Literacy as a Means to Achieving Social Justice: The Case of Mexican Indigenous Communities[1]

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Abstract

This literature review addresses some of the issues central to analyzing and understanding literacy programs in Mexico. The discussion is related to Social Justice concerns and focuses particularly on indigenous communities in Mexico and their educational opportunities both in the country as a whole as well as in university settings. A broad discussion of Mexican education (particularly literacy education) is presented as well as discussions of social justice and indigenous educational programs. These areas are discussed both historically and in modernity. Literacy is not viewed as a mark of intelligence or accomplishment but rather as a tool that can help one to attain such attributes. Further, literacy is seen as a tool which can be given to communities and which can allow them to achieve social justice in certain areas. Through literacy, communities can begin to support themselves, react to and interact with the government and the dominant (Spanish-speaking) culture in a productive way. This in turn allows for positive change for individuals, their families, and their communities in the face of historical repression.

Resumen

Esta revisión de la literatura presenta algunos de los temas centrales para el análisis y la comprensión de los programas de alfabetización en México. Esta discusión está relacionada con problemas de Justicia Social y se centra particularmente en las comunidades indígenas de México y sus oportunidades educativas, tanto en el país en su en general como en la Universidad. Se presenta una discusión amplia de los debates de justicia social y de los programas educativos indígenas de la educación mexicana (especialmente educación y alfabetización). Estos temas se discuten tanto históricamente como actualmente. La alfabetización no es vista como una sello de inteligencia o realización sino como una herramienta que puede ayudar a un sujeto a lograr estos atributos. Además, la alfabetización es vista como una herramienta que puede dar a las s comunidades para que estas a su vez puedan lograr justicia social en ciertas áreas. A través de la alfabetización, las comunidades pueden empezar a valerse por sí mismas e interactuar con el Gobierno y la cultura dominante (habla español) en forma productiva. Esto a su vez permite un cambio positivo para los individuos, sus familias y sus comunidades frente a la represión histórica.

Introduction

If one goes online and searches the word 'Literacy' in Google, the first item which appears is a *Wikipedia* article which posits that literacy is, "…the ability to read for knowledge, write coherently and think critically about the written word," (Literacy, n.d.) This definition is not only so wide-reaching as to make certain forms of literacy appear not to be, but it illustrates an important aspect of literacy that is often taken for granted when analyzing the topic. Namely, that literacy is a complex process which only certain people are able to take advantage of fully. For example, in order to find this definition, one must first be capable of reading and writing text (the most basic conceptualization of what it means to be 'literate') and

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must additionally be capable of using a computer and the internet. In order to comprehend the article one must not only be capable of reading text, but of understanding broad concepts such as 'read,' 'knowledge' and 'think;' and in order to include this citation in a written work one must be capable of writing, copying text, and connecting the ideas and concepts *read* in one text to the ideas and concepts being *presented* (in writing) in another text. At the same time, of the aspects of literacy which are proposed above, only part can clearly be seen as falling into this brief summary of what it is to be literate. By viewing literacy in this way—as a complicated, ever present set of actions that many literate people are unconscious of—a complexity emerges that is ignored by those who can read and invisible to those who cannot.

Despite the fact that literacy may seem to be a natural process to many people, for a person to be literate (in the strictest sense) they have to have been at some point in their lives and has to have been cultivated through continuous exposure. As such, it is not readily available in a homogenous form to many people in the world. Nonetheless, it is seen throughout the world as necessary and can, indeed, mark the difference between participating and not participating in education-related areas (particularly higher education). This is because literacy is such a vital part of modern conceptualizations of education that to be 'illiterate' and study at any level (let alone a specialized level) would be practically impossible. At the same time, in order to advance within modern culture it is quite necessary to have studied at a university in some capacity. As a result of this, the lack of literacy among certain populations serves as both a reflection of their marginalization by the majority society and a way of preventing them from effectively addressing it.

