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ABSTRACT

The traditional K-3 social studies curriculum has focused on food, clothing, shelter, communication, transportation, and other cultural universals. Very little information exists about children's prior knowledge and thinking about these topics. This study was designed to provide such information with respect to the topic of family living, and in the process to assess claims that primary-grade students do not need instruction in the topic because they learn what they need to know about it through everyday living. Individual interviews were conducted with 96 K-3 students, stratified by grade level, achievement level, and gender. Students were asked to define families and talk about why most people live in families and to talk extensively about many and diverse aspects of families and family living. Findings suggest that children do not routinely acquire all, or even a significant portion, of what is worth knowing about cultural universals through everyday experiences. Furthermore, the mostly tacit knowledge that they do accumulate is limited, disconnected, and frequently distorted by naive ideas or outright misconceptions. The conclusion is that primary students stand to benefit from instruction about cultural universals, and this instruction should be part of the primary grades social studies curriculum. Contains 53 references. Appended are the family living interview and a table of distribution and correlation coefficients showing relationships of coding categories to grade level, achievement level, and gender. (Author/BT)

PRIMARY-GRADE STUDENTS' KNOWLEDGE AND THINKING ABOUT FAMILY LIVING AS A CULTURAL UNIVERSAL

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Abstract

The traditional K-3 social studies curriculum has focused on food, clothing, shelter, communication, transportation, and other cultural universals. Very little information exists about children's prior knowledge and thinking (including misconceptions) about these topics. This study was designed to provide such information with respect to the topic of family living, and in the process to assess claims that primary-grade students do not need instruction in the topic because they learn what they need to know about it through everyday living. Individual interviews were conducted with 96 K-3 students, stratified according to grade level, achievement level, and gender. The students were asked to define families and talk about why most people live in families; to define grandparents, aunts and uncles, cousins, and step-siblings; to talk about ways that families get bigger or smaller and how families' needs change accordingly; to explain marriage and divorce; to talk about ways in which today's families are both similar to and different from families in the past; to explain why today's families usually have fewer children than families in the past; to make past vs. present comparisons concerning the activities of fathers, mothers, and children; to talk about why large extended families tended to live together in America in the past and still do in some other countries today, but this pattern is no longer widespread in America; to make past vs. present comparisons concerning the amount of time that children spend with their parents; to talk about family-related customs in other countries; to talk about family life on farms, in small towns, and in big cities; to talk about where their ancestors came from and why they emigrated to America; to talk about why families today move from one place to another and even from one country to another; to talk about how family life might change when a family moves to a new country; to explain why children today go to school for many more years than children in the past; to identify things that children typically learn at home from their families; to explain why families need rules; to explain how families can get help in emergencies; and to talk about what families can do to help other families and their communities in general.

Anthropologists and other social scientists often refer to cultural universals (sometimes called "social universals" or "basic categories of human social experience") as useful dimensions for understanding a given society or making comparisons across societies (Banks, 1990; Brown, 1991). Cultural universals are domains of human experience that have existed in all cultures, past and present. They include activities related to meeting the basic needs of food, clothing, and shelter, as well as family structures, government, communication, transportation, money or other forms of economic exchange, religion, occupations, recreation, and perhaps others as well. The term implies that activities relating to each cultural universal can be identified in all societies, but not that these activities necessarily have the same form or meaning in each society. On the contrary, it recognizes variations among societies (as well as among individuals within societies) in orientation toward or handling of common life events associated with each cultural universal (e.g., family structures are universal, but different cultures and individuals within cultures have different notions of what constitutes a family).

Cultural universals have special importance for early elementary social studies because much of the basic content taught in the primary grades focuses on them. The traditional reasoning has been that teaching students about how their own and other societies have addressed the human purposes associated with cultural universals is an effective way to establish an initial, predisciplinary knowledge base in social studies, preparing the way for the more discipline-based courses of the middle and upper grades. Two major reasons are cited commonly by supporters of the argument that organizing early social studies around cultural universals provides a sound basis for developing fundamental understandings about the human condition. First, human activities relating to cultural universals account for a considerable proportion of everyday living and are the focus of much of human social organization and communal activity, so instructional units on cultural universals provide many natural starting points for developing initial social understandings. Until they understand the motivations and cause-and-effect explanations that underlie these activities, children do not understand much of what is happening around them all the time. As they develop such understanding, previously mysterious behavior of their parents and other people significant in their lives becomes comprehensible to them, and they become equipped with intellectual tools that will enable them to begin to develop efficacy in these domains themselves.

Second, children from all social backgrounds begin accumulating direct personal experiences with most cultural universals right from birth, and they can draw on these experiences as they construct understandings of social education concepts and principles in the early grades. If cultural universals are taught with appropriate focus on powerful ideas and their potential life applications, all students should be able to construct basic sets of connected understandings about how our social system works (with respect to each cultural universal), how and why it got to be that way over time, how and why related practices vary across locations and cultures, and what all of this might mean for personal, social, and civic decision making.

Not everyone agrees with this rationale, or even with the notion of social studies as a pre- or pandisciplinary school subject organized primarily as preparation for citizenship. Some people advocate basing school curricula directly on the academic disciplines. They would offer separate courses in history, geography, and the social sciences, simplified as needed but designed primarily to pursue disciplinary goals rather than citizenship education goals. With particular

reference to the primary grades, Egan (1988), Ravitch (1987) and others have advocated replacing topical teaching about cultural universals with a heavy focus on chronological history and related children's literature (not only historical fiction but myths and folk tales). We agree that K-3 students can and should learn certain aspects of history, but we also believe that these students need a balanced and integrated social education curriculum that includes sufficient attention to powerful ideas drawn from geography and the various social sciences, subsumed within citizenship education purposes and goals. Furthermore, we see little social education value in replacing reality-based social studies with myths and folklore likely to create misconceptions, especially during the primary years when children are struggling to determine what is real (vs. false/fictional) and enduring (vs. transitory/accidental) in their physical and social worlds.

Some of those who are opposed to a focus on cultural universals in early social studies have asserted, without presenting evidence, that there is no need to teach this content. Ravitch (1987) dismissed it as "tot sociology," arguing that it holds little interest or value for students, partly because they already know it from everyday experience. Larkins, Hawkins, and Gilmore (1987) also suggested that primary-grade students already know most of this content, so there is no need to teach it in school. The authors of this report have disputed these arguments, suggesting that the knowledge about cultural universals that children develop through everyday experience tends to be tacit rather than well-articulated. Furthermore, much of it is confined to knowledge about how things are without accompanying understandings about how and why they got to be that way, how and why they vary across cultures, or the mechanisms through which they accomplish human purposes (Brophy & Alleman, 1996).

Recent developments in research on teaching suggest the need for data that speak to this issue. Increasingly, theory and research have been emphasizing the importance of teaching school subjects for understanding, appreciation, and life application, using methods that connect with students' prior experience and engage them in actively constructing new knowledge and correcting existing misconceptions. In mathematics and science, rich literatures have developed describing what children typically know (or think they know) about the content taught at their grade levels. This information informs the design of curriculum and instruction that both builds on students' existing valid knowledge and addresses their misconceptions.

There is potential for applying similar methods in social studies if more is learned about children's ideas about topics commonly taught at school. So far, little such information exists about topics addressed in K-3 social studies. Child development researchers have concentrated on cognitive structures and strategies that children acquire through general life experiences rather than on their developing understanding of knowledge domains learned primarily at school. Research in the Piagetian tradition has focused on mathematical and scientific knowledge, although there have been some studies of stages in the development of economic, political, and social knowledge (Berti & Bombi, 1988; Furnham & Stacey, 1991; Furth, 1980; Moore, Lare, & Wagner, 1985).

Nor have scholars concerned with curriculum and instruction developed much of this kind of information. There have been occasional surveys of knowledge about particular social studies topics (Guzzetta, 1969; Ravitch & Finn, 1987; U.S. Office of Education, 1995a, b).

However, these have concentrated mostly on isolated facts such as names, places, or definitions, with reporting of findings limited to percentages of students able to answer each item correctly. To be more useful to educators, the research needs to emphasize questions that probe children's understanding of connected networks of knowledge and analyses that focus on qualitative aspects of their thinking about the topic, including identification of commonly held misconceptions.

Significant progress has been made in studying children's developing knowledge of politics and government. For example, children are much more aware of the administrative than the legislative or judicial aspects of government and they tend to view presidents as godlike figures notable for their power to get things done and their benevolence or caring about the needs of each individual citizen (Connell, 1971; Greenstein, 1969; Hess & Torney, 1967; Moore, Lare, & Wagner, 1985; Stevens, 1982). Research on economics knowledge has begun to uncover stages in children's development of understanding of, as well as common misconceptions in their ideas about, such topics as the functions of banks and the operations of retail stores (Berti & Bombi, 1988; Berti & Monaci, 1998; Byrnes, 1996; Jahoda, 1984; Schug, 1991).

Several teams of investigators have studied children's historical learning (Barton & Levstik, 1996; Brophy & VanSledright, 1997; McKeown & Beck, 1994). This work has demonstrated, for example, that much of the historical knowledge of fifth graders is organized in narrative form, so that it tends to feature stories focused around a few hero figures rather than less personalized causal analyses of historical trends. The students' narratives also tend to compress time and space by depicting face-to-face interactions between people whose life spans did not overlap (e.g., Columbus and the Pilgrims).

