The goals and values students hold, how these are related to school motivation and achievement, and how these goals develop and change over a period of years in the context of cultural background, family, society, and school was studied with Native American and Anglo American students from a middle and high school in Phoenix, Arizona. Participants were selected for this longitudinal study when they were in grades 7 and 8, and it was intended that they would be interviewed annually until they finished high school. Over 3 years, 48 first interviews, 26 second interviews, and 11 third interviews were conducted. The analyses of these interviews indicate that for Native American and Anglo American students alike, there are four needs that motivate them to strive for school success: (1) seeking excellence in one's work; (2) self-esteem; (3) affiliation; and (4) social concern. A number of the values and needs emphasized in the school setting, such as competition, group leadership, recognition, and rewards, are perceived to be relatively unimportant by these students. Many students did not have a clearly articulated sense of purpose for their schooling, and this lack should be addressed. (Contains 2 tables and 42 references.) (SLD)
A Longitudinal Qualitative Study of School Motivation and Achievement

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Paper presented at the
81st Annual Meeting of the American Educational Research Association
New Orleans, April 24-28, 2000
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Purpose of study The specific aim of this research is to determine the nature of the goals and values that students hold, how these are related to school motivation and achievement, and how these goals develop and change over a period of years in the context of cultural background, family, society and school.

It is unfortunate that students who are the focus of research endeavours are often those whose voices are not literally heard. For example, those students in high schools who are arguably most in need of being listened to are those at risk of failure or dropping-out. It is the specific aim of this research to "hear" the voices of such students who do not succeed at school, as well as those from the same cultural backgrounds who do succeed. The research design entails conducting longitudinal in-depth interviews with matched students (ability, age and cultural backgrounds) over a three-year period. These interviews provide rich data relating to: 1) How students' personal goals are related to school motivation and achievement; 2) How these goals are developed in the context of cultural background, family, school and society; and 3) How students' school-related goals vary with age, cross-sectionally and longitudinally. Currently there is little 'scientific' information on what children from different cultural backgrounds value in their schooling and the goals they seek that give purpose to their learning and motivation. Much policy and practice in education either ignores the relevant goals and values of children from cultural backgrounds other than Anglo, and treats all children the same, or bases practices on stereotypical views of what these children 'are like'.

Theoretical framework. The research is embedded within a theoretical literature dealing with achievement motivation, especially that relating to goal theory. The importance of this field within education has become increasingly evident over the past decade, as its research and theoretical base continue to grow rapidly and inform educational practice (e.g., Ames, 1992; Blumenfeld, 1992; Covington, 1992; Maehr & Anderman, 1993 Pintrich & Garcia, 1991; Pintrich, Marx & Boyle, 1993; Schunk, 1996; Urdan & Maehr, 1995; Wentzel, 1991). The contribution of the long-term cross-cultural research of the Chief Investigator has been noteworthy in this expanding research field (McInerney, 1994ab; McInerney, 1995; McInerney, 1992; McInerney, Roche, McInerney, & Marsh, 1997; McInerney & Sinclair, 1991, 1992; McInerney & Swisher, 1995).

The types of achievement goals stressed by schools have dramatic consequences for whether children develop a strong sense of self-efficacy and a willingness to try hard and take on challenges at school, or whether they choose to avoid challenging tasks, giving up
when faced with failure (Bandura, 1997). Many school systems today tend to reward children for achievement behaviours that conform to "standards" reflecting Western values. It is commonly believed that cultural minority children may be poorly motivated to achieve at school because both schools and classrooms stress goals that are incompatible with their cultural values (James, Chavez, Beauvais, Edwards & Oetting, 1995; Kirkness & Bowman, 1992; Ledlow, 1992; Yates, 1987).