This can be seen both in modernity and historically. Tavárez (2010), for example, writes of the, "unusual appropriation of the Latin alphabet and European literacy practices by local indigenous [Zapotec] intellectuals," (p. 73) in Mexico during the 17th century; a time in which Zapotec ritual specialists were presenting written accounts of their practices to the government of New Spain. What is telling in the analysis of writing samples which Tavárez realized is that, according to the author, they vary in significant ways with regard to spelling. Tavárez posits that this is the result of each individual being taught to write as a reflection of their own phonemic realizations (or those of their teachers). In this example, there is clearly a degree of what would be called 'literacy' by most. However, in many ways this sort of written expression lacks certain characteristics needed to be recognized (or at the very least accepted) as 'literacy' within the majority society today.

It is here that one of the most important aspects of being literate comes into play. In order to participate in a society—and in many cases improve your situation in so doing—some degree of literacy is usually required. Indeed, the Zapotecs written about by Tavárez (2010) were registering their ritual practices in order to be spared prosecution for idolatry. Despite the fact that at this point in time Spanish was hardly the majority language in Mexico, a command of it was necessary in order to navigate the bureaucracy imposed by the Spanish government. In this

sense, literacy (in theory) allows one to not only enter into the majority society but to participate in it and become part of it.

One of the reasons that a great deal of importance is placed on literacy is that it is often seen as lifting many of the knowledge-based limitations which exist for humans in educational and social arenas. With this in mind it is no wonder that traditional conceptualizations of literacy have put forth the misguided idea that it makes people more intelligent. The interaction of various forms of and uses for literacy in the example of the *Wikipedia* article shows how literacy can allow one to understand concepts in complex ways and learn about topics which they know nothing about. Similarly, the example of Zapotec writers in New Spain shows that although literacy allows participation in society it is not necessarily reading and writing which make it acceptable, but rather that it be the 'right kind' of literacy.

However, as the academic comprehension of literacy has expanded, so too has the common understanding of it. Because of this, literacy is no longer seen as something that makes one more intelligent by virtue of its mere presence in their cognitive functioning but rather as a tool which allows people to broaden their knowledge through their own volition. Employing this reading of what it means to be literate, anyone can learn about a topic through their knowledge and use of literacy. It is because of this that literacy remains such an important research topic within many fields. While literacy cannot be expected to make one more intelligent by virtue of its very existence, there are certainly many benefits provided by literacy.

Principal among these benefits is the potential for continuous and autonomous learning summarized by Hanna and Sánchez (2011):

> *The ability to read is crucial in entering the modern world. The educational system present in almost any country places access to education and culture through books and texts as their principle objective. Reading opens the doors to knowledge by allowing independent study; it is reading which allows students' dependence on teachers to be broken (p. 1198, my translation).*
> *La habilidad lectora es clave para entrar al mundo modernos [sic]. El sistema educativo de cualquier país tiene como objetivo central el acceso a la educación y la cultura a través de los libros y textos. Leer abre las puertas al conocimiento a través del estudio independiente: es la lectura la que permite romper el vínculo de dependencia entre el alumno y el maestro.*

The question that remains to be answered is: if this is so widely accepted and so common as a factor in the design of education systems, how is it present in Mexico and how does it affect the country's indigenous populations? Further, assuming that indigenous populations are able to successfully pass through the Mexican education system while retaining their cultures and languages, how does this affect their performance in higher education setting? These questions are looked at accomplished by first addressing literacy among Mexico's indigenous populations

as a whole, then looking at literacy's role in Social Justice and the history of education and literacy education in Mexico, and finally the experiences of indigenous students in Mexican Higher education are discussed. The following discussion addresses these points in turn while focusing particularly on the social, cultural, and educational benefits that can be gained from literacy.

Literacy and Social Justice

The present writing is focused on the situation of Mexican indigenous populations with respect to literacy and their participation in higher education. As can be seen in many writings, this is an important approach in that the indigenous populations of Mexico have (as in the case of indigenous populations throughout the Americas) been marginalized through educational programs beginning with the arrival of Europeans and continuing up until the present day. With this in mind, the present discussion approaches literacy as a potential means to achieving Social Justice for indigenous populations within Mexico by examining some of the advances made in the works of researchers in a variety of fields.