Very little information is available concerning children's knowledge and misconceptions relating to the cultural universals emphasized in K-3 social studies curricula. As a first step toward developing such information, we interviewed middle-class students late in the spring of second grade on various aspects of the topic of shelter (before and after they experienced an instructional unit on the topic). Shelter is not only a cultural universal but a basic need, and all of the students had had experience with it throughout their lives. Thus, if Ravitch and others had been correct in their assertion that children develop clear knowledge about such topics through everyday experience, we should have seen such knowledge demonstrated by middle-class children who were nearing the upper end of the primary-grade range. Instead, we found that the students' prior knowledge about topics relating to shelter was limited and spotty, tacit rather than well-articulated, comprised of loose collections of observations rather than well-integrated knowledge networks that included awareness of connections and understanding of cause-effect relationships, and often distorted by inaccurate assumptions or outright misconceptions (Brophy & Alleman, 1997).

These findings motivated us to launch a series of studies on developments across Grades K-3 in students' knowledge and thinking about cultural universals. Our intention is to generate findings that will have immediate value to social educators interested in developing more powerful curriculum and instruction for the early grades and teaching in ways that connect with students' prior knowledge. We also expect the findings to be of interest to scholars who study developments in children's general cognition or domain-specific knowledge.

All of these studies involve interviewing large samples of students stratified according to grade level (K-3), prior achievement level (high, average, low), and gender (boys, girls). In addition, the first two studies (on shelter and clothing) involved stratifying students according to the socioeconomic status (SES) of the populations served by their respective schools (upper middle-class suburban, middle-class suburban, lower middle-class urban). Interview protocols feature questions designed to elicit extended statements of students' thinking about the topic. Responses are coded for the presence of commonly mentioned ideas or response elements, and scores derived from these codes are subjected to quantitative statistical analyses. In addition, unusual responses or elaborations of common responses that go beyond the basic ideas represented by the coding categories are listed and discussed in the reports. Analyses focus on general levels of knowledge and trends observed across grade levels, but with attention to how these trends interact with prior achievement level and gender. Findings are discussed with emphasis on their potential implications for curriculum and instruction in primary-grade social studies and on what they suggest about more general developments in children's social knowledge and thinking. Complete technical reports concerning students' knowledge and thinking about shelter (Brophy & Alleman, 1999b) and clothing (Brophy & Alleman, 1999a) already are available, and reports about food and about communication have been submitted to ERIC. Subsequent reports will feature transportation and government.

Research on Children's Knowledge About Families

Considerable research is available about some aspects of children's ideas about families and family living (especially their knowledge of kinship relations), whereas little or no research is available about other aspects (e.g., their knowledge of changes over time in family structures and activities). Edwards (1986) synthesized the findings of much of this research. She began by noting that young children are deeply concerned about people's connections to one another and want to know to whom they particularly "belong." They realize that some but not all of the people that they know are special to them, and they are sensitive to bonds based on association, caretaking, and affection. They use the same family and kinship terms that adults do in talking about their social relationships, but they do not necessarily assign the same meanings to these terms.

In particular, children are likely to conflate two types of close relationships that adults typically distinguish: friendships and family relationships. Adults distinguish these terms by defining friendships as voluntary, self-chosen relationships based on ties of liking, common interests, and so on, but defining family relationships in terms of genealogical and legal kinship connections. Young children usually do not understand these genealogical and legal relationships, so they are more likely to think about family in terms of closeness and support. In addition, the distinctions between family and friendship relationships are blurred in some subcultures and individual families in which close friends are referred to as aunts, uncles, or cousins, even though they are not blood relatives.

Fischer et al. (1984) described the mastering of kinship and family concepts as a complex and multistep cognitive task. They suggested that children in all cultural groups develop through stages from concrete to more fully abstract levels of understanding. They identified four steps in this process.

Step 1: Concrete categorical concepts. Children begin to use kinship terms as social labels at about age three (Chambers & Tavuchis, 1976; Danziger, 1957; Edwards, 1984; Elkind, 1962; Haviland & Clark, 1974; Jordan, 1980; Piaget, 1946/1971). Typically they use only the most common terms (mother, father, grandmother, grandfather, etc.) and they apply them to people both inside and outside the family. For example, they may refer to elderly people in general using grandparent terms. These very young children use kinship terms to assign people to concrete categories, but they do not understand the kinship relations that underlie them and cannot coordinate them. For example, they think of a "mother" as a woman and a "son" as a boy, but they do not relate the two categories to each other to understand that in order to be a mother, a woman must have a son or daughter. Thus, they use kinship terms "categorically" to fit people into sex/age categories, rather than "relationally" to describe kinship relations. Furthermore, they do not conserve these relationships over time, so if asked whether two girls who are sisters will still be sisters when they grow up, they may say, "No, they will be mothers."

Step 2: Early relational concepts. Around age four or five, children begin to coordinate these social categories. They now understand intuitively that a kinship term involves a relationship between two people, but they are vague about the exact nature of the relationship. Rather than understanding that a woman becomes a mother by having or adopting a baby, they tend to define kinship relationships in terms of close connections. Therefore, they may think that people are relatives because they live in the same house or like each other a lot. One six-year-old is quoted summarizing this thinking: "Families are who you live with and who you love." When asked to name everyone in their family, children at this stage usually name all members of their household, including pets.

Step 3: Later relational concepts. Beginning about age six or seven, children start to coordinate multiple kinship roles into a large system or "web of relations." They begin to understand that one person can occupy many kinship roles at once (be one person's wife, another's mother, another's sister, etc.). They begin to move away from the "closeness" definition of a family toward a kinship-based definition, often mentioning a third person when asked to explain the relationship between two people. They also begin to include relatives such as grandparents and cousins on their family lists, and to understand that a family member who moves out of the household still remains part of the larger family because he or she is still related to the child. Kinship concepts that can be understood from the child's point of view (mother, sister, etc.) are easier to understand and thus mastered earlier than concepts that require the child to look at the self from an adult's perspective (daughter, granddaughter, etc.). Concept difficulty and age of mastery are also related to the complexity of or number of logical steps required to define the relationship (e.g., aunt is more difficult than mother, niece and cousin are more difficult than son or daughter).

Step 4: Fully abstract concepts. Children's ability to define kinship terms develops throughout middle childhood. During adolescence, they become capable of fully objective kinship concepts. At this point they can understand their culture's kinship system in an abstract or general way. For example, American adolescents come to appreciate that there are two kinds of relatives: blood relatives that are permanent and given "by nature" and spouses and in-laws that are gained "by law" and are divorceable. One major exception to this generalization is legal adoption, because it severs the biological kinship and establishes new kinship relations based on

law. As adolescents develop further, they come to understand that kinship systems are cultural inventions, so that people growing up in different cultures may learn different rules (e.g., concerning whom to refer to as "aunt" or "cousin").

Separation and divorce tend to complicate children's development of these understandings. During the early relational period (prior to age six or seven), young children conceive of a parent as someone who lives in the household. Therefore, they may think that if the parent moves out, he or she is no longer the parent anymore. Also, because they do not understand how people can have multiple kinship relations, they may think that when a father divorces his wife, he divorces his children as well. This is part of the reason why children often believe that the separation or divorce resulted from their actions rather than from deterioration in the relationship between their parents.

We found a few additional studies that relate to the kinship findings summarized by Edwards. Thornburg (1983) presented 4-8-year-old children with a photograph of four siblings and their parents, then asked questions such as "This is the father. Whose father is it? . . . Are there any other fathers?" Then she gave them abstract figures of various sizes and invited them to make their "very own family" and identify the people in it. Analyses indicated that correct answers to the questions were supplied by 63% of the 4-year-olds, 67% of the 5-year-olds, and 67% of the 6-year-olds, but 81% of the 7-year-olds, and 88% of the 8-year-olds. There were no differences according to gender, race, or family size.

Chambers and Tavuchis (1976) explored the defining characteristics that first- and third-grade children used in conceptualizing 17 American kin terms. They found that the students often were unable to respond to their questions, and that when they did identify relationships, they did not all base their identifications on the same attributes.

Diez-Martinez Day and Remigy (1999) studied the family conceptions expressed by 5-, 8-, and 11-year-old Mexican and French children. As previously reported by other investigators, they found that the younger children tended to use very concrete criteria for classifying families. They described the understanding of the younger students as confined to fragmentary observations and focused on partial and fortuitous aspects of social relationships rather than on biologically-based kinship.

Besides these studies of kinship knowledge, a great many studies have been conducted on some aspect of family, but few of these focused on children's family-related knowledge. Instead, they investigated questions such as whether variables such as birth order or family size were related to measures of school achievement or personal adjustment, or what factors affect children's adjustment to parental separation or divorce.

A few studies have addressed other aspects of children's family-related knowledge. Mazur (1990) studied children's understanding of marriage and divorce. Children aged 5-10 were asked about five themes in reference to a storyline that was illustrated with paper dolls: marriage, divorce of a couple without children, divorce of a couple with young children, remarriage, and step-parents. She found that children's understandings were related to their ages but not their parents' marital status. Older children's reasoning was both more concrete and

practical and more complex and psychological. Younger children were focused on the obvious and superficial behaviors and appearances of spouses, step-parents, and step-children. These findings appear to tie in with more general findings indicating that young children's thinking about family relationships is influenced more by proximity and social relationships than by genealogical or legal relationships.