The term goals refers to the different purposes that students may have in various achievement situations which guide their behaviour, cognition, and motivation as they become involved in academic work. Two types of goals have received considerable attention from researchers in this area: mastery goals (also called task or learning goals), and performance goals (also called extrinsic goals). Central to a mastery goal is the belief that individual effort leads to success, and that learning has intrinsic value. With a mastery goal, individuals are oriented toward developing new skills, trying to understand their work, improving their level of competence, or achieving a sense of mastery. Mastery goals and achievement are "self-referenced". In contrast, central to a performance goal is a focus on one's ability relative to others. Ability is shown by doing better than others, by surpassing norms, or by achieving success with little effort. Public recognition for doing better than others through grades, rewards and approval from others, is an important element of performance goal orientation. Performance goals and achievement are, therefore, "other-referenced" such that, "self-worth" is determined by one's perception of ability to perform and compete successfully relative to external criteria. Hence, when a student tries hard without being completely successful (in terms of the established norms), his or her sense of self-worth is threatened and motivation for learning is reduced. In Western educational settings, both mastery and performance goals have traditionally focussed on individual achievement of goals.

**Goal theory in cross-cultural context**

Little attention has been paid to group orientations such as working to preserve in-group integrity, interdependence of members and harmonious relationships. This social dimension of schooling (which includes the influence of parents, teachers and peers) may interact with both mastery and performance goals, and be extremely influential in affecting children's attitudes towards schooling in general, and to learning in particular. Furthermore, students may hold multiple goals such as a desire to please parents, to be important in the peer group, or to preserve their cultural identity, each of which may impact upon their level of motivation for particular tasks in school settings. Indeed, these multiple goals interact providing a complex framework of motivational determinants of action.

The literature also posits a number of opposing values and goals of children coming from Western societies (often classified as Individualist societies) and those coming from non-Western societies (often classified as Collectivist societies) (see for example, Cuch, 1987; Deyhle, 1989, 1992; Fergusson, Lloyd & Horwood, 1991; Fogarty & White, 1994; Giles, 1985; Platero, Brandt, Witherspoon & Wong, 1986; Sanders, 1987; Stokes, 1997; Tharp, Dalton & Yamauchi, 1994; Tippeconnic, 1983; Yates, 1987). It is commonly believed that indigenous children, for example, such as those from Aboriginal, and Native American communities, are less likely to be motivated by individually oriented goals such as mastery and performance, and more likely to be motivated by social goals that reflect their need to maintain group allegiance and solidarity. Furthermore, it is believed that indigenous minority children are both past and present oriented, and hence do not set goals for the
future. Their valuing of tradition encourages them to see little point in change; while their belief in the need to maximise and enjoy their present life means that they see no purpose in investing effort and time for an anticipated future. Indeed for the traditional American Indian, thinking too much about the future is considered a taboo (McInerney, Ardington & DeRachewiltz, 1997). As a consequence of this it is believed that these children seek gratification in the form of immediate payback for what they achieve rather than delaying gratification for the satisfaction of some future need. The research support for many of these contentions is currently very limited.

In a multicultural nations such as the United States, an understanding of the cultural issues in school motivation is of particular importance. As we have suggested above, there is evidence of potentially conflicting values and opposing goals of children from individualistic Western societies, and children from non-Western collectivist societies (Cuch, 1987; Deyhle, 1989, 1992; Fergusson, Lloyd, & Horwood, 1991; Forgarty & White, 1994; Giles, 1985; Platero, Brandt, Witherspoon, & Wong, 1986; Sanders, 1987; Stokes, 1997; Tharp, Dalton, & Yamauchi, 1994; Tippeconnic, 1983; Yates, 1987). Cultural background, therefore, plays an important role in students' development of goal orientations through socialisation processes within families and cultural communities. Little, however, is really known about the range of achievement values, goals and beliefs that are most salient to students from diverse cultural backgrounds. For many of these children the culture of the home strongly reflects the parents' culture of origin. Consequently, these children are brought up in a culturally different environment until they first go to school. It is essential for teachers to have knowledge of, recognise, come to understand, and accommodate within the regular school programs the value systems characterising these children which reflect their sociocultural backgrounds. A mismatch between goal orientations and values supported by teachers and schools, and the goal orientations, beliefs and values held by students developed through socialization practices within families and cultural communities, may have significant implications for student motivation, absenteeism, achievement and retention as well as their intentions to complete further education (see, for example, Ladson-Billings, 1995; Cochran-Smith, 1995; Stokes, 1997). In order for effective education to be available for all children within culturally diverse school systems it is educationally vital to explore this issue. Our study provides an ideal opportunity to investigate this important issue, an opportunity that is rarely presented the social science investigator.