The importance of understanding how educational programs and indigenous populations interact in Mexico is particularly pertinent in the wake of the 1996 San Andrés Accords (see Schmelkes, 2011) which called for the establishment of pluricultural education in Mexico and additionally drew attention to the historical slights directed at the country's indigenous population. Part of the reason for this airing of past mistakes is that the recognition of the need for pluricultural education in Mexico has not only addressed some past errors on the part of the Mexican government but has—unintentionally—shown researchers how embracing indigenous language, literacy, culture, and society can help students to succeed in all levels of schooling and is far from a hindrance as was long believed. With this broadening of Mexico's educational horizons there come many opportunities for achieving Social Justice for communities which have long suffered at the hands of uncaring, Eurocentric policies.

Social Justice is, like literacy, a multi-faceted concept that cannot be easily described or approached as a single, coherent area. Social Justice consists of a wide variety of individual 'justices' which fall under its purview. Like the language-related activities involved in literacy, the areas contained within Social Justice are both separate and connected and work individually in addition to working as part of a system. In a general sense, Social Justice can be seen as any work in favor of, "…the democratic values of equality, justice and respect for marginalized populations…" (The Centre for Social Justice, 2011). However, Social Justice as an approach to understanding the human condition does not just view the 'solutions' to societal ills, but focuses on the manifestations of these ills by looking at topics such as police repression, civil rights, and the penal system (Social Justice Journal, 2004).

Through this broad and evolving framework, Social Justice has been applied to a number of situations. Although oftentimes approaches taken by researchers are

not branded as promoting Social Justice as such, many literacy approaches utilized over the years have supported causes which fall under the banner of Social Justice. This is particularly true with regard to literacy programs involving underserved or marginalized populations. Some programs which have tentative connections to Social Justice never explicitly tie it to their research but clearly view Social Justice as a goal (even if not in name). This can be seen in examples such as Hamel et al.'s (2004) discussion of a bilingual and bicultural education program in Mexico in that the program enables students to excel by embracing the linguistic knowledge which they already possess. While this obviously helps students achieve in the short run, in theory it permits educational advancement beyond what would be gained from more 'traditional' education—potentially allowing students to attend college. This, in turn, comes back to the community as these students advance within the majority society (this cycle is discussed in more detail below). This dynamic is also present in O'Donnell's (2010) discussion of native-Spanish speaking and native speakers of indigenous languages' progress in university English classes in Oaxaca. In both the Hamel et al. and O'Donnell examples, both the historical injustices dealt indigenous members of Mexican society as well as the difficult climb to be able to address one's own situation are made abundantly clear through views of these students' experiences in literacy.

In this respect, it becomes difficult to separate literacy education from the attainment of Social Justice when looking at higher education. Because of the historical marginalization of indigenous populations, it is enormously difficult for them to attain any measure of advancement within the majority society without being assimilated into the majority culture, usually by leaving behind their indigenous identity (O'Donnell, 2010). However, as can be seen in both O'Donnell's study and the writings of Rainer Hamel (Hamel and Francis, 2006; Hamel et al., 2004) this is never necessary and indeed by retaining their indigenous language and identity students can excel far beyond what majority-imposed programs have traditionally allowed.

Changes in Literacy in Mexico

Historically, Mexico has been affected by problems in education, high rates of illiteracy, and political turmoil to varying degrees. While present in separate sectors of Mexican society, these three characteristics of the country's political makeup are inter-dependent and form a cycle which perpetuates them in Mexican culture and society. In recent years the literacy rate has climbed substantially—especially when considering that most sources indicate a rate of well below 80% at the beginning of the last century. This can be seen as an even steeper climb when considering that the actual illiteracy rate at the time would likely have been far, far higher. With a wave of neo-liberalization brought on by a more market-based economy at the end of the 20th century, though, disparities remained quite pronounced. This was particularly true in relation to marginalized indigenous populations.

