Preliminary findings were generated from a formative evaluation that examined the implementation of a new secondary curriculum in Mexico. The study provides a deeper understanding about what is gained and what is lost when a decentralized curriculum is designed at the national level and implemented in local settings. Some insight is provided into how well the new curriculum is serving the needs of the different ethnic groups in a country with ethnically, culturally, and economically diverse populations. Data collection involved document analysis, site visits, and interviews with officials from the State Department of Education along with teachers and school administrators in four secondary schools in southeast Mexico. Findings suggest that the emphasis on homogeneously implementing national standards without consideration of local context have created a situation where the tension between national standards and local needs could affect the quality of students' education. The educational possibilities for children of indigenous ancestry are particularly at risk. National versus local is a significant topic both in Mexico and the United States, as is the issue of diverse ethnic groups and the extent to which students will be well served by national curriculum standards. Contains 5 notes, 18 references, and a table of data. (BT)
Evaluating Curriculum Reform in Mexico
Challenges addressing a diverse population

Edith J. Cisneros-Cohernour
Betty M. Merchant
Robert P. Moreno

University of Illinois at Urbana-Champaign

University of Illinois at Urbana-Champaign
National Transition Alliance
117 Children's Research Center
51 Gerty Drive,
Champaign, IL., 61820
E-mail: e-chaco@uiuc.edu

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Evaluating Curriculum Reform in Mexico:\nChallenges addressing a diverse population

Edith J. Cisneros-Cohemour
Betty M. Merchant
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University of Illinois at Urbana-Champaign

Purpose of the study
This paper describes the preliminary findings of a formative evaluation examining the implementation of a new secondary curriculum in Mexico. The study provides a deeper understanding about what is gained and what is lost when a decentralized curriculum is designed at the national level and implemented in local settings. Some insight is provided into how well the new curriculum is serving the needs of the different ethnic groups in a country having ethnically, culturally and economically diverse populations. Data collection involved document analysis, site visits and interviews with officials from the State Department of Education, teachers and school administrators in four secondary schools in southeast Mexico. As the findings suggest, the emphasis on homogeneously implementing national standards without consideration of local context have created a situation where the tension between national standards and local needs could affect the quality of students’ education. The educational possibilities for children of indigenous ancestry are particularly at risk. The study is of importance for both Mexico and the United States. National vs. local is a significant topic in both nations, as is the issue of diverse ethnic groups and the extent to which students will be well served by national curriculum standards.

Antecedents & need of study
In 1990 after a long process of assessment and elaboration, Mexico began to create a new national curriculum for elementary and secondary schools. Once the plan was approved, the Mexican Department of Education initiated a process of evaluation review that led to the creation of detailed curricular plans and textbooks. The new curriculum was expected to accomplish various goals such as the improvement of educational quality, an increase in the educational attainment and skills of Mexican children, and the creation of national standards (Colosio, 1990; Beltran-Vera, 1990; Carranza, 1990). Additionally, the policy is expected to accomplish both modernization and decentralization of the educational system, a stronger participation of Mexican society in the educational arena, and the strengthening of national values (Gonzalez-Cantu, 1990; Pescador-Usana, 1990; Gonzalez-Torres, 1990). In 1993, implementation of the reform was initiated by the new president, Ernesto Zedillo-Ponce De Leon. Since its implementation the new curriculum has been subject to controversy, both generally because of the decision to initiate decentralization by creating the national curriculum at the central level (Cisneros, 1996) and specifically by the promulgation of different perspectives through the rewriting of history books (De Palma, 1995).

At the present, no research or evaluation has been conducted regarding the way in which the new secondary school curriculum is being implemented, or about the possible trade-offs in choosing a national instead of a local or regional approach in the creation of a decentralized curriculum. More research is also needed on how the new curriculum is satisfying the needs of different groups in the Mexican society and the possible implications of the new policy at the national, regional and state level. This study includes four case studies conducted in southeast Mexico in order to address the following issues/questions:

1 This study was conducted with funding from the Tinker Foundation and the Center for Latin American and Caribbean Studies of the University of Illinois at Urbana-Champaign.
a. What are the needs being served by the new curriculum? Are the needs of the different ethnic groups being considered? Is the curriculum satisfying some needs while excluding others?
b. Do different stakeholders have similar perceptions and expectations about what the educational system is promoting and about what the curriculum should be promoting?
c. What kind of "give and take" occurs when choosing a national, instead of a local or regional approach in the creation of a curriculum?