Finally, several studies have addressed children's understandings concerning inheritance and parent-child resemblances. Springer (1996) conducted two experiments to evaluate whether young children understand that kinship implies, but does not guarantee, physical resemblance among family members. In the first study, preschoolers showed that they expected adopted babies to share physical characteristics with their biological parents but beliefs and preferences with their adoptive parents. In Study 2, preschoolers expressed recognition that shared physical characteristics do not guarantee kinship: A baby who looks like and lives with a woman is not her biological child if he or she initially grew inside someone else, and babies do not necessarily resemble nor live with their biological parents. In both studies, there was an increase with age in understanding that parents and offspring tend to share physical characteristics, but physical resemblances do not necessarily entail kinship. Springer concluded that the results support claims that some preschoolers have a naïve theory of biology. However, he also noted that the development of critical understandings concerning kinship involve merely acquiring factual knowledge rather than undergoing more general change in the cognitive structure.

Horobin (1997) reported findings that appear to support those of Springer. She interviewed kindergarten through third-grade children to determine their understandings of biological inheritance in the context of illustrated stories about animal offspring born and raised under four conditions: normal biological parentage and rearing, adoptive rearing, inter-uterine transplant parentage and rearing with own species, and inter-uterine transplant parentage and rearing with transplant species. The results indicated that children thought it most likely that the offspring would resemble their original species, in both physical and behavior characteristics, under all conditions. However, the children sometimes also perceived the transplant conditions as having biological implications for inheritance.

Solomon, Johnson, Zaitchik, and Carey (1996) reported findings that they viewed as refuting the claim that preschoolers understand biological inheritance. In their initial study, 4-7-year-old children were told a story in which a boy was born to one man described as having certain features (e.g., green eyes) but then adopted by another man described as having different features (e.g., brown eyes). The children were asked which man the boy would resemble when he grew up. Findings indicated that preschoolers showed little understanding that selective chains of processes mediate resemblance to parents. It was not until age 7 that children consistently expected the boy to resemble his biological father in physical features but his adoptive father in beliefs. That is, it was not until age 7 that the children demonstrated that they understood birth as part of a process that selectively mediates the acquisition of physical traits and understood learning or nurturance as mediating the acquisition of beliefs. Follow-up studies replicated the main findings of the initial study, leading the authors to question claims by other investigators that preschoolers understand biological inheritance.

More recently, Richards (2000) has argued that understanding of inheritance and the genetic bases for kinship relationships is limited even in adults. He noted that many of the social (as opposed to genealogical) concepts of kinship that are commonly developed by children are sustained by everyday social activities and relationships, so that they may be particularly resistant to change.

Finally, Hirschfield (2001) summarized controversies that have arisen concerning children's naïve theories of both biology (including inheritance and family resemblances) and sociology (including family and kinship). He concluded that earlier investigators (notably Piaget) tended to underestimate children's levels of understanding, but more recent investigators tend to credit them with higher levels, including "a more nuanced, if covert, understanding of the concept of family" (p. 108).

Our Family Living Interviews

We developed an interview protocol designed to elicit students' thinking about what we consider to be key ideas that ought to be emphasized in an elementary social studies curriculum that treats family living as a cultural universal. The content base for the interview was synthesized from three general sources: (1) social studies education textbooks and other sources that identified key ideas about family living that are rooted in the social science disciplines; (2) information about family living typically included in elementary social studies textbook series or in children's tradebooks on the topic; and (3) our own ideas about the key features of elementary social studies units that focus on cultural universals and are designed to teach the material for understanding, appreciation, and life application (Brophy & Alleman, 1996). We believe that the most basic and important ideas for children to learn about family living include: the nature and functioning of families; kinship relationships; how and why families change over time; what it means to get married or divorced and why people do so; changes in family size and everyday living patterns that have occurred over time, particularly those related to shifts from the rural life of agrarian societies to the city and suburban life of modern societies; cultural differences in family living patterns; comparisons across rural, small-town, and large-city settings; reasons why families sometimes move within or even across countries, and the adjustments that such moves require of family members; the roles of families and of schools in teaching children what they need to learn; the need for families to have rules; the help available to families in emergencies; and ways that families can help other families and their communities at large.

After identifying and sequencing the content base to be addressed, we developed and revised initial drafts of the interview protocol. These drafts featured primarily open-ended questions, typically followed by planned probes, designed to elicit extended statements of students' knowledge and thinking about the topic. Probes were designed to reveal whether students understood and could explain the concepts or relationships addressed by the initial questions (and if not, what alternative concepts or relationships they might have constructed).

The "funnel" interview technique was used, in which initial broad questions encourage students to make extended statements about a topic, attending to whatever aspects of the topic they select for focus on their own initiative, and explaining themselves in their own words. Probing then begins with follow-up questions asking (if necessary) for clarification or

elaboration of what students have said in their initial statements. Finally, more specific questions are asked (if necessary) to call students' attention to aspects of the topic that they did not address spontaneously. This approach maximizes the degree to which students' responses reflect their own unique stances toward and construction of knowledge about the topic, and it minimizes the cueing of specific responses through suggestive questions. Yet, it also ensures that all of the students address certain key aspects of the topic (either because they do so spontaneously in responding to initial broad questions or because they are asked more specific questions later).

Successive drafts of the interview were piloted with students who were not involved in the later study. This pilot work led to revisions designed to make sure that all questions were clear, to specify probing and follow-up questions more completely, and to eliminate questions that were too easy or difficult to be useful. This process eventually yielded the final version of the interview shown in Appendix 1.

Sample

Our first two studies (on shelter and clothing) involved interviews with 216 students, 54 in each of Grades K-3, stratified within each grade by the socioeconomic status (SES) level of the community, the students' prior achievement levels, and the students' gender. The SES variation was introduced by conducting one-third of the interviews in an upper-middle class suburban community, one-third in a middle/working-class suburb, and one-third in lower-middle/working class neighborhoods of a small city. Together, these samples subsumed the middle three-fourths or so of the SES range in the general population.

The patterns of findings that appeared in the first two studies led us to discontinue further systematic sampling across the SES range, because the observed SES differences in these studies were relatively small and not especially interesting or informative. Students from higher SES backgrounds tended to have more, or more accurate, knowledge than students from lower SES backgrounds, but the same general developmental patterns were observed in each group. We did not find theoretically or practically interesting group contrasts (e.g., contrasts suggesting the existence of qualitatively different developmental paths or constructions of knowledge that were unique to particular SES groups). Consequently, we concluded that in our future work it would be more efficient to concentrate initial studies at the middle of the SES distribution (by interviewing in the same middle/working class suburb for which the middle SES samples in the first two studies were drawn). Possible group differences would then be addressed in follow-up studies. For example, we followed up the shelter study by interviewing students who lived in Manhattan, a highrise, high-density residence area that contrasts with the lowrise, low-density communities of the Michigan students interviewed in the initial study. Also, given that our food interview included several questions on farming and the origins of food, we followed up the initial food study with interviews of students from farm families.

The students interviewed for this study attended the public schools of a middle/working class bedroom suburb of a small city (population about 160,000). The community is average or slightly above average on most socioeconomic and educational indices. During the years when these interviews were conducted, the community's high school graduation rate was 83% and the

percentages of its fourth graders who achieved "satisfactory" scores on the state's achievement tests were 49% percent for reading and 65% for mathematics.

Reflecting their school populations, the majority of the students we interviewed were white. We did not consider race or ethnicity in identifying students for the sample, except for the stipulation that all interviewees must have spent all or at least most of their childhood in the United States. Recent immigrants or students who had spent most of their preschool years in other countries were not included, because an assumption underlying the work was that what the students knew about family living (other than what they had been taught at school) had been learned in the process of growing from infancy in the contemporary United States (particularly through home and neighborhood experiences and exposure to television and other media).

Interviewees were selected from among students whose parents gave us permission to do so. Most parents who returned our forms did give such permission, although a significant minority of parents never returned the forms despite repeated requests. Once the potential interviewees in a given classroom were identified, they were listed alphabetically by gender and the teacher was asked to characterize them, within gender groups, as being within the upper third, the middle third, or the lower third in general academic achievement. When we had access to more students in a given cell (e.g., high achieving male first graders) than we needed, the students to be interviewed were selected randomly from within the eligible group. When additional students were needed to fill out certain cells, we expanded sample recruitment to a nearby school in the same district that served a very similar student population.

Collection and Preparation of Data

Students were interviewed individually. The interviews typically lasted about 30 minutes and were conducted in small offices or other locations within their schools but outside of their classrooms. To facilitate rapport with students and make sure that their responses were preserved verbatim, the interviews were tape recorded, using a microphone that could be placed unobtrusively on the table and did not require either the interviewer or the student to handle it or speak directly into it. Interviewers were instructed to establish good rapport with the student before beginning and then to conduct the interview in a relaxed and conversational style rather than a more formal or test-like style.

The tape recorded interviews were transcribed by one person and then listened to by a second person who identified omissions and inaccuracies in the transcripts. Data for statistical analyses were then developed by coding the corrected transcripts.

Coding the Transcripts

We did not attempt to force students' responses into predetermined coding categories. Instead, we allowed the categories to arise from the data, using what have been called analytic induction methods for developing grounded theory (Bogdan & Biklen, 1982; Glaser & Strauss, 1979; Patton, 1990). Coding schemes were developed by reading responses to each question and identifying common ideas (embodied in similar statements) that represented alternative ways to respond to the question. Responses then were coded for the presence or absence of mention of

these common ideas. Multiple codes were assigned if the student mentioned more than one of the ideas. In addition to categories encompassing common ideas, each coding scheme contained an "other" category for flagging rare or unique responses.