Beginning in the late 1980s, with Carlos Salinas de Gortari's election to the presidency, Mexico began to experience a more market-based approach to politics, economics, and social programs (Muñoz et al., 2010). This resulted in more importance being put on competitiveness, thus resulting in, "…the economic exclusion of rural producers in marginalized areas. Their ways of life [were] made unsustainable and they [had] to abandon agriculture and migrate to the agro-exportation zones of the United States to survive," (p. 66, my translation).

> *…la exclusión económica de productores/as rurales de zonas marginadas. Sus modos de vida se han vuelto insostenibles y han tenido que abandonar la agricultura y migrar a zonas agro-exportadoras a Estados Unidos para ganarse el sustento.*

Today, according to the CIA World Factbook (Mexico, 2011), the literacy rate in the country lies around 86%. Nonetheless, the data behind this statistic can be debated. Indeed, according the INEGI (2006) (the Mexican census bureau), in 2005 the literacy rate in Mexico was 91.5%.

Regardless of these differences, the fact remains that the highest rates of illiteracy exist among the most under-served populations (indigenous communities). In many ways causing them to remain underserved. In the same INEGI (2006) analysis cited above, Oaxaca, Guerrero, and Chiapas were indicated as the Mexican states with the highest rates of illiteracy in Mexico. These states are, not by coincidence, also the three states with the most established indigenous populations according to the National Autonomous University of Mexico (UNAM, n.d.). Indeed, Schmelkes (2011) citing data from the National Institute for Adult Education claims that, "…the 2005 illiteracy rate of the non-indigenous population (6.7%) aged 15 and older must be multiplied by a factor of five to obtain the illiteracy rate of the indigenous population for that same year (36%)," (p. 91). Further, "Twenty-five percent of indigenous people over 25 years of age are not functionally literate; 40% of indigenous people over 15 years of age have not completed elementary education; of these, 18% have never been to school; and only 22% have completed some years of elementary schooling," (O'Donnell, 2010, citing the Subsecretary of Basic Education, n.d.). While this does not bode well for any sector of society, and, indeed, affects the indigenous population in all sectors of society, it is perhaps most felt in the education sector where illiteracy may bar one from entry, or at the very least bar students from advancing. So, while illiteracy has negative effects on all those who experience it, illiteracy such as is discussed by these two authors would seem to disproportionately affect indigenous populations who are at an age when they could and should be attending school.

As in most of the above discussion regarding Social Justice, it is important to keep in mind that education and policy have an almost completely mutually dependent relationship. That is, as policy changes, educational programs, goals and outcomes change. Then as education changes, a change is ultimately affected in future policy. It is precisely because of this cyclical relationship that Social Justice can theoretically be achieved through educational programs; nonetheless, it is also

because of this relationship that the achievement of socially responsive programs in national education in Mexico remains a vague and distant goal.

In discussing the implementation of literacy programs and issues in Latin America, Caruso (2010) points out that the initial forays into recognizing the importance of literacy with regard to social and political change came on the heels of the region's liberalization in the early- to mid-1800s. Among the political and social contributions which resulted from this regional political shift was a focus on education as a tool to achieve democracy and equality for all. In spite of this broad-based, regional push, the idea that education would be freely offered to all communities and that it would solve a wide swath of social issues went essentially unrealized. In fact, Caruso points out that because of the general belief of the ruling class during this period (beginning in 1833) that literacy and education made a man worthy of participation, some countries took a very long time in acknowledging this belief. Brazil, for instance, did not recognize voting rights for illiterates until 1988, over 150 years after the beginning of liberalization movements in the region.