Precursor research
In a series of quantitative studies with Aboriginal, Navajo, and Betsiamite (Canadian Indian) students McInerney (McInerney, 1991ab, 1992, 1994ab, 1995, McInerney, Hinkley, Dowson & Van Etten, 1998; McInerney & McInerney, 1996; McInerney, Roche, McInerney, Marsh, 1997; McInerney & Sinclair, 1991, 1992; McInerney & Swisher, 1995) explored the nature of the achievement goals for a variety of groups. In particular, this research examined similarities and differences between the groups and the relationship of salient goals to criteria of educational success, such as achievement, retention and further education. The findings from this series of studies suggest that the motivational profiles of the diverse groups are more similar than different; that only a narrow range of goals and sense of self variables is important in explaining school achievement on educational criteria, and that these are similar across all the groups; and that key variables used to distinguish Western and indigenous groups do not appear to be salient in the school contexts studied.
Significance of the research

As school systems tend to reinforce children for achievement behaviour that conforms to “standards” that reflect Western values the results indicating the salience of common goals to school achievement across cultural groups begs the question as to whether academic achievement could be enhanced in other more culturally appropriate ways e.g., by developing learning structures that are more consonant with cultural values. The findings clearly indicate that some children from the minority cultural groups studied appear to be effectively socialized into what it means to be a student in Western schools with all that this implies in terms of the nature of the tasks, valuing of individualistic or cooperative work, setting of goals, acquiring attitudes to school work and rewards. We are left with the following significant questions: Why do some children from minority cultural groups appear to successfully cross the cultural boundaries and do well at school while others fail? Are sense of self factors and achievement goals related to a child’s perception of his or her role as a student within a school setting, rather than being related to specific cultural values, which may be relatively unimportant in a school setting? Can, and (if so) how do, some children operate effectively at school while also maintaining strong cultural ties and values? These questions need attention through carefully designed qualitative research.

The studies referred to above also did not examine the genesis of the achievement goals students held, whether these goals changed over time, and if so how, whether there was a movement from traditional cultural values to Westernised values as students move through a Westernised school setting, or whether some students maintain traditional goals and values while others combine the traditional and Western. In other words, these earlier studies did not consider the change process. A consideration of this important factor, therefore, also forms an important component of the present study.

Participants and method

Equal numbers of male and female students were originally invited to participate from both Native American and Anglo American (n=40) attending the same Middle High School in a regional area of Phoenix, Arizona. Participants were selected from grades 7 and 8 for the first interview and it was intended that these participants would be interviewed yearly for a period of five years, that is until they finished High School.

In December 1997 thirty seven interviews were conducted on the matched groups of students from Anglo American and Native American backgrounds. Three students were not available for interview. Each of the interviews was transcribed and analysed for themes related to school motivation and achievement and the relationship of these to cultural background, family, society and school. In January 1999, the second phase of the study, was conducted. A total of twenty four interviews was conducted, made up of 11 first interviews (to substitute for interviewees not available for a second interview), and 13 repeat interviews. Unfortunately, owing to logistic problems (i.e., having to conduct interviews outside of school time) a number of scheduled second interviews did not take place. In particular, the researchers concentrated on the thirteen repeat interviews focusing on how the achievement goals and motivators revealed by students in their first interview developed and changed over the course of the year.

In December 1999, the third phase of the study was conducted. This phase was very successful and included 11 third interviews, and 13 further second interviews. Its
implementation was significantly facilitated by the School District Superintendent agreeing to permit interviews to take place during instructional time.

**Analyses**

Each of the tape-recorded thirty-minute interviews was transcribed to allow analyses of verbatim text. Demographic details were recorded with the interviews to allow their incorporation into the analyses. Data were entered into QSR NVivo (Richards & Richards, 1999) to facilitate management and analyses of the large volume of text generated through the interviews. The interview format was semi-structured allowing for school-related issues to be discussed generally, first (e.g. “What’s school like at X High School?” “What’s good/not so good about school?”), followed by more specifically targeted questions in relation to students’ values and motivational orientations (e.g. “Some students are motivated to work hard at school because they want to get prizes and rewards. Is that important to you?”)

Initial coding of the text was based, in part, on a priori conceptual categories and also, in part, on open coding which allows for the generation of new codes which captured issues and responses arising during the course of the interviews. Among the key conceptual areas against which text was coded were the following: issues, significant people, culture, environment, goals, feelings, perceived difficulties, coping strategies, motivational values, self-concept, success, failure, learning, and valuing education.