After initial versions of the coding schemes were developed and refined, reliability was established between two coders who coded one-fourth of the transcripts (stratified according to grade level, achievement level, and gender). Upon completion of this coding, the two sets of codes were compared and inter-coder agreement percentages were computed. Most coding schemes initially met our criterion of 60% exact agreement across coders. When coding schemes failed to meet the inter-coder agreement criterion, the coders analyzed the problem and made adjustments in the coding schemes, then coded the one-fourth sample of responses again. All of the revised coding schemes met the inter-coder agreement criterion at this point. Across the 45 coding schemes used, exact agreement percentages ranged from 70% to 98%, averaging 85%.

Once the coding schemes had met the reliability criterion and been revised as needed (to incorporate minor alterations or elaborations suggested by insights developed while coding to establish reliability), the two coders used them to code all 96 interviews. Upon completion of their independent coding, they compared their codes and negotiated agreement on all discrepancies. They also developed a running list of the rare and unique responses that had been coded into the "other" categories, as well as any unusual elaborations of common ideas that seemed worth preserving for possible inclusion in this report. Thus, the report encompasses not only the commonly observed response variations that were amenable to statistical analysis, but also the rare or unique responses and any elaborations on common responses that seemed worth including because they appeared to have theoretical or practical significance.

Once coding was completed, the codes were converted into scores that became the bases for statistical analyses. In most cases the codes were used as is. However, some commonly occurring responses that originally were coded in an "other" category were broken out to create new scores, and some categories that were coded too infrequently to serve as a basis for useful statistical analyses were folded into related categories or simply omitted from such analyses. For example, Question 5 asked students to identify reasons why families might get smaller. Responses to this question were originally coded as follows:

0. Doesn't know/no relevant response
1. Answers only in terms of loss of body mass due to poor nutrition, not reduction in size of family
2. Instead of explaining how a family might shrink, only explains why it might not grow (parents decide not to have more children)
3. Death: A family member dies
4. Divorce/separation: loss of one parent
5. Complications of divorce/separation: loss of step-siblings that belong to departing parent
6. Normal moving out: children grow up and leave for marriage, college, etc.
7. Traumatic moving out: family member runs away, wanders off and gets lost, discovers that he or she is in the wrong family, etc.

8. Growing up/getting older (unexplained)
9. Loss/exclusion of pets
10. Other: student supplies a relevant, substantive response not included in previous categories

Inspection of the initial codes indicated that no students were coded in Category 8, so this category was dropped. Also, only two students were coded in Category 5. This category also was dropped, not only because only two students were coded in it but also because these two students were also coded for Category 4, which subsumed the basic reason for the family departures involved. The mention of departing step-siblings seemed to be a relatively minor elaboration on the more fundamental mention of divorce or separation, so this elaboration was dropped rather than included in the "other" category.

Other changes involved combining categories. Only four students were coded in Category 1—too few to analyze separately. Rather than just dropping these codes, however, they were included with the codes in Category 0 because students who answered only in terms of loss of body mass due to poor nutrition (without saying anything codable in subsequent categories) failed to generate a relevant, substantive response to the question. Finally, only five students were coded in Category 2 and only four were coded in Category 9—again, too few to analyze separately. Rather than dropping these codes, we included them with the other codes originally coded in Category 10, thus expanding Category 10 to include the original Categories 2, 9, and 10. These changes resulted in the following set of scores for Question 5 that were analyzed statistically:

0. Doesn't know/no relevant response/answers only in terms of loss of body mass due to poor nutrition
1. (not used)
2. (not used)
3. Death: a family member dies
4. Divorce/separation: loss of one parent
5. (not used)
6. Normal moving out: children grow up and leave for marriage, college, etc.
7. Traumatic moving out: family member runs away, wanders off and gets lost, discovers that he or she is in the wrong family, etc.
8. Other

Data Analysis, Interpretation, and Presentation

Scores derived from the codes were subjected to statistical analyses designed to reveal trends in the sample as a whole as well as contrasts across subgroups of students who differed in grade level, achievement level, or gender. These analyses included frequency distributions and means reflecting the degree to which various ideas were expressed across the sample as a whole and within its stratified subgroups, correlation coefficients indicating the direction and degree of relationship among the variables, and Chi-Square analyses indicating when subgroup differences were large enough to reach statistical significance.

Initial inspection of the results of these analyses indicated that (1) the response patterns to most questions featured statistically significant and often quite dramatic grade level differences showing increases in level and accuracy of knowledge across the K-3 range, (2) the achievement level differences, and (especially) the gender differences were much smaller and less likely to reach statistical significance, and (3) most of the achievement level differences that did appear were in the expected direction and thus not especially interesting or informative (that is, students who were higher in prior achievement level tended to have more, or more accurate, knowledge than students who were lower in prior achievement level, but the same general developmental patterns were observed in each group).

Given the uniformity of this pattern (with very minor exceptions that are noted when the relevant data are discussed), we decided to organize the presentation of findings in this report as follows. First, findings from related clusters of questions are presented together. For each question cluster, data presentation begins with discussion of descriptive statistics and the progressions in students' knowledge across Grades K-3, illustrated with excerpts from eight students' interview responses. We then present the findings on achievement level and gender differences. Except where the data indicate otherwise, we treat these group differences as relatively minor variations on the main themes established by the grade level differences.

Next, we turn to the correlational data, reporting noteworthy patterns that appeared in the relationships between the response categories under discussion and the categories used to code responses to other questions in the interview. These relationship patterns help us to interpret the meanings and implications of the various response categories, both in their own right and relative to one another. They are especially helpful when the grade level, achievement level, or gender differences found for a response category seem counterintuitive (if the meaning of the category is taken at face value). Sometimes, the correlational patterns indicate that the responses coded into a category had different meanings or implications (e.g., were either more or less sophisticated) than the category descriptor seemed to imply.

After presenting these quantitative data, we turn to a more holistic analysis of what the findings suggest about developments in children's knowledge and misconceptions about family living as they progress through Grades K-3. Along with the data shown in the tables, these analyses include consideration of the rare and unique responses and unusual elaborations of common responses that were recorded and analyzed for potential significance. Taken together, these findings are discussed with reference to previous findings (where available), the understandings we have developed about growth and change in children's knowledge and misconceptions relating to family living, and the potential implications of these understandings for curriculum and instruction in elementary social studies.

The Nature of and Reasons for Families

The first two questions on the interview asked the students to define families and talk about why most people live in them.

1. Today we're going to talk about families. What is a family? (Probe for whatever the student can say about the composition and nature or functioning of a family.)

2. Why do most people live in families?

Analyses of responses to Question 1 indicated that all but 14 of the students were able to define or describe a family. These responses varied in their adequacy or specificity as definitions of a family, but all were accurate or at least defensible as statements about families. Some students offered general definitions of families: People who love/help/take care of each other (37), people who do things together (35), people who live together (30), or a group of people who are related through birth or marriage (11). In addition to or instead of providing a general definition, some students described families by listing their members: 10 confined the list to parents and their children; 38 included grandparents, uncles, aunts, cousins, step-siblings, or other relatives as well; and 34 included pets.

Question 2 asked why most people live in families. Here, almost a third (31) of the students were unable to respond. The rest said that people live in families because they love, want to take care of, or want to help one another (27), they want to get married and/or have children (21), they need a family in order to get their basic physical needs met (14), or they want to live with others and not be alone (12).

The following examples are representative of responses to the first two questions. They are segments drawn from verbatim transcripts of the interviews, although they have been edited to eliminate extraneous material (mostly final probes that failed to elicit any additional response). Here and throughout the rest of the report, the examples are drawn from the transcripts of interviews of eight average achieving students, one boy and one girl from each of Grades K-3.

Kindergarten

Jered

1. There's like my baby brother and my sisters, my cousins, and Uncle Robb and Uncle Joe and my mom and dad and grandma and grandpa and my other grandma and grandpa, and . . . I forget . . . and my other cousins. (What is a family?) I forgot.

2. I forget.

Kate

1. I have a grandma and a grandpa and I have a brother and a dad and I also have lots of cousins, and me and my mom. (What is a family?) It's where you love all your family. (Can you tell me anything else about a family?) No. (Well, who can be in a family?) Grandmas and grandpas and aunts and uncles and moms and dads. (Anybody else?) I don' t know . . . children. (What things do families do?) They all love each other and they get together. (Anything else?) I don't know. (You told me families get together. Why do they get together?) Cause they love each other.

2. Cause they love each other.

First Grade

Chris

1. Me, my brother, my mom and my dad, and my two cats, but I'm going to get a dog. (What is a family?) I don't know. (What people are in a family? Who's in a family?) Your mom, your dad, a brother and a sister, twins, triplets, pets, and I forgot. (What does a family do?) They play games and they help you with your homework if you don't know. They go to work and they . . . I don't know.

2. Because they want to. (Why do they want to live in families?) So when you need help on work, someone can help you on it.

Lauren

1. My mom, my dad, my grandmas. I've got lots of grandmas, and my aunts and my uncles and my cousins, and . . . that's it. (What is a family?) It's . . . it's like (long pause, no further response) (You named all the people in your family. Why are they your family?) Because God made them, and he made them because if we didn't have a family, then there wouldn't be us.