Mexico's case is not terribly different. As Caruso (2010) indicates, much of the unwillingness to include many people in political and social processes stemmed (and, in many ways, still stems) from the fact that wealthy Spanish-speakers control most Latin American countries. In Mexico, many improvements have been made, but the same slights in educational arenas continue to be directed at indigenous populations and continue to manifest themselves through low levels of achievement in education and marginalization within society. One way to avoid this is through indigenous students' entry into and graduation from universities in the country. However, due to the same problems discussed above as well as social stigmas related to indigenous language and culture (see Barriga-Villanueva, 2008) it is difficult for many students to simultaneously retain their heritage and succeed in the majority society. Much of this is the result of historical policies governing education and literacy teaching in Mexico.

Corona (2008) analyzed the historical march of the SEP as it relates to varied indigenous populations. This historical analysis found that the principle method for instilling the education required by Spanish-speaking Mexican culture has centered on pushing the necessity of Spanish fluency among indigenous populations and not in fostering L1 competence or cultural awareness among indigenous students; in other words, assimilation. As a sort of response to this deficit, Francis and Reyhner (2002) present a model of native and dominant language interaction and prevalence which highlights the complicated web which indigenous students face. The model shows the interaction and coexistence of indigenous languages and Spanish in Mexico and presents a model of how and where students receive input from each. Unfortunately, the model is idealistic—if nothing else—and fails to account for the Mexican government's official response to historical instances of

education in indigenous communities: eliminating indigenous language input and output in favor of Spanish.

In a country like Mexico which is dominated by Spanish speakers but which plays host to a number of diglossic situations, it is obvious that an understanding of Spanish and its production is needed in order to be physically and economically mobile within the country as well as to be able to participate politically, socially and in academic environments. Acevedo-Rodrigo (2008)—looking exclusively at reading—divides Mexican language and literacy teaching into three distinct periods: Independence through the 1870s, 1880-1890s, and 1910-1930. Each of these periods represents a slightly re-tooled approach to literacy teaching, and in many ways the methods continuously improve from a pedagogical standpoint. For example, Acevedo-Rodrigo asserts that the predominate thrust of instruction shifted from reading-only to a curriculum based on reading and writing between the first and second periods. However, what is important to note in viewing Mexican literacy teaching in this light is that none of the programs recognized the fact that many students were indigenous and, thus, non-native speakers of Spanish.

> *During evangelisation in the early Colonial period Spanish missionaries learned indigenous languages and used them to deliver religious instruction. The administration recognised two widespread pre-Conquest languages, náhuatl and maya, which were extensively used in official documentation. Despite such efforts to improve communication, ritual was eventually seen as the only realistic way of spreading Christianity to a significant number of people. (p. 50)*

Once this eagerness to reach indigenous people through their own language faded away, the general approach used by the Mexican government and, indeed, most of those with positions of power, shifted to strict adherence to Spanish instruction. This use of *castellanización* (the exclusive teaching of Spanish) has almost always been used in one sense or another in the education of Mexican indigenous populations and has not generally been shown to have positive results (in relation to Spanish production, L1 production, or learning in general (see Hamel et al., 2004)).

Indeed, the pillars of *castellanización* are so much a part of the historical development of Mexican literacy education that they appeared even in the opinions of Mexicans regarding the SEP's role in indigenous education soon after its founding (Revista Educación, 1923, p. 7, as cited in Corona, 2008),

> *…I have always been an enemy of this measure because it, erringly, heads a 'reservation' system which divides the population into castes and skin colors. We want to educate the indian in order to completely assimilate him into our nationality and not to push him aside. In educating the indian, I think that we must follow the venerable method of the great Spanish educators who, like Las Casas, Vasco de Quiroga, y Motolinía, adapted the indian to European civilization; as a result creating new countries and new races instead of erasing the natives or isolating them… (p. 4, my translation)*