Site selection and description
The study was conducted in southeast Mexico. Site selection was decided based on the strong presence of at least four ethnic groups in the state: Spanish, Mestizo, Mayan and Lebanese as well as the ability to access the area. Since the Mexican curriculum is highly centralized, this study in the Southeast strongly reflects both the type and curricular content being implemented in the schools of other Mexican states. As in other parts of Mexico, the area has been affected by the national economic crisis. During earlier interviews with board officials and school principals, we found that the area has been experiencing recent migration of their working class citizens to the United States as well as return-migration (Alcocer, 1996). Although the Southwest of Mexico was experiencing problems between the Mexican army and Mayan rebels, these problems were not affecting the region in which the study was conducted.

Characteristics of the Mexican educational system
The Mexican educational system has been strongly influenced by France and the United States. The school system reflects the American model of organization of grades by chronological age as well as various educational reforms in the U.S. as evidenced in the new curricular changes approved by the Mexican government in 1992. The influence of the French model is reflected in the different ability tracks or educational levels. The Mexican educational system is divided into three educational levels: basic education, high school and higher education (Mexican Department of Education, 1998). See picture 1:

Figure 1. Educational levels

<table>
<thead>
<tr>
<th>Preschool</th>
<th>Basic Education</th>
<th>Secondary (Middle)</th>
<th>High School</th>
<th>Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years. 1 required</td>
<td>6 years (all required)</td>
<td>3 years (all required)</td>
<td>3 years (non required)</td>
<td>4(^7 - 6) years plus 1 year of social service (baccalaureate)</td>
</tr>
</tbody>
</table>

Unlike the United States where the term secondary education refers to both middle school and high school, in Mexico secondary education usually refers to the first three years of secondary school (Villa, 1988). Secondary education (middle school) became compulsory in 1993 and includes three levels. It serves the needs of children who are between 12 to 15 years of age.

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2 Over the years, the word "Mestizo" has changed its meaning. Now it is used to refer to people of Mixed ancestry not necessarily of White and Indian background.
3 Basic education serves the needs of children between three to fifteen years of age. It includes nursery, educación preescolar (pre-school education), educación primaria (elementary education), and educación secundaria (middle school).
4 Length of study varies.
5 The duration of most bachelor degrees is five years plus one year of social service. Social service is a graduation requirement.
Other modalities of secondary education are vocational, distant, open-secondary and adult secondary.

The school year consists of 200 working days and operates from the last week of August to the first week of July. Some schools are only open for morning or afternoon sessions while others are open for both. The school day for the schools varies in length but is it generally six hours long. See Appendix 1 for the total number of hours allotted to each subject.

Methods
A qualitative approach was utilized to explore and better understand important evaluative issues regarding the implementation of the new secondary curriculum of Mexico. A case study method was used in order to obtain information about the trade-offs made by the Mexican Department of Education designing a curriculum at the central level while attempting to serve the needs of diverse groups at the local level.

Four secondary schools in southeast Mexico were selected for this preliminary part of the study. The four schools are representative of the schools attended by ethnic groups represented in the location. The case studies were organized around the main questions or issues (Stake, 1995). The criterion for selecting cases was less “What schools represented the totality of the school types in the area?” but more “What schools would help us to understand how well the new curriculum satisfies the needs of the different constituencies in a local community in southeast Mexico?” Schools were also selected on their disposition to participate in the study and their accessibility.

Data were collected over a period of eight weeks through observations, document analysis and semi-structured and open-ended interviews with officials at the State Department of Education, teachers and school administrators in the four schools. Site visits provided understanding of the context under which the curriculum is been implemented. Interviews were conducted in the school buildings. Each interview lasted from 20 minutes to an hour. The researchers used traditional ways for validating their observations by utilizing multiple data sources: observation, interviews, and document review. They also used membership checking, allowing participants to confirm or disaffirm the accuracy of quotes and descriptions the researchers recorded.