2. Because God made them and some people don't, and some people don't have homes and some people don't even have food.

Second Grade

Mark

1. The only people living in my house right now is me, my mom, and my dad, and one of my fish, and a cat and a dog. (Do you have any people in your family who don't live in your house?) Yeah, I've got two grandpas and a grandma. I have an aunt and I've got another aunt which has my cousins, and an uncle. My cousins' names are Mike and Johnny and Jake. And I've got another aunt and uncle, and they have a dog named Riley, and my cousin's name that lives there is Charlie. (What is a family?) A family is a bunch of people that are like mom and dad, grandma and grandpa, aunt and uncle, and cousins. (What sorts of things do families do?) Like go out to eat and stuff, and probably like go to see each other and stuff, and probably they go swimming and stuff together, and sometimes they go to each other's houses and stuff.

2. Because when you grow up, you have to learn the stuff that your mom and dad taught you. If a child doesn't learn the things their parents teach them, all they'd do is act mean to other people.

Emily

1. My mom, my dad, my brother, me, and all the rest of the people. (Who are the rest of the people?) My aunt, my uncle, and . . . I don't want to say anymore. (Do they all live with you in one house?) No, they live in Alabama, I think, and Pentwater and Jackson. (What is a family?) Some people to love and people to play with. (Can you think of what else is special about a family?) So you can swim with them and if they know how to touch in the deep end and you're in the deep end without a life jacket, they can come and help you.

Third Grade

Dale

1. It's like a mom and . . . it's like a family that that loves each other and plays with each other and they do stuff, like play games usually, board games usually like Monopoly. (Who's in your family?) My brother in first grade . . . my parents got divorced and now I have two sisters actually. I have one who's my true one and I have another one but she's not my sister. She sort of babysits us, like you know. You play games and stuff—the whole family.

2. I don't know about that one. . . for shelter and love and care for people and they care for each other and for our shelter too, so they can live in it, so all of us can live in it—everybody we love . . . like my dad I love and you'd live in it together and we'd have a bunch of children.

Chelsea

1. My mom and my dad and my two brothers. (Anybody else in your family?) Nope, I just have a dog and a hamster. (What is a family?) It's sort of like where your mom and dad create us and come home, like my dad has a mom and she created him. (Who can be in your family?) Sort of like everybody—my grandma and grandpa and aunts and uncles. (OK, who else can be in a family?) Your cousins and stuff like that . . . lots of people. (What sorts of things do families do?) Sometimes your mom and dad go to work and sometimes you might have to stay with your brothers and sisters, and families usually go out and do fun things together, most of the time . . . not all the time. (Anything else you can think of that families do?) They sometimes fight and sometimes they get along together, but they sometimes argue. Families all love each other, they don't disrespect anybody in the family. They respect them.

2. Because . . . I don't know.

Grade Level Differences

Descriptive statistics and information from the Chi-square analyses of scores derived from the coding of Questions 1 and 2 (and all of the other questions in the interview) are given in

Table 1. The numbers in the columns for the total sample (N = 96), the four grade level groups (N = 24), the three achievement level groups (N = 32), and the two gender groups (N = 48) are simple frequency scores indicating the numbers of students in the sample as a whole and within each grade level, achievement level, or gender group who were coded for mentioning the idea represented by the response category. Sets of scores are underlined if the analyses described below identified statistically significant relationships between the frequency of use of a response category and the students' grade level, achievement level, or gender.

The score distributions were subjected to Chi-square analyses to determine whether the differences observed reached the .05 level of statistical significance. Two forms of Chi-square analysis were used. The first, used with all of the distributions, was a conventional Chi-square analysis that assesses the probability of obtaining the observed group totals if it is assumed that the variable appears with the same frequency in each group within the population as a whole (in other words, if it is assumed that there are no group differences). This Chi-square test does not take into account that the groups might be ordered on a dimension (e.g., grade level or achievement level). Consequently, a statistically significant result simply indicates that the variance in the group totals exceeds that which might be expected to occur because of chance variations in sample characteristics.

A related analysis, the Mantel-Haenszel Chi-square test, was used to assess the statistical significance of trends observed in the grade level and achievement level distributions. These two distributions involved a progressive ordering of their categories (from kindergarten through third grade, and from low through average to high achievement level). The Mantel-Haenszel statistic takes into account such progressive ordering and tests for directional trends (i.e., tendencies for the scores to either rise or drop as one moves up the grade or achievement levels). Statistically significant Mantel-Haenszel Chi-squares do not imply that the difference between each successive grade level or achievement level score is statistically significant, or even necessarily consistent with the overall trend. However, they do indicate that a statistically significant rising or dropping trend was detected across the four grade levels or the three achievement levels.

In compiling the data for Table 1, we first examined the grade level and achievement level comparisons for the significance of the Mantel-Haenszel Chi-square. If this Chi-square was significant at or below the .05 level, we underlined the group totals and recorded the phi coefficient (comparable to a conventional correlation coefficient) to indicate the direction and level of strength of the relationship between grade level (or achievement level) and the frequencies of coding of the response category in question. If the Mantel-Haenszel Chi-square did not reach the .05 level of statistical significance, we examined the findings for the conventional Chi-square. Usually this Chi-square also failed to reach significance, in which case we did not underline the group totals or record a phi coefficient in the table. In a few instances, the Mantel-Haenszel Chi-square was not statistically significant but the conventional Chi-square was. This indicated that there was statistically significant variation across the groups being compared, but this variation did not take the form of a systematically rising or dropping trend that paralleled the grade level or achievement level progression. Where these unexpected nonlinear group differences appeared, we underlined the group totals and placed the letters "NL" (standing for nonlinear) in the phi coefficient column. In summary, for the grade level and achievement level analyses, we (1) underlined the set of group totals and included the phi

coefficient when the analyses indicated a significant directional trend, (2) underlined the set of group totals and entered "NL" when the analyses indicated significant nonlinear variance, and (3) did not underline the set of group totals and did not enter either a phi coefficient or the letters "NL" when neither of the Chi-square analyses yielded a significant result.

The Mantel-Haenszel Chi-square test was not appropriate for assessing the statistical significance of gender differences, because the two gender groups (boys, girls) are not ordered on a continuum. Consequently, the conventional Chi-square test was used for this purpose. When this test indicated a statistically significant difference between the two gender groups, the gender totals were underlined and the phi coefficient was entered to indicate the direction and strength of the relationship (negative phi coefficients indicate that the boys were coded significantly more frequently in the category than the girls; positive phi coefficients indicate that the girls were coded significantly more frequently than the boys). When the Chi-square test failed to indicate statistical significance, the gender totals were left without underlining and no phi coefficient was entered. To simplify the table, decimal points were omitted from all of the phi coefficients recorded.

Analysis of the scores derived from the coding of responses to Question 1 showed two significant relationships with grade level (see Table 1). The first relationship was a negative one, indicating that failures to respond to the question were more common in younger than older students. This same trend appeared for almost all of the questions in all of our interviews. There is considerable variation from question to question in the percentage of students who say "I don't know" or are unable to provide a substantive response that speaks to the question. Whatever their frequency may be, these failures to respond to questions tend to be concentrated in the younger students, especially the kindergarteners. In this case, 14 students were unable to respond to Question 1, of whom 7 were kindergarteners and 6 were first graders.

The other significant relationship was positive, indicating that the older students were more likely to say that a family is a group of people related through birth or marriage. This relationship was predictable, because this response was the most sophisticated of the those included in the categories for Question 1.

Only one of the categories for responses to Question 2 showed a significant relationship with grade level. Older students were more likely than younger students to say that most people live in families because they want to get married and/or have children.

Overall, there were fewer significant relationships with grade level for this set of response categories than for most other sets. Still, the data indicate that the older students were more able to respond to these questions than the younger ones, and in particular, more likely to generate the most sophisticated responses.

Achievement Level and Gender Differences

The 13 response categories for the first two questions yielded three significant relationships with grade level, three with achievement level, and four with gender. This is an unusual pattern. More typically, a set of 13 categories would yield nine or ten significant

relationships with grade level and perhaps two or three with achievement level and one or two with gender. In this case, even most of the youngest students were able to respond to the questions and their responses tended to be accurate or at least defensible and free of misconceptions, so there were fewer grade level differences than usual.

Two of the three significant relationships with achievement level were linear relationships. These indicated that higher achievers were more likely than lower achievers to define a family as a group of people related through birth or marriage and to include pets in listing family members. The former relationship was predictable because it involved the most sophisticated response in the set. The latter relationship is a bit surprising. We suspect that most observers would have predicted that lower achievers would be more likely than higher achievers to include pets in a list of family members.

The remaining significant relationship with achievement level was a nonlinear one indicating that average achievers were less likely than other students to say that people want to live in families in order to get their basic physical needs met. This nonlinear pattern was not expected, and we have no explanation for it (the correlations between this response category and all of the other coding categories did not yield interpretable patterns, and nothing that we know about cognitive development or the school curriculum across the K-3 range suggests an explanation for this finding). We also are unable to interpret most of the other nonlinear relationships that appeared in our analyses. Rather than continue to repeat our explanations for why this is the case (the nonlinear patterns were unexpected, their reliabilities are unknown, and nothing in the correlational analyses or the extant research literature suggests clear interpretations), throughout the rest of this report we will simply describe nonlinear patterns without commenting on them (except in a few instances where we do have interpretations to suggest).

Three of the four gender differences were for responses to Question 1. Here, the girls were more likely than the boys to define a family as people who do things together and to identify various extended family members and also pets in talking about who would be included. Like most gender differences observed in our findings, these significant differences appear to reflect differences in orientation to the topic or style of responding to the question rather than differences in knowledge about the topic.

