley?

18. ¿Cree usted que esta nueva ley ha tenido exito en lograr sus metas? ¿Porque o porque no?

19. ¿Porque cree usted que esta ley no se decreto anteriormente?

20. ¿Cuál cree usted que sea la mayor contribución de la nueva ley a educación? Cuál es la mayor debilidad?

21. ¿Cuál es el rol de la LA NORMAL en la implementación de la nueva ley General de Derechos Lingüísticos de los Pueblos Indígenas?

22. ¿Que otras agencias u organizaciones cree usted que son responsables para la implementación de la ley de derechos linguisticos?

23. ¿Quienes cree usted que son individuos/organizaciones que apoyan a la ley? Y los individuos / organizaciones que critican la ley?

24. ¿Que problemas y desafíos ha tenido su institucion en la implementación de la nueva ley?

25. ¿Existe algún programa donde se busque integrar a Maya hablantes para trabajar en la institución o para estudiar educación?

26. ¿Los normales tienen una clase llamada "asignatura regional." Como es?

27. ¿Cómo percibe la diferencia entre LA NORMAL y la UPN? Cuales son las semejanzas y diferencias del currículo de la LA NORMAL y la UPN?

28. ¿A quien ve usted que son sus aliados más importantes en la promoción de los derechos indígenas? Quienes son los actores más importantes para la implementación de las políticas de derechos indígenas? Y quienes son los actores más importantes en implementar las políticas de educación que buscan promover los derechos indígenas?

29. ¿Como percibe usted el sistema de las escuelas normales y el sistema de la LA NORMAL en su habilidad para producir maestros que son calificados y competentes para ensenar temas indígenas?

30. ¿Que está haciendo el estado para que los maestros entiendan la nueva ley? Y que está haciendo el gobierno federal?

31. ¿Cree usted que los maestros actuales en México están suficientemente preparados para trabajar con la población indígena? Y en su estado?

32. ¿Como cree usted que los maestros en su estado están preparados para trabajar con la población indígena en comparación con los maestros de otros estados? Y comparado con el promedio general?

33. ¿Cuáles elementos cree usted que definan a una buena escuela? Cuáles elementos cree usted que definen a un buen maestro?

34. ¿Ve usted a los maestros como individuos que juegan un rol en la implementación de la política federal? Ve usted a las escuelas normales y a la UPN como entidades que juegan un rol en la implementación de la política federal?

35. ¿Qué tipo de capacitación se ofrece a gente que ya esta enseñando en escuelas indígenas para entender la nueva ley de derechos indígenas?

36. Como piensa que sus maestros aprenden sobre las nuevas políticas educativas? Cree que sus maestros están actualizados en las políticas educativas?

37. Han tenido algunos talleres o capacitación para informar a sus maestros sobre los cambios en las leyes de educación? Trata de leyes federales, estatales, o locales? Sobre la Ley General de Derechos Lingüísticos de los Pueblos Indígenas?

38. Cree que existe una diferencia sobre como implementan las leyes las escuelas normales y como establecen las metas los que han hecho las leyes (i.e., La Camara de Diputados)? En cual manera?

39. Cuales procesos existen en su escuela para informar a sus maestros de nuevas politicas educativas?

40. Cuales políticas educativas se comunican a los maestros y como se decide cuales políticas se tienen que conocer?

41. ¿Existen otros individuos en su agencia que me recomienda hablar? Y alguna otra agencia que me recomienda platicar?

42. ¿Estaría dispuesta a tener otra reunión nuevamente en un futuro en caso que tuviera más preguntas?

43. ¿Piensa que sus colegas estarian dispuestos a hablar conmigo en el futuro?

44. ¿Tiene algún último comentario que le gustaría hacer?

45. ¿Tiene alguna información impresa o documentos que cree usted me ayudaría revisar?

THE SURVEYS

Survey Translated into English

Part 1. Instructions: Please read the following statements and circle the option that best describes your opinion in relation to the current situation of indigenous education in Mexico. There are six options:1-Totally Disagree 2-Disagree 3-Somewhat disagree 4-Somewhat agree 5-Agree and 6-Totally agree. Remember that the questions are about your own opinion, to be done independently, and there are no correct or incorrect answers. All responses are confidential. Thank you for your participation.