> *… siempre he sido enemigo de esta medida porque fatalmente conduce al sistema llamado "de la reservación", que divide la población en castas y colores de la piel, y nosotros deseamos educar al indio para asimilarlo totalmente a nuestra nacionalidad y no para hacerlo a un lado. En realidad creo que debe seguirse, para educar al indio, el método venerable de los grandes educadores españoles, que como Las Casas, Vasco de Quiroga y Motolinía, adaptaron al indio a la civilización europea, creando de esta manera nuevos países y nuevas razas, en lugar de borrar a los naturales o de reducirlos al aislamiento...*

What is interesting to note in this opinion is that, for all intents and purposes, it was well-intentioned, and was firmly based in much of the same liberal philosophy which now suggests that *castellanización* programs hurt more than they help. Although there are obvious hints of bias against indigenous populations in the above discourse, these could be seen as nothing more than products of the time. What is important is the underlying idea that inclusion would help indigenous people to achieve. The problem with this logic, which only recently has come about through post-modern thought, is that no matter the amount of liberty and equal treatment given the indigenous populations of Mexico, it either prepares them to integrate into the majority culture, essentially leaving their own behind or permits them to hold onto said culture thus 'exempting' them from entry into academic pursuits or positions of power within the majority society.

This is not meant to suggest that there are no programs which help indigenous communities to learn in their own language in addition to learning Spanish. However, programs like these are few and far between. One such program which has been quite well-documented is a bilingual system which has been laboriously established in P'urhepecha-speaking areas of Hidalgo and Michoacán. Hamel et al. (2004) discuss the establishment of this system in detail as well as some of its advantages and disadvantages. While the example of this school design is an exception within the Mexican school system (even viewing the system optimistically), it is a shining example of the fact that embracing a bilingual, bi-cultural approach to indigenous instruction not only helps students to interact more effectively in the greater society, but it aids in their cognitive development in a way that is impossible even in monolingual Spanish-speaking schools in other parts of Mexico thus permitting students to have more success in either work or academic pursuits than would otherwise be possible.

The general pedagogical basis of the system put into place by Hamel et al. (2004) and assorted others in these schools is the idea that L1 and L2 language knowledge lies in the speaker's brain like an iceberg. All that is 'submerged' is the knowledge which is shared between languages. Each speaker then has two 'exposed' parts of the iceberg which represent the individual linguistic characteristics and knowledge of each language. According to Hamel et al., the traditional *castellanización* system of language teaching results in a 'stunted' L1. That is, the L2 is developed before the underlying concepts in the L1 are

cognitively solidified. This, in turn, causes academic problems among students of this method in both their L1 and their L2; the use of a graduated bilingual program such as the one laid out by Hamel et al., on the other hand, allows students to first develop concepts and a knowledge base in their L1 (in this case P'urhepecha) before beginning instruction in their L2 (Spanish). This approach to literacy instruction allows students to 'build on' existing L1 knowledge while learning their L2. Despite the fact that this is a very seldom used pedagogic structure in Mexico, Hamel et al. have found very positive results among students with noticeably improved grades and a generally more positive outlook on the P'urhepecha language and P'urhepecha identity in the schools in which this approach was used.

Once bilingualism and biculturalism is achieved in the students' two languages, they will not only be able to 'integrate' into Mexican society (the principle goal of *castellanización* programs) but will have a decided cognitive advantage over many comparable monolingual Mexican peers thus being capable of aspiring to the same things (i.e. furthering their education, participating more actively in Mexican society, and potentially serving their own communities). This example highlights a perfect example of the ways that educational programs themselves can be utilized to instill the ideals and practices of Social Justice into students. However, a great many approaches seek to add Social Justice to the lives, educations, outlooks, and points of view of people who have already been educated. Ciardiello (2010), for instance, looked at the different ways in which Social Justice literacy practices can be inserted into pre-existing curricula in order to affect changes in the thinking of students. These literacy practices, such as the reading of dissident poetry, interact with students' pre-existing understanding of the world and literacy in order to open their eyes to Social Justice in their worlds. However, despite these tools being offered students, arguably the most effective way of promoting Social Justice among Mexican indigenous communities would be to find ways to take advantage of their unique backgrounds in order to facilitate their journey through school and provide them with a path to success in higher education.