By cross-referencing the content of text coded at any number of categories or “nodes”, we are able to determine whether values are referred to as traditional or Western, are supported within various social contexts (e.g. within family, peer and school groups), are considered instrumental to achieving desirable outcomes, and are perceived to motivate or de-motivate students. The three interview transcripts for each participant were compared longitudinally (within subjects) to investigate any changes in motivational value structures as students progress through school. In addition, analyses were conducted cross-sectionally (between subjects) in order to make comparisons between students.

**Results of stage one of project**

The following findings relate to the first interviews with nineteen Native American students and eighteen Anglo American students. These data provide a beginning point for analysing developments in student attitudes over the course of the three interviews. Students were in Middle School at this time (Grades 7 & 8) and progressively have entered High School. This research, as mentioned earlier, attempts to track developments in attitudes over these crucial years.

**Student attitudes**

Student attitudes from both groups towards schooling at the Middle High School were generally positive. Limitations related to a). perceived lack of teacher support (particularly after school); b). inappropriate discipline program (STEP); c). lack of meaningfulness of school and its purpose.

**Family influences**

Students from both groups consistently emphasized the role of a supportive family in encouraging motivated learning. Many negative examples were given whereby
dysfunctional family relationships were seen to cause a diminution in school motivation and learning in the children of these families.

Motivational values
There were seven motivational values examined in the interviews: seeking for excellence in one's work, competition, group leadership, affiliation, social concern, recognition and rewards. Each student was asked to indicate which of these values was important to them personally (each was described in context) and to rank order these. The number of first, second and third choices each value received from the students were tallied. The results are reported in the following table (Table 1).

Table 1
Motivational values in relation to school

<table>
<thead>
<tr>
<th>Value</th>
<th>Total number of 1,2,3 choices</th>
<th>Native American</th>
<th>Anglo American</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellence</td>
<td>20</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Competition</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Group Lead</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Affiliation</td>
<td>14</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Social Concern</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Recognition</td>
<td>7</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Rewards</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

It is clear from this table that students from Native American backgrounds emphasised three values more than others, viz, seeking excellence in their work, having concern for the welfare of their fellow students and wanting to work with their friends at school. However, excellence was rated considerably more highly than the other two. Indeed, a glance at the table also indicates that Native American students were significantly stronger on this value than the Anglo group. There was little difference between the two groups on the need for affiliation. Students from Native American background were, however, stronger on social concern. Students from both groups consistently de-emphasized the importance of three values: being competitive, working to be placed in a position of authority over others, and working to receive rewards and tokens. On the other hand, both groups acknowledged the value of recognition and praise, although this was comparatively stronger for the Anglo group, but considered that intrinsic motives were more likely to sustain their motivation to succeed at school in the long term.

Sense of self values
Four sense of self values were examined in the interviews, viz, self-esteem, need to be liked at school, sense of competence, and sense of purpose for schooling. The following table (Table 2) indicates the cumulated first, second and third choices across these three values. (These had been listed with the motivational values above and so students could only make one first choice, one second choice, and so on, (an ipsative scale)).
Table 2

Sense of self values in relation to school

<table>
<thead>
<tr>
<th>Value</th>
<th>Total number of 1,2,3 choices</th>
<th>Native American</th>
<th>Anglo American</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self esteem</td>
<td>15</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Liking</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sense of competence</td>
<td>5</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Sense of purpose</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

As seen in the above table, clearly the most important sense of self value for both groups was self-esteem, that is, the need to feel good about one’s self in a school setting. Sense of competence was also relatively important to the Native American students.

It is clear from the first interviews that the students valued the opportunity to express their views on what works and doesn’t work for them at school. The school and Native American communities should find effective ways in which to promote achievement success, build important social skills and foster self-esteem in the students from Native American backgrounds served by the largely Anglo American Unified School District.

These first interviews provided a rich source of information. However, the students were interviewed in early middle school, hence their attitudes and values were expected to develop and change as they progressed through school, with some students becoming more at home with schooling, and others, unfortunately, becoming more alienated. It is the purpose of this research to follow through this process with these students to ascertain the developments that occur and to relate these to school, social and community forces that impact on the students. The following represents the findings from the second and third interviews conducted with thirteen of the original participants.