1. The economic development of indigenous towns is more important than the maintaining their cultural and linguistic traditions.
2. The federal authorities from the Secretary of Public Education understand how to improve the training of new teachers[56].
3. Learning the English language is more important for our students than learning indigenous languages.
4. The General Law on the Linguistic Rights of Indigenous People was necessary.
5. All Mexican citizens are Mexicans and people should not try to identify themselves as part of a subgroup.
6. I have the independence necessary to teach the courses I am assigned.
7. The graduates of my institution are well-prepared to work with the indigenous population.
8. My institution can have an important role in implementing indigenous rights policies.
9. Our institution offers sufficient training in indigenous languages for our students to that are going to work in villages that speak indigenous languages.
10. I believe that the teachers who are current working in indigenous areas are well-prepared.
11. My institution regularly offers training to their faculty concerning recent changes in educational policy.
12. I have participated in workshops supported by institution related to changes in federal educational policies in the last year.
13. I believe I am abreast in recent educational reforms.
14. If it were necessary, I am trained to teach future teachers about educational policy in Mexico.
15. If it were necessary, I am trained to teach students methods about how to teach students to teach indigenous populations.
16. I have the ability to interpret and implement educational policies in the manner that best adapts to the local context where I work.

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[56] Literally "the formation of new teachers"

17. I am clear on how the General Law on the Linguistic Rights of Indigenous People applies to the educational policies in my institution.
18. The indigenous students in the public primary schools have the same opportunity as any other student.
19. Our students need specialized preparation is they are going to successfully teach in indigenous communities.
20. Teacher should learn that indigenous students should be taught like any other student.
21. I regular integrate topics related to indigenous affairs in my classroom.
22. I devote the same amount of time to themes of indigenous culture as to the national culture in my classroom.
23. I have sufficient resources to do my job well in the (normal, UPN).

Part II. Select the three sources of information that are most important concerning how you obtain information about the latest educational reforms. Number 1 should be the most important source of information, 2 the second most important and 3 the third most important source of information. You only need to choose three.
TV News_____ Radio_____ Newspaper_____ School Director_____
Development Workshops_____ The State Department of Education_____
The Federal Department of Education_____
The academic subdirector_____ Other colleagues_____ Friends_____
Internet_____ Family_____

Next, find a list of abilities and themes. Please, order the concepts according to their importance in the teaching of future teachers in Mexico. Use number 1 as the most important followed by 2,3, 4 until successively numbering all until number 12.
1. Spanish language ability___
2. Indigenous language ability___
3. English language ability___
4. World history and culture___
5. National history and culture___
6. Regional history and culture___
7. Indigenous history and culture___
8. Mathematics____
9. Methods of general pedagogy____
10. Subject matter knowledge____
11. Differential Instruction_____
12. Methods to work with the multilingual/multicultural population____

Part III. Demographic Information
Age_____ Sexo: Male Female
Position in Insitution: Full-time, Half-time, Hourly o Substitute/Temporary
Highest Level of Education: Technical School, Bachelor's Degree, Master's, Doctorate
Institution_____ Major_____

Years as teacher in: Preschool _____ Primary_____ Secondary_____ Preparatory_____

Indigenous School_____ Urban School_____ Rural school_____

Subjects taught in preschool, elementary, secondary, and preparatory_____

Years of teaching in teacher-training

institutions_____

Courses taught in teacher-training

institutions_____

Languages spoken other than Spanish and

Level_____

City/Town of

birth_____

Optional: If you would like to make any comments about the survey or the research project, please write in on the reverse of this page.

Survey—Spanish

Encuesta sobre la Formación de Maestros en México.

Parte I. Instrucciones: Por favor, lea los siguientes enunciados y circule la opción que más describa su opinión en relación a la situación actual de la educación indígena en México. Existen seis opciones: 1-Totalmente en desacuerdo; 2- En desacuerdo; 3-Algo en desacuerdo; 4-Algo de acuerdo; 5-De acuerdo y 6-Totalmente de acuerdo. Recuerde que las preguntas son de propia opinión, hechas independientemente, y no hay respuestas correctas o incorrectas. Todas las repuestas serán confidenciales. Gracias por su participación.