However, the remaining gender difference occurred because 14 girls but only 7 boys said that most people live in families because they want to get married and/or have children. Coupled with nonsignificant tendencies suggesting that girls were slightly more able than boys to respond to each of the first two questions, this difference suggests that the girls were slightly more knowledgeable than the boys concerning the nature of families and the reasons why people live in them.

Relationships Among Response Categories

Although our interests lay more in group differences in response patterns, we also correlated scores for the different response categories, within and across question clusters, to see if any noteworthy relationships emerged. Most of the significant correlations were not especially

interesting because they fit into one of three expected patterns. First, many were logically necessary negative correlations between mutually exclusive category alternatives within the same cluster (e.g., there was a negative correlation between the category for failure to define a family and the categories used to code the definitions that were given in response to Question 1 by the students who were able to do so). Second, some were logically necessary positive correlations that reflected part-whole relationships. For example, Question 9 asked about ways in which families today are the same as families in the past. Among the categories for coding responses to this question, Category 1 was used for responses that were not specific to families but instead talked about people in general (they eat food, wear clothing, etc.), whereas Categories 4-7 were for responses that were specific to families (responses that referred to similarities in basic family characteristics, stage phenomena, family composition, or "other" aspects of families). Finally, Category 9 was used to identify students who made one or more responses specific to families (i.e., students who had been coded in Categories 4, 5, 6, or 7). Consequently, Categories 4, 5, 6, and 7 all showed positive correlations with Category 8.

Third, there was a general tendency toward correlation within and across clusters in the length and quality of the students' responses (i.e., certain students were more likely than others to be unable to respond or to respond poorly to our questions; certain students were more likely than others to consistently make lengthy and complex responses; and certain students were better informed than others and thus more likely to consistently make sophisticated responses). Given that these three types of relationships were expected to appear and that the explanations for them are well understood, we will not describe them in this report unless there is some special reason to do so.

In addition to these expected relationships, however, the correlational analyses sometimes identified statistically significant relationships between response categories that would not necessarily have been predicted, and that indicated interesting connections among students' ideas. Most of these interesting relationships involved categories that reflect qualitative differences in the ways that students approached the questions, as opposed to categories that reflect differences in the amount or accuracy of their knowledge. Interesting intercorrelations involving the first set of categories included the following.

Students who defined a family as people who do things together were more likely than other students to include pets in listing family members. Also, students who defined a family as people who love, help, or take care of each other were more likely than other students to say that most people live in families because they love, want to take care of, or want to help one another. Otherwise, intercorrelations involving categories for responses to the first two questions were unremarkable.

Rare and Unique Responses

The following responses to the first two questions involve interesting elaborations on the ideas represented by the coding categories or embody ideas that are not included in those categories. Most of these responses have been paraphrased to save space and focus on their key ideas, although occasionally rare or unique responses are quoted verbatim when it appeared worth doing so.

Question 1A: Listing of family members

Responses to this question are well represented by the categories except for that of a second grader who said that some close friends might be considered family.

Question 1B: Definition of family

Responses in the first two categories were similar in most respects except that students who used the word "related" or clearly understood a biological relationship were coded in Category 1, whereas responses that talked more generally about a married couple and their relatives were coded in Category 2. Rare and unique responses included the following.

Kindergarten: None.

First grade: Sometimes they have the other dad and they have to go there and stuff, and they don't get to see them very much; a group that lives in different cities (unexplained further).

Second grade: People that you can count on normally and that you would tell secrets to that you wouldn't tell other people.

Third grade: Your mother makes a family and your dad helps; a little tiny community.

The following third grader is quoted for a succinct but very complete response: "A group of people who are related to each other and who love, care about, and help each other."

Question 2: Why people live in families

Kindergarten: That's how you "make feelings happy;" we need to live in a house and not be left out in the streets; you were born with them and you celebrate your birthday with them.

First grade: God made them, because if they didn't have a family, there wouldn't be us; they don't like living in orphanages, so they live in a house.

Second grade: Children need parents to teach them, so they don't grow up to act mean to people.

Third grade: They want to meet their uncles and stuff.

Discussion

The students found it easy to answer Question 1, and what they said was accurate and free of misconceptions. As previously reported in the research summarized by Edwards (1986), however, the students tended to define families and identify motives for family living in terms of social ties among family members (they live together, do things together, love/help/take care of one another), rather than in terms of genealogical or legal ties. Only 11 students specifically mentioned birth or marriage as the basis for the relationship.

Question 2 was more difficult for the students: Almost a third of them were unable to respond. Once again, the responses focused on social ties, with students saying that people live in families in order to get their basic needs met, so that they will have social companionship, or because they love/want to take care of/want to help one another. Only 21 students said that they live in families because people get married and/or want to have children. Older students were more likely than younger students to supply responses that made reference to genealogical ties. Even so, however, only 10 of the 48 second and third graders defined a family as a group of people related through birth or marriage, and only 15 of these 48 students said that most people live in families because they want to get married and/or have children. A few categories showed expected linear relationships with grade level or achievement level, but in general, the grade level and achievement level differences on this set of categories were weaker and less often statistically significant than usual. The gender differences indicated that the girls were somewhat more knowledgeable than the boys in talking about the nature of families and why people live in them.

Knowledge of Kinship Terms

Question 3 assessed the students' knowledge about the basis for kinship relationships in extended and blended families. We did not ask about the members of conventional nuclear families (mother, father, sister, brother) because previous research has established that most children come to understand the meanings of these terms before they get to school.

Question 3A. Families include grandparents, aunts and uncles, and cousins. What are grandparents?

Question 3B. What are aunts and uncles?

Question 3C. What are cousins?

Question 3D. What are step-brothers and step-sisters?

More than half (52) of the students were able to define grandparents as one's parents' parents. However, 21 students were unable to respond to the question, 4 generated incorrect responses (e.g., they are your mom and dad), 14 could only say that grandparents are people who are old or look old, and the rest gave miscellaneous "other" responses such as that your grandpa is your grandpa because he married your grandma, your mother had you and so you get grandparents too, or they are your grandparents because you share the same last name.

The students found it harder to define aunts and uncles. This time, fewer than half (41) correctly said that they are sisters and brothers to one's parents, sons and daughters of one's grandparents, or parents of one's cousins. Instead, 24 students were unable to respond to the question, 13 could only give partial information (such as by saying that aunts and uncles are brothers or sisters but not being able to say to whom, that aunts are female and uncles are male, or that an uncle became an uncle because he married an aunt), 9 said that aunts and uncles are special to you or love you but could not specify their relationship to you, and 10 supplied incorrect responses (confusing aunts and uncles with Godparents, cousins, etc.).

The students found it comparably difficult to define cousins. Only 37 of them correctly defined cousins by saying that your cousins are the children of your aunts and uncles or that they have the same grandparents as you do. Otherwise, 25 students were unable to respond, 19 described cousins merely as friends or playmates without specifying any relationship, and 16 knew that cousins were related but could not say how.

The students had the most difficulty defining step-siblings. Only 19 were able to identify step-brothers and step-sisters as sons and daughters of one's step-parent. Another 7 identified them as children that one's mother or father has with a new spouse following a divorce. The latter definition fits half-siblings rather than step-siblings. However, we included these 7 responses along with the 19 correct responses in analyzing the data and presenting the findings in Table 1, because the 7 students involved at least understood that divorce and remarriage are involved in creating step-sibling relationships. The 19 correct step-sib definitions were given by 7 first graders, 4 second graders, and 8 third graders. The seven half-sib definitions were given by 3 second graders and 4 third graders.

Otherwise, 42 students were unable to respond to the question, 15 supplied part of the idea but did not explain accurately or completely (e.g., if you get remarried, they're your step brothers or sisters; they're half of your mother's; they're the nephews and nieces of your step-parent), and 13 supplied other responses that did not include the notion of relationship (e.g., they're friends, people that you love, mean people, etc.). Note that a few students described step-siblings as mean, probably because of exposure to the *Cinderella* story or movie.

Overall, the students found it easiest to define grandparents, somewhat more difficult to define aunts and uncles or cousins, and most difficult to define step-brothers and step-sisters. The following examples from average-achieving boys and girls are representative of the responses from students across the four grade levels.

Kindergarten

Jered

3A. Oh, there's one more I know. He's my grandpa. (What makes someone your grandparent?) I forget.

3B. I don' t know.

3C. I forget.

3D. I forget.

Kate

3A. Grandparents are kind of like a dad or a cousin.

3B. Aunts are mom's children.

3C. Cousins are almost like a friend. (Are cousins related to you?) Yes. (How are they related to you . . . do you know?) No.

3D. They're like a brother and a sister. (Is there anything different?) No.

First Grade

Chris

3A. Grandma and grandpa. (What makes them your grandma and grandpa?) They're old, one is a boy and one is a girl.

3B. Aunts are your mom's sisters and your uncles are your brothers. (Uncles are your brothers?) No, my mommy's brothers.

3C. Cousins are people that are part of your family because they visit you because they're your cousins. (Are they related to you in a special way?) No.

3D. If you have a mom, then you have a different mom that's your step-mom.

Lauren

3A. Grandparents . . . they're grandpas and grandmas. (Why is someone your grandma or grandpa?) That's an easy question. Like your mom has you and that's how you get a grandma and grandpa. (OK, what makes your grandpa your grandfather?) Because your grandma gets married to him.

3B. They are people that are in your family, and they can't have a home either, some aunts and uncles do, and some don't.

3C. They are people in your family too, and some grown up cousins don't have homes and some do.