In general, the method selected facilitates an understanding of the process and events taking place and it is appropriate to the nature and complexity of the issues under study. Case studies are especially valuable in refining theory and suggesting complexities for further investigation, as well as helping to establish the limits of generalizability.” (Stake, 1994, p. 245). The qualitative approach is more appropriate because it allows the researcher to move from simplicity to complexity and is particularly sensitive to issues of culture and ethnicity (Peshkin, 1988, 1993). In addition, this methodology is appropriate when studying “processes, relationships, settings and situations, ... providing insights that identify problems, clarify and understand complexity, and develop theory.” (Peshkin, 1993, p. 24). Moreover, it is congruent with the cultural characteristics of the subjects “who understand life as a world inhabited by people, events, and relationships, rather than “variables, indexes, and correlations”.
Qualitative interviews can be more valuable than surveys or other methodologies because Mexican culture is highly personal. (O’Rourke, 1997)

Significance of the study
The study is of importance at the moment in which Mexican government is confronting opposition in the implementation of national standards and textbooks. It is relevant for Mexican institutions focused on improving secondary education and for its future impact on
higher education, as well as for the US schools in the case of reverse migration and standards base-education. In addition, the topic of outcome-based evaluations is important for both nations as it is the issue of how well the use of outcomes defined by officials at the Department of Education address the needs of diverse populations and raise issues of equity and ethical concerns. Because Mexico is also one of the countries that provides the United States with a significant number of immigrants, further studies could also look at the profound implications for the delivery of educational services for these children (Chapa & Valencia, 1993). The findings of the study may also, in turn, be used to facilitate future research comparing the knowledge, skills and values promoted by the two educational systems and the use of strategies to better educate and place Mexican immigrant children (Moreno, 1991; Carter, 1996, Cisneros, 1996).

Further research efforts could also concentrate on how teachers apply the educational objectives of the new curriculum as well as the characteristics of effective instruction as perceived by the different audiences. New studies may contribute to the degree to which these perceptions differ from those of American school administrators, teachers and State Department officials regarding the knowledge, skills and attitudes promoted in American schools. The study was the first to examine the extent to which the Mexican national curriculum and standards satisfy local concerns.

**Preliminary results**

Following is a brief description of preliminary findings that are organized around the main research issues/questions:

*What are the needs being served by the new curriculum? Are the needs of the different ethnic groups being considered? Is the curriculum satisfying some needs while excluding others?*

When asked whether the needs of the different ethnic groups had been addressed by the new secondary school curriculum, different audiences provided different responses. Officials at the State Department who experienced regular changes in educational policy every six years were unsure about the needs being addressed by the reform. Three principals eluded the response to this question and only repeated the information provided in the rationale for initiating the reform. Teachers and one of the principals indicated that the Mexican government organized several forums to identify strengths and weaknesses of the former secondary school curriculum, and organized groups of educators and scientists over the country to prepare recommendations for the development of the new curriculum. They, however, were of the opinion that the curriculum was already developed before the process of national consultation. As one teacher indicated: "Every six years we get a new educational reform with the new president elected. I think the reform was inspired in the US educational system because our last two presidents were educated there". Another teacher added: "I do not believe they (Department of Education) looked at the information they collected through a national consultation. There was not enough time to look at the results of the forums and have a new design on time for the implementation date already announced". A colleague of this teacher added: "If they (Department Education) looked at our feedback, how can you explain that they ignored our comments. You can see that they just copied something that was already prepared by the time they were organizing the national consultation."

Officials at the Department of Education shared the perceptions that the curriculum was not generally responding to the needs and context of the schools, especially those attended by Mayan and Mestizo children. Teachers shared this perception and added that although the reform stresses the importance of linking the new program to student lives, it disregards student cultural context.
In general, there was concern that the Mexican government was supporting the reform for political reasons rather than having a genuine interest for improving the quality of this level of education.

Do different stakeholders have similar perceptions and expectations about what the educational system is promoting and about what the curriculum should be promoting?
The different audiences indicated that they were reluctant to express expectations about the new curriculum before it was presented to the public. Teachers, principals and curriculum specialists at the State Department of Education thought that with the appropriate support the new curriculum could be very positive for the majority of students, but they were concerned about the decision for implementing the reform within the former bureaucratic structure and without adequate resources. Teachers were especially concerned about the strong role of the federal government in the decentralization process. The principal of the only private school involved in the study had more positive expectations of the curriculum than did the public school principals. That principal expressed that in her opinion, private schools have more freedom to adapt the curriculum since their funding does not come from the Department of Education.

An important finding was that in spite of the lack of expectations, Department of Education personnel and school staff differed in their understanding of the decentralization process. Personnel at the Department of Education described the decentralization as a process by which the states were going to finance their schools and educational programs. Teachers and administrators described the reform as a process that was expected to provide more autonomy to the schools in making the instructional process related to the lives of the children and making learning more active and meaningful.