Results of stage two and three of project

Purpose of schooling

Students who were motivated at school articulated the reasons why they are at school, and, in many cases, described clearly the trajectory they wished to take after leaving school. This clarity of focus on the future increased for many students as they progress through the grades. In general, Anglo American students more clearly articulated their goals than students from Native American backgrounds. It was more common for Native American students to indicate that the reason they were at school was that “they had to or they would be punished” or “they had to, to get their per capita”. It would appear that for these students, education is not linked to valued lifelong purposes.

Family influences

Virtually all students from both groups perceived that parental/family interest in, and support for education, was the primary motivator behind them doing well at school. In particular, it was thought that parents and families help students set goals that are instrumental in giving purpose and meaning to their schooling. It was more likely that Anglo American students...
said that they had positive parental support than did Native American students. Native American students commonly spoke of dysfunctional family backgrounds as a major inhibitor of student progression through school.

Schooling at Anglo American Middle School
In general, students from both groups believed that the schooling provided at Anglo American Middle School is good. It was, however, more likely that Native American students disliked schooling and considered it ‘boring’ and ‘irrelevant’. It was also apparent from the interviews that, in general, students became more positive towards schooling as they progressed from Middle to High School. High School was perceived by many as providing more scope for the individual, more interesting subjects, and better teaching. Many agreed that the reason for this perception was their own growth in maturity, and their clearer view of the purposes of education in terms of their future. Many Native American students indicated that the reason they wanted to do well at school was so that they did not “become bums” like many on the reservation, and asserted that they wanted to make a better life for themselves.

Valuing schooling
On a number of key indicators such as “values in life”, “success in life”, “achievements” many Native American students gave the impression that they were not yet at the stage where thinking in these terms was relevant. A number, however, could clearly articulate on each of these and these acted as guiding rules for their involvement in school. It was also apparent in a number of interviews that Native American students needed help in clarifying their ‘world view’. In other words, whereas many of these students gave an initial impression of not caring about education and the future, it appeared to be more a matter of verbal fluency and articulation in the interview situation. In fact, for many individuals there existed a wealth of positive beliefs and values that they need help from school counsellors and teachers in actualizing.

Influence of Peers
It was more likely that students from both groups talked of friends as being a positive influence in their schooling than a negative influence. Many students went to school to be with their friends and considered that they worked well with their friends. In the case of the Native American students, friends included students from the Anglo community. Some references were made to negative peer influences and, in particular, persuasion to take drugs which was considered inimical to good school work. More Native American students talked of drugs as a negative influence than did Anglo American students. Most students, however, considered that the actual penetration of drugs into the school community was low.

Fatigue at school
Many students referred to “being tired” when they arrived at school and perceived that this was a major inhibitor of attention and motivation at school. Among the reasons given for this were the early school-starting time and such extra curricular activities as sport.

Summary
The second and third interviews were essential in tracking through the developing thoughts and motivations of the students in the school setting as they progressed from Middle to High School. Clearly, attitudes began to change, and for some students these attitudes became
more positive. In many of the High School interviews, Anglo American students referred to their improving grades, and their clearer perceptions of their future in relation to graduating and seeking employment. Although several Native American students also cited improved grades and clearer perceptions of their future as they moved from Middle School to High School, such positive attitudes were less frequent than for the Anglo American students. Further investigations into the factors underlying the paucity of positive attitudes and motivation towards school for some Native American students are indicated by these findings.

Conclusion
In summary, over three years, 48 first interviews, 26 second interviews and 11 third interviews have been conducted. This provides a wealth of data on students' perceptions of schooling, their motivation to succeed at school (or lack of it) and its antecedents, and the changes in their motivation to schooling that occur over time. From the analyses of interview transcripts, it was deduced that for these Anglo and Native American students alike, there are four needs which motivate them to strive for success at school: seeking for excellence in one's work, self-esteem, affiliation, and social concern. Furthermore, a number of values and needs emphasized within the school setting, viz, competition, group leadership, recognition and rewards, are perceived to be relatively unimportant to these students, and indeed, can be counterproductive in terms of engagement in effective learning. It is also important to reiterate that many students did not have a clearly articulated sense of purpose for their schooling, and this lack needs to be addressed.

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