That is, while studies like those mentioned above have examined specific actions which can provide *tools* to achieve Social Justice among students, it is also important to look at ways to use education to instill the skills needed to promote Social Justice among students. This can be seen clearly in examples of technology being used in education because not only does the use of these tools help reach marginalized populations but it can serve to prepare these populations for university study in the same way as it does many members of the dominant Mexican society (Kim et al., 2011) due to the increasing importance of information technology in Mexican universities (see Guevara, 2010; González et al., 2007, for discussion). None of this is possible without first laying the ground work for more effective pre-university schooling, however by that same token, the cycle of Social Justice in indigenous communities is greatly aided by community members' graduation from college.

Indigenous Presence in Mexican Universities

Based on the information presented in the above discussion it would not be outrageous to assume that there is an infinitesimally small indigenous population in Mexican higher education. That is not the case. While there is a far lower population of indigenous students than non-indigenous students, students from indigenous communities do make up a respectable part of Mexico's national university community. Nonetheless, it is important to indicate from the start that Mexico's university level indigenous population is quite small in the grand scheme of things. Indeed, recently the Subsecretary of Higher Education for the national Ministry of Education in Mexico indicated that only 2 or 3 of every 100 university students in the country are of indigenous origin (Martínez, 2011). Obviously, this is due to the numerous modern and historical problems in Mexico's dealing with indigenous populations (laid out above); however, it is important to recognize that merely being indigenous does not necessarily have to prevent advancement within Mexico's educational system. It can in fact (particularly in the case of higher education) be a boon.

In addressing the presence or lack of an indigenous population in Mexican universities it is first vital to recognize the social and historical factors that cause their situations in the first place. In the case of indigenous students in Mexico the disparities are glaringly obvious. According to Chávez Arrellano (2008), despite the fact that in 1990 Mexico was home to the majority of the indigenous population in Latin America, it had the lowest number of indigenous students in higher education. Although in the same article the author speaks of the advances in the 10 years after this data was gathered, by 2000 only 2.7% of Mexico's indigenous population over 15 years old had been enrolled in higher education at some point (even so, this data only refers to those who passed one year of higher education courses). While these figures seem dismal on the whole, it is important to recognize the contributions which being indigenous can have on academic study and which higher education can have on the situation which Mexico's indigenous populations currently and historically have faced.

The most obvious benefit that 'embracing' indigenous identity through education can have is the general improvement of learning and advancement. This is connected to the idea of fostering Social Justice through literacy teaching not by allowing for advancement but by addressing the factors that have prevented advancement for so long. This has been found most notably by Rainer Hamel in P'urhepecha communities in which innovative coordinate bilingual programs were implemented (Hamel and Francis, 2006; Hamel et al., 2004). Through the use of these programs, native speakers of P'urhepecha were able to overcome various obstacles which would otherwise have presented themselves during the course of schooling. Basing ourselves in the idea of achieving Social Justice, this serves students by allowing them to advance in their formative years of schooling before eventually standing a better chance of being accepted into a university setting.

However, the benefits of utilizing indigenous language, literacy and culture is not limited to primary and secondary schooling, but can also be found in university settings.

O'Donnell (2010) found that—in a similar vein to innumerable studies on bilingualism in other contexts—bilingualism in an indigenous language and Spanish bilingualism contributed to the acquisition of English. While observing university classes in Oaxaca over three years O'Donnell found that a wide variety of factors contributed to students' positive or negative perspective regarding their use of indigenous language including personal and social factors related to their perception of their own L1. O'Donnell found that many of the principle factors which contributed to the loss of indigenous languages among students were, "…(1) low self-esteem, including their view of external judgments, on the part of indigenous language speakers on both societal and personal levels; (2) lack of educational support for indigenous language speakers; and (3) university students' belief that an indigenous language will not serve their personal or professional aspirations," (p. 396). Interestingly, these factors are the same which are generally seen to contribute to indigenous students' difficulties in Mexican schooling in general (see Schmelkes, 2011; Dietz, 2009; Hamel and Francis, 2006; Hamel et al., 2004; Francis and Reyhner, 2002). As such, what is vital to note here is that addressing these problems will not only help students, but it will serve as a way forward for indigenous communities in general.