What kind of give and take occurs when choosing a national, instead of a local or regional approach in the creation of a curriculum?
The different audiences identified less positive effects than negative effects resulting from the reform. Some positive outcomes were:

- Minimum educational requirements have been increased. In the past only elementary education was compulsory, now students are expected to complete one year of pre-school, six years of elementary school and three years of secondary school.
- The extent of teacher preparation was increased. Teachers are now required to complete their high school diploma before starting their professional preparation at the Normal schools.
- The reform has encouraged and supported the creation of groups of teachers by discipline or area. These groups of teachers meet once a month with curriculum specialists from the Department of Education. The creation of teacher groups has resulted in increased communication among the teachers and the State Department of Education. In some schools, however, these groups were limiting individual teachers from introducing innovations in the classroom when they were not of the appeal of the group.

On the other hand, there were some negative outcomes as a result of the new educational reform: as reported by the respondents:

- Different audiences agreed that there were problems regarding content coverage and sequence of the curriculum, as well as time pressure for covering expanded course content. The audiences also agreed that there was a lack of adequate teacher training and professional development.
- In addition, school administrators perceived that the main problems faced at the building level are negative teacher attitude towards change in general and professional development specifically. Additionally, the limited economic resources restricted the effectiveness of the reform especially in the rural areas where teachers with inadequate school facilities were teaching students who needed to work full time to support their families.
• Teachers perceived that other problems with the curriculum implementation involved disregard for students’ needs and cultural context, especially in the case of Mayan and Mestizo students. In some schools with high numbers of Mayan students, the change in curriculum orientation created value conflicts between home and school according to many respondents.

• There was also the perception that there was an inadequate integration between the secondary school curriculum and the other educational levels. Teachers felt the pressures for standardization and accreditation had resulted in a shift in the grading systems and a reduction in dropout rates that could create an illusion of educational quality for the students.

• In addition, teachers perceived that the principals’ negative attitudes towards change and lack of professional development, their limited wages, and the policy of hiring instructors on an hourly basis are other serious problems not being addressed by the Department of Education.

• Other problems involved delay in the delivery of books and other curriculum materials from the Department of Education to the schools, and the lack of resources and facilities at the building level to support the curriculum implementation.

• The Department of Education decided to implement the new curriculum within the former bureaucratic structure. It also created more regulations that have resulted in an increase in bureaucracy that is limiting instructors’ professional discretion and latitude, as well as motivation towards innovation.

• Officials at the Department of Education shared teachers’ perception that the lack of resources to support curriculum implementation and the lack of full time instructors were negatively impacting the implementation of the educational reform. These officials noted teachers’ traditionalism, lack of professional development for teachers and administrators, and the autocratic leadership style of the Department of Education at the central level among main problems in the implementation of the new curriculum. These officials also felt incapable to respond to teachers request for adapting the curriculum in the public schools, since according the organizational structure, these requests needed to be sent to the central offices of the Department of Education in Mexico city for their approval.

Conclusions

The research on educational change is full of examples of problems in the implementation of educational reform and innovation when their design disregards the context in which they will be implemented (Saranson, 1990; SERVE, 1994, Duttweiler, 1988; Fullan, 1994). By designing an educational reform at the national level, the Mexican Department of Education confused centralization and decentralization. In addition, the decision to implement the reform without considering the philosophical and epistemological foundations of the new practices relative to the school context could result in diminishing the educational opportunities of Mexican children, especially those of Mayan or Mestizo heritage. For the reform to work, it is imperative that the Mexican government provides necessary funding, support and professional development for teachers, school administrators and department of education personnel. In addition, the type of leadership at the central level and the bureaucratic structure need to be modified to support the reform.

The use of outcome- evaluation also deserves special attention. The decision of defining outcomes at the central level is leading schools to manipulate the grading system and dropout rates instead of increasing educational quality. The emphasis on outcomes is also increasing barriers for teacher innovation and creativity.

Finally, there is a question about the real intentions of the Mexican government in the design and implementation of the reform. Different stakeholders were concerned about how real were the intentions of the Mexican government for improving education. In general, there was a strong perception that the government decided to make changes to be more visible for political ends.
References

Appendix 1

Table 1. New Curriculum contents

<table>
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<th>Table 1. New Curriculum contents</th>
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Table 1. New Curriculum contents

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<td>• Universal History II (3 hours per week)</td>
<td>• History of Mexico (3 hours per week)</td>
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<td>• Geography of Mexico (2 hours per week)</td>
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6 English and French
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Fax: (217) 244-0851
E-Mail Address: e-chaco@uiuc.edu
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