1. El desarrollo económico de los pueblos indígenas es más importante que mantener las tradiciones culturales y lingüísticas.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

2. Las autoridades federales de SEP entienden como se puede mejorar la formación de maestros.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

3. El aprendizaje del idioma ingles es más importante para nuestros estudiantes que el aprendizaje de las lenguas indígenas.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

4. La Ley General de Derechos Lingüísticos de los Pueblos Indígenas era necesaria.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

5. Todos los ciudadanos mexicanos son mexicanos y la gente no debe tratar de identificarse como parte de un subgrupo.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

6. Tengo la independencia necesaria para enseñar los cursos que se me asignan.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

7. Los egresados de mi institución están bien preparados para trabajar con la población indígena.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

8. Mi institución puede tener un rol importante para implementar las políticas de los derechos indígenas.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

9. Nuestra institución ofrece suficiente capacitación en lenguas indígenas para nuestros alumnos que van a trabajar en los pueblos que hablan idiomas indígenas.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

10. Creo que los maestros que están trabajando actualmente en áreas indígenas están bien preparados.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

11. Mi institución ofrece regularmente capacitación a sus docentes sobre los cambios recientes en la política educativa.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

12. He participado en talleres relacionados con los cambios de las políticas educativas federales apoyado por mi institución en el último año.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

13. Creo que estoy actualizado en las recientes reformas educativas.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

14. Si fuera necesario, estoy capacitado para enseñar sobre la política educativa de México a los futuros maestros.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

15. Si fuera necesario, estoy capacitado para enseñar métodos a estudiantes sobre cómo enseñar a la población indígena.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

16. Tengo la habilidad de interpretar e implementar políticas educativas de la manera que mejor se adapten al contexto local donde yo trabajo.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

17. Tengo claro como la Ley General de Derechos Lingüísticos de los Pueblos Indígenas se aplica a las políticas educativas en mi institución.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

18. Los estudiantes indígenas en las escuelas primarias públicas tienen las mismas oportunidades que cualquier otro estudiante.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

19. Nuestros alumnos necesitan preparación especializada si van a enseñar exitosamente en las comunidades indígenas.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

20. Los maestros deben aprender que a los estudiantes indígenas se les debe enseñar lo mismo que a los demás estudiantes.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

21. Yo regularmente integro temas relacionados a asuntos indígenas en mis clases.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

22. Otorgo el mismo tiempo a temas de la cultura indígena y temas de la cultura nacional en mi salón de clases.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

23. Tengo suficientes recursos materiales necesarios para hacer mi trabajo en la normal.
Totalmente en Desacuerdo   1--------2---------3----------4----------5---------6 Totalmente de acuerdo

Parte II. Seleccione las **tre**s fuentes de información más importantes de acuerdo a como obtiene información sobre las últimas reformas educativas. El numero 1 será la más importante fuente de información, el 2 la segunda más importante y el 3 la tercera fuente de información más importante. **Solo tiene que escoger tres.**

Noticias en la televisión_____   Radio_____   Periódico_____
Director de la escuela____ Talleres de capacitación_____
El departamento estatal de Educación_____ Secretaria de Educación Publica_____
El subdirector académico_____ Otros colegas_____ Amigos_____
Internet_____ Familia_____

A continuación encontrará una lista de habilidades y temas. Por favor ordene los conceptos de acuerdo a la importancia en la enseñanza de los futuros maestros en México. Utilice el número 1 como el más importante siguiendo por el 2, 3, 4 y así sucesivamente hasta el numero 12.

1. Habilidades en idioma español _____
2. Habilidades de idiomas Indígenas _____
3. Habilidades de idioma Inglés _____
4. La historia y la cultura mundial _____
5. La historia y la cultura nacional _____
6. La historia y la cultura regional _____
7. La historia y la cultura indígena _____
8. Matemáticas _____
9. Métodos de Pedagogía General _____
10. Conocimiento de la materia a impartir _____
11. Instrucción Diferenciada _____
12. Métodos para trabajar con poblaciones multilingüe / multicultural _____

Parte III. Información Demográfica
Edad_____   Sexo: Hombre Mujer
Puesto en Normal: Tiempo Completo, Medio Tiempo, Por Hora, o Interino
Nivel más alto de educación: Técnico, Licenciatura, Maestría, Doctorado.
 Institución_____   Carrera _____
Años como maestro en: Preescolar ____Primaria____ Secundaria____ Preparatoria_____
Escuela Indígena_____   Escuela urbana _____   Escuela Rural_____
Materias impartidas en preescolar, primaria, secundaria, o preparatoria_____
Años de enseñanza en la escuela normal_____
Materias impartidas en la escuela normal:
_____
Idiomas que hable además del español y nivel- _____
_____
_____
Cuidad/Pueblo de nacimiento_____
Opcional: Si le gustaría hacer cualquiera comentario sobre el cuestionario o la investigación, favor de escribirlo al reverso de esta página.