The possibilities which are inherent in embracing indigenous language and literacy skills in school are quite clear in the works of both O'Donnell (2010) and Hamel et al. (2004) in that both have shown that by fostering students' pre-existing skills (in both cases an indigenous L1) students at various levels can excel. In looking particularly at O'Donnell's work in Oaxaca it can be seen that the factors in language loss are all connected and, indeed, all can be addressed through a curriculum or approach which acknowledges the backgrounds of indigenous students. Further, in addressing factors related to language loss, the students' academic performance is simultaneously fostered. That is, by embracing indigenous languages, students did better in university English classes on the whole which thus contributed to their marketability and, as a result, perception of academic success.

While the acknowledgement of these sorts of programs is important in addressing long-standing issues, many problems related to education issues concerning indigenous communities in Mexico are related to Mexico itself and the ways in which communities and the majority culture differ and are perceived to differ. To begin with, the individuals who are attending universities in Mexico must be considered (in this case, indigenous students). However, at the same time, due to the historical repression as well as the distinctions present within Mexican society regarding indigenous groups, the programs themselves must be analyzed carefully. Guitart and Gómez (2011) discuss the individual aspect of university populations based on self-concept among students in the state of Chiapas. In their

study, the authors found that in comparing universities in Chiapas directed towards either indigenous or mestizo populations, the general concept of self was found to be markedly different with indigenous students demonstrating aspects of collectivism while mestizo students demonstrated more traits related to individualism. While, as the authors point out, this is not a trait characteristic of a given country, it is an important point to contemplate when viewing how schooling has traditionally been given to indigenous populations in Mexico.

Further, the differences between universities directed at indigenous and mestizo populations can be seen in the formation of the programs themselves. As Dietz (2009) discusses, with the rising popularity of intercultural universities in Mexico (such as one of the universities discussed in Guitart & Gómez, 2011), there comes to be a fine line between aiding communities which have traditionally been marginalized and creating a polished, one-size-fits-all brand of Mexican multiculturalism. Through the creation of what Dietz calls 'indigenous' universities in Mexico, a challenge arises between what will be taught, why, and how it will be of benefit to a given school's students. Dietz characterizes this as, "…the challenge of developing flexible, interdisciplinary and professional degree programmes that are also locally and regionally relevant, useful and sustainable for both students and their wider communities," (p. 3). Because of this, students have had to take a larger role in the development of their own education than would be taken by monolingual mestizo students in the rest of the country. This tendency among indigenous populations which have contact with intercultural universities serves as a sort of bridge to achieving Social Justice in that they are not only receiving more culturally appropriate education but are additionally playing a part in their own future and helping their community and future generations at the same time.

Discussion

As can be seen in the above discussion, much is being done currently in Mexico to address the needs of indigenous communities with regard to education. Indeed, it could safely be said that more is being done currently with respect to educational opportunities for indigenous students than at any other time in Mexico's history. While the implementation of new programs and the streamlining of old ones helps to address past wrongs committed in Mexican society, it will not have a positive effect on future generations unless work in this area is constant and addresses issues as they present themselves.

It is important to note the fact that many of the issues which have manifested themselves since colonial times have been the result of trying to forcibly separate the indigenous population from their identity as such (such as in the case of *castellanización* programs). However has been shown in research over the past decade or more, by embracing these differences—particularly with regard to literacy—students are able to more effectively participate in, advance in and form part of the general community of higher education, their own communities, and Mexico in general. Further, this sort of outcome facilitates the goals set by Social

Justice in that by embracing historical differences and furthering the academic reach of underserved populations, these same populations can eventually address the very problems which made achieving wide-reaching academic success take so long in the first place.

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