3D. Oh, I do have a step-sister and two step-brothers, and one real brother. Those are like if . . . if your dad gets married to someone else and then they break up and she goes to someone else, that's my mom and that makes them your step-sisters and your step-brothers.

Second Grade

Mark

3A. Grandparents are somebody that's like the oldest person in the family. (Are grandparents related to you in a special way?) Yeah, they're related to you because they're your mom's or dad's parents.

3B. Aunts and uncles are somebody that are either your mom's or dad's sister or brother.

3C. Cousins are somebody's mom's or dad's sister's or brother's child.

3D. Step-brothers and step-sisters I think are people that you adopt or something.

Emily

3A. Grandparents is your grandma and grandpa. (Are they related to you in a special way?) No.

3B. Aunts and uncles? (You told me you had an aunt? What's her name?) Aunt Dahlia. (What makes Aunt Dahlia your aunt?) She's my mama's sister.

3C. They are people to play with, but if they're like a baby or something, you can help the parents take care of the baby. (Are cousins related to you in a special way?) Yeah. (How?) Maybe some cousins are born before you and cousins may be born after you.

3D. I don't know.

Third Grade

Dale

3A. They're sort of like our grandpas and grandmas and we like to visit them and they're like a part of the family, sort of, and they help us usually. (What makes them your grandparents?) They're sort of old and they love us like dads and cousins and everybody loves us . . . it's not like all our kids or like our cousins or grandpas and our dad's and mom's brothers. They love us and our grandpas are sort of old, and they love us too.

3B. They're usually like . . . we usually come and visit them and they come and visit us. They sort of love us too, because they have children too, but they sort of love us too. (But what makes them your aunt and uncle?) I don't really know.

3C. People who play with you and usually love you and all that stuff, and they play videogames and we usually come over there and play videogames.

3D. People that are not like really related to you but they just take care of you and stuff if you got adopted..

Chelsea

3A. They're your mom's moms and dads.

3B. They're your mom and dad's sisters and brothers.

3C. They're your mom and dad's brothers' and sisters' kids.

3D. Like if your mom and dad get divorced and they marry another guy and his kids are your step-brothers and step-sisters, and who he married would be a step-mom.

Grade-Level Differences

Grade-level differences for this set of categories were frequent, strong, linear, and predictable. Younger students were more likely than older students to be unable to respond to each of these questions, as well as to be coded for some of the less sophisticated responses (defining cousins as friends or playmates without specifying a relationship; providing "other" definitions of step-siblings that also failed to specify a relationship). In contrast, older students were more likely to provide the most sophisticated responses to the questions (correctly defining grandparents, aunts and uncles, cousins, and step-siblings). Relationships with grade level were unusually clear and consistent for this set of categories, suggesting consistent growth across the K-3 years in the students' knowledge of these kinship relationships.

Achievement Level and Gender Differences

The 16 categories for responses to the four parts of Question 3 yielded 10 significant relationships with grade level, but only 3 with achievement level and four with gender. The achievement level differences indicated that lower achievers were more likely to be unable to respond when asked to define aunts/uncles and cousins, whereas higher achievers were more likely to define cousins correctly. These differences, along with related nonsignificant trends, indicate that the higher achievers were consistently more knowledgeable than the lower achievers about the bases for grandparent, aunt/uncle, and cousin relationships. This was not the case for definitions of step-sibling relationships, however: Here there were no significant relationships with achievement level and the nonsignificant trends actually favored the lower achievers. These figures probably reflect differences in the students' actual life experiences with step-sibling relationships.

Once again, the significant gender relationships all favored the girls. When asked to define grandparents, 10 boys but only 4 girls were only able to say that grandparents are old or look old, whereas 22 boys but 30 girls were able to define grandparents correctly as one's parents' parents. Similarly, when asked to define step-siblings, 25 boys but only 17 girls were unable to respond, whereas only 8 boys but 18 girls were able to define these relatives correctly. There were no significant gender differences for definitions of aunts and uncles or cousins, but nonsignificant trends in the sets of response categories for these questions also favored the girls. Thus, across Questions 1-3, there were eight significant gender differences, all favoring girls. The girls were more able than the boys to supply information about families and kinship relationships.

Relationships Among Response Categories

The only noteworthy intercorrelations involving categories for responses to Question 3 concern the categories for correct definitions of the four kinship relationships addressed. Students who correctly defined any one of these relationships (grandparents, aunts/uncles, cousins, step-siblings) were more likely than other students to also define the others correctly. These correct definitions supplied in response to the four parts of Question 3 were part of a "maturity set" of response categories that were coded more frequently for older and better informed students. Across the interview as a whole, this maturity set also included stating that families get bigger when new children are born or adopted into the family; identifying ways in which families today are similar to families in the past; stating that today's parents typically want fewer children than in the past because it is now more costly to have or care for children; stating that mothers in the past spent most of their time on housework and household maintenance; being able to say something specific about the activities of fathers in the past (doing farm work, building their own log cabin, etc.); stating that fathers in the past spent more time working and had less time for family or leisure; stating that children in the past spent a lot of time doing chores and that children today have more time for play or other self-chosen activities; stating that farm people have more work/chores to do than other people; drawing generic comparisons between cities and small towns; providing sophisticated responses to a question about why families move (job change, want better schools, etc.); identifying traditional male role behaviors or "other" knowledge or skills as things commonly learned from fathers or male relatives; stating that families need rules to clarify responsibilities and avoid chaos; and stating that families can help their communities by not littering or by picking up litter dropped by others. Throughout the rest of the report, when we indicate that a response category was part of the maturity set of responses to the interview as a whole, we mean that it tended to correlate positively, and often significantly, with the coding categories just identified.

Rare and Unique Responses

Question 3A: Grandparents

Kindergarten: A different kind of parents; like a dad or cousin; grandpas and grandmas and uncles and aunts are the same because they do the same things with us.

First grade: They're your mom and dad; they have the same last name as you (this response was also made by two other first graders and two second graders); like your dad's uncle.

Second grade: None.

Third grade: This third grader is quoted as reflecting several themes that students brought out when they talked about their grandparents: "Grandparents are people that are old and they treat you real well and they get lots of sores and stuff and have to take medicine. They will take you to the zoo sometimes and just let you walk around to see what it's like and take you to different places. Sometimes they'll travel to the south in the winter to get away from the cold. They sort of don't have any jobs. (What makes someone your grandpa and not someone else's

grandpa?) We're real close and maybe he's not with the other person, and we do lots of things together. We just ride around and play and have fun and go fishing on a boat sometimes, and leave everyone else alone."

Here is the response of an adopted child: "It means when I was first born, my mom adopted me and took me over to meet them and told them that they were going to be my grandpa and grandma. The first time when they were grandpa and grandma was when I was six, and the first time when I went to meet them, I was seven, and when I went to meet them, they became my grandpa and grandma."

Question 3B: Aunts and Uncles

Kindergarten: They're grandpas and grandmas; aunts are mom's children; confused aunt with grand aunt (several other students did too, not surprisingly given that most families use the same term for each).

First grade: People that your mom and dad know; they're your grandpas and grandmas (3).

Second grade: Your dad or mom's parents; your parents' cousins (2); people who adopt you.

Third grade: One third grader who was generally knowledgeable about other things was notably confused about aunt/uncle relationships: "When you're born, your grandparents pick two family members to be like aunts and uncles to you [Godparents]. (Earlier you mentioned your Uncle Steve. What makes him your uncle?) Well, I already had an aunt because Aunt Pat got married. I'm not sure if Aunt Pat married Uncle Steve after I was born, but she was already named Aunt Pat. (Why was she named Aunt Pat?) Because she is married to an uncle." [Student understood that aunts are married to uncles but was vague about the relationship to the niece or nephew.]

Question 3C: Cousins

Most definitions of cousins are well represented by the categories. Many students indicated that cousins were older, although a few suggested that they were younger. Most, however, spoke of them as similarly aged playmates, whether or not they understood that a blood relationship is involved. One second grader said that cousins are kids who are related to you when you are grown up, and several others had similar responses.

One commonly described type of family member (variously identified as an aunt or uncle, cousin, or step-sibling) was a brother or sister who had grown up and left the family home but had not yet married and started a family of his or her own. These individuals were confusing to the students because they were neither moms/dads nor children (in the sense of children living within a nuclear family household).

Question 3D: Step-siblings

Many students understood this relationship clearly from personal experience, whereas many others had no idea and some struggled to define the relationships involved.

Kindergarten: Says that she has a very young brother who is "not really steppish" yet [i.e., not yet able to walk]; part of your family that doesn't live with you—you acquire them because relatives adopt other children; family members who lived long ago and are dead—they are our family and we love them a lot and we go to their funerals when they die; step-brothers and step-sisters are mean [Cinderella].

First grade: Other people in the family that you are not related to; a grown-up brother or sister died, then you would have another; they don't live with you; grown-up siblings who don't live with you but are not married yet; they are mean; they are your friends, but like sisters; your parents didn't want you anymore so they gave you to someone else [adoption].

Second grade: People who live with you.

Third grade: People who are adopted into a family; people who are not really related to you but help take care of you if you get adopted.

Discussion

Our findings generally parallel those of previous investigators in showing that knowledge of kinship relationships develops gradually across the age range studied, with the younger students primarily emphasizing social ties among the people involved and the older ones beginning to learn about genealogical or legal ties. Our findings elaborate on earlier ones by indicating that the legal relationships are even more difficult and confusing for students than the genealogical ones. Unless they could speak from direct experience, the students had difficulty talking about adoption or step-sibling relationships.