APPENDIX C

CONSENT FORMS

Spanish

Soy un investigador de la Universidad de Estado de Michigan y me gustaría aprender mas acerca de la educación indígena en México. Este estudio es para mi disertación de doctorado en el Colegio de Educación en Michigan. Si esta de acuerdo, me gustaría hacerle algunas preguntas. La entrevista tendrá una duración de una hora. Puede omitir la respuesta de alguna pregunta que no desee contestar. Usted puede terminar la entrevista en cualquier momento. Yo solo quisiera escuchar sobre la manera que usted hace ciertas cosas, sus experiencias en la educación, y sus opiniones y conocimientos sobre asuntos relacionados con la educación indígena. No existen respuestas correctas o incorrectas. ¿Tiene usted alguna pregunta?, Si no es así, entonces ¿Esta usted de acuerdo a contestar la encuesta?

Esta investigación es confidencial. Confidencial significa que los datos de la investigación solo incluirán alguna información como su nombre y su información para contactarlo. Sin embargo, yo mantendré esta información confidencial, limitando el acceso a la información y guardándola en un lugar seguro. Además, esta información será guardada separada de las notas en donde las notas solo se referirán a un seudónimo. El equipo de investigación y el Comité de Critica de la Universidad del Estado de Michigan (Michigan State University) son los únicos que estarán autorizados a consultar los datos. Si existieran publicaciones sobre este estudio, o si los resultados son presentados en una conferencia, ningún individuo será identificado.

Nuestra conversación será grabada con su consentimiento. Usted puede decidir terminar de grabar en cualquier momento. Nadie mas con excepción de mi tendrá acceso a la grabación. Además, tomare notas con su permiso.

Si usted tiene algún comentario o pregunta sobre este estudio, usted puede contactar al Dr. Lynn Paine, del departamento de Educación, 317 Erickson Hall, Michigan State University, East Lansing, MI 48824 (telefono 517-355-3266) o el Dr. Peter Vasilenko, Director de Michigan State University Institutional Research Board at Michigan State University, 202 Olds Hall East Lansing, MI 48824 (teléfono: 517-355-2180).

¿Tiene usted alguna pregunta?
Si no es así, entonces ¿Esta usted de acuerdo a contestar la encuesta?

An English translation

I am a researcher from Michigan State University who would like to learn more about indigenous education in Mexico. This study is for my doctoral dissertation in the College of Education. If you agree, I would like to ask you about some questions. The interview will last about one hour. You do not have answer any questions you do not wish to answer. You may stop the interview at any time. I would just like to hear about the way that you do certain things, your educational experiences, and your opinions on and understanding of certain issues related to indigenous education. There are no right or wrong answers. Do you have any questions? If not, then do you agree to let me ask you questions?

This research is confidential. Confidential means that the research records will include

some information about you, such as your name and contact information. I will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location. Also, this information will be stored apart from the notes, and the notes will only refer to a pseudonym. The research team and the Institutional Review Board at Michigan State University are the only parties that will be allowed to see the data. If a report of this study is published, or the results are presented at a professional conference, no individual will be identifiable.

If you consent, our conversation will be recorded. You may stop the tape recorder at any time. No one other than myself will have access to the tapes. In addition, I will take notes as necessary, with your permission.

If you have any comments or questions about this study, you may contact Dr. Lynn Paine, Department of Education, 317 Erickson Hall, Michigan State University, East Lansing, MI, 48824 (phone: 517-355-3266)or Dr. Peter Vasilenko, the Director of Michigan State University Institutional Research Board at Michigan State University, 202 Olds Hall East Lansing, MI 48824 (phone: 517-355-2180).

Do you have any questions? If not, then do you agree to proceed with the interview?

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