Attempts to teach young children about these kinship relationships can get complicated, especially in contemporary times when we want to define "family" broadly enough to encompass the many alternatives to traditional nuclear families (husband, wife, and their children). The key idea is probably that most kinship relationships are genealogical ones that persist through marriages, divorces, or other changes in household make-up or location. That is, children who share the same parents are brothers and sisters regardless of whether their parents are or ever were married, their parents' parents are their grandparents, their parents' siblings are their aunts and uncles, and so on, regardless of whether or not their parents stay together. These kinships are based on blood relationships and remain in place whether or not the people involved live together, see one another frequently, or even like each other.

Perhaps depending on the family relationships represented by students in the class, teachers will have to make decisions about whether and how to address some of the more complicated kinship relationships when teaching about families (e.g., whether to identify and distinguish between half-siblings and step-siblings). Similarly, the teacher will have to decide

how much emphasis to place on formal marriages, adoptions, and other legal proceedings in teaching about what previous investigators have called legal kinship ties. These same ties often exist de facto when people with children begin living together, and especially when they establish a lasting union that would qualify as a common-law marriage. Other complications are introduced by divorce or separation, especially when the family has been stable for some years. The terms "ex-wife" and "ex-husband" are in common use to describe former marital relationships, but we do not have commonly used parallel terms (e.g., ex-step-brother, ex-aunt) to describe people who are not blood relatives but are blood relatives of one's former step-parent. Yet, these relationships (or at least, friendships that originated in these relationships) often persist in children's lives.

Perhaps the simplest solution is to ignore or downplay marriage certificates, adoption papers, and other legal aspects of family relationships and instead explain the bases for two general categories of kinship relations: genealogical relations (blood relatives of one's biological parents) and step relations (blood relatives of one's step-parent), making the point that the former relationships persist through changes in marital relationships or households, but the latter relationships can be severed through divorce or separation (although personal friendships and a subjective sense of kinship may persist).

The response categories for kinship definitions showed strong and consistent relationships with grade level, with younger students emphasizing proximity, affective ties, and support as the bases for family relationships but older students beginning to emphasize blood relationships. Girls were more knowledgeable than boys in defining grandparents, aunts/uncles, and cousins.

Changes in Family Size

Questions 4 and 5 asked how families can get bigger or smaller over time

Question 4A. The number of people in a family can change over time. Sometimes families get bigger. How might a family get bigger? . . . What is another way that a family might get bigger?

Question 4B. How do families' needs change when they get bigger?

Question 5A. Sometimes families smaller. How might a family get smaller? . . . What is another way that a family might get smaller?

Question 5B. How do families' needs change when they get smaller?

All but 13 of the students were able to explain how families can get bigger. A heavy majority (71) of them mentioned the birth of new babies. In addition or instead, students mentioned adoption of new children (16), marriage (15), addition of new pets (10), acquisition of step-siblings (6), and 19 "other" responses (e.g., inviting or allowing someone to live with you, such as an elderly relatively or a person who is currently destitute; gaining more cousins or other extended family members).

Despite this general accuracy in understanding how families can get bigger, almost half (43) of the students could not respond to the follow-up question about how a family's needs change when it gets bigger. The only common response, made by 46 students, was to say that the family would need a bigger house, more food, more clothing, and so on. In addition or instead, 23 students suggested "other" needs, such as bottles or diapers for a new baby.

The students also found it easy to talk about how families can get smaller, although a sixth (16) of them were unable to respond to this question. The remaining students suggested that families can get smaller when someone dies (53), when there is a divorce or separation (26), through normal moving out by children who grow up and leave for college, work, or marriage (27), by traumatic moving out that occurs when a family member runs away, wanders off and gets lost, discovers that he or she is in the wrong family due to some mix up in identity, and so on (12), or for other reasons such as loss/expulsion of pets or parental decision not to have any more children (9). Again, however, despite their ease in talking about reasons why families might get smaller, more than two-thirds (67) of the students were unable to say how a family's needs would change when it got smaller. The remaining students said that the family would not need as much living space, food, clothing, and so on (19) or gave "other" responses (12).

Overall, the responses to Questions 4 and 5 indicated that most students were well aware of common reasons why families get larger or smaller, but they had difficulty identifying ways in which these changes would affect the families' needs (beyond the obvious change in the amounts of food, clothing, etc. required). The following examples from average-achieving boys and girls are representative of responses from students across the four grade levels.

Kindergarten

Jered

4A. Cause people get babies. (Are there any other ways that families can get bigger?) I don't know.

4B. Because the more birthdays you have, you get bigger and bigger and bigger.

5A. Well, I have tons of people in my family. I know how they do it. The family gets smaller because a lot of the people died already. (What is another way that a family might get smaller?) Get shot by a gun or something.

5B. It's a little bit quieter in the house and . . . I forget.

Kate

4A.. Have more babies. Get more pets. It makes a larger family.

4B. I don't know.

5A. By having a baby. (Is there any other way that a family could get smaller?) By getting different things and by taking all their things out and selling them for sale.

5B. I don't know.

First Grade

Chris

4A. You have to eat food. (How could the number of people in a family get bigger?) If they have more babies and you have more pets.

4B. They have to go to college and make money. (You told me that a way a family could get bigger is if they had more babies. If a family had more babies, would the family . . . the things that the family needs change?) Yeah. (What would they need?) They would need money. (Would they need different things if more people joined the family?) No, because they have too much and there's no more room.

5A They stay small. (How could the number of people in a family get smaller?) I don't know.

5B. They don't need to change when they have a baby because babies don't know what to do with the money. (Would the family need different things if the family got smaller?) Yeah. (What would they need that would be different?) They need toys if they had a baby.

Lauren

4A. That made me have a bigger family. Usually we're like a little family, but when my dad came in . . . he was my step-dad—my real dad's in jail, so when my step-dad came, that made it a bigger family. (OK, that's one way families can get bigger.) Yes, or a mom can do that. (What's another way a family might get bigger?) There's a lot of answers for that one. If your grandma breaks up with someone and goes to someone else, that makes it a bigger family. If your aunt does the same thing, that makes it a bigger family, and if your uncle does it, that makes it a bigger family. (Can you think of other ways you can get a bigger family?) Cousins do it. That makes it a bigger family, and step-sisters do it when they grow up—that makes it a bigger family . . . and step-brothers. That's it.

4B. Needs of the family? (Yeah. What are some of the things that families need?) Food, cars, bikes. (So how do they change when the family gets bigger?) You have to get more and more and more, and once you run out of food and you don't have any more and you don't have any money, then you're poor.

5A. That's if your dad, uncle, aunt, grandpa breaks up and doesn't want to go back with them, that makes it a littler family. If your mom goes away from your dad and doesn't

want another family, then she'd take her kids. She wouldn't want to leave them so they'd just be stuck in another family.

5B. It takes some of their food, . . . they take all of their food, they take their furniture, and they also take everything you have—even the kids' toys.

Second Grade

Mark

4A. You might have another brother or something or your mom and dad's sister or brother might have another baby.

4B. When they get bigger, they need bigger clothes and stuff, and they have harder work and stuff. (You told me that one of the ways a family could get larger in number was if it had a new baby. OK, if the family got larger in number and there were more people in a family, would their needs change?) They would use more money because they would have to buy the baby new clothes and stuff, and sometimes you have to buy other things for your house because when the baby is like two, you like to give them stuff and they break stuff.

5A. When somebody dies or goes away from home and stays and doesn't come home.

5B. They don't use much money and stuff and they don't have to buy that much clothes and stuff, and they can keep more money and they can just . . . they don't have any kids or something and their family is really small and they can do whatever they want without their kids whining or something.

Emily

4A. Having more babies. (OK, can you think of another way?) Go to the orphanage and get more children. (Can you think of another way a family could get bigger?) Getting dogs and cats.

4B. They do more work. (Would families need different things if more people joined the family?) Yeah, they need more toys for the baby, the children—and some clothes.

5A. People dying. (Can you think of another way families get smaller?) They might not want to be in the family no more and run away. (Can you think of another way?) Like a grown up walked out of the family and change his or her name, and they get married to a different person.

5B. I don't know.

Third Grade

Dale

4A. Like with babies—newborn babies. They'll get everything—all the attention. When the grandpas come over and there's a new baby, they get all the attention and the kids usually don't get any of the attention. Our baby just came in. (How else could a family get bigger?) Maybe with dogs because they're like a pet, if your dad's not allergic. You'd get like a dog—something that would take care of itself.

4B. If there's a new baby in the house, probably they will get all the attention. (But how does what the family needs change?) They probably need food for the baby. They'll probably forget me a little.

5A. Cause people die sometimes in our family, like my grandpa dies. I still miss him, too. Another person died too. My grandpa died and another person who was smoking—his lungs got gas in them and he just died. Probably the gas got into him and made him just pop, and you can die. (What is another way families can get smaller?) It gets smaller sometimes like when some people move out when they get divorced. They fight sometimes and they get divorced automatically.

5B. Usually babies get all the attention and they'll probably forget me. They'll probably forget me totally, so that's probably why. I'd probably have to sleep on the couch and the baby has to sleep in my room if we don't have enough room. Because he has to sleep in a crib, so where do I put my bed and all that stuff?

Chelsea

4A. Like your mom or dad has a kid and the mom and dad's kid has a baby and the baby's grandparents are your mom and dad, and then they got babies, and then the other one could have babies and they could keep going and going and going. (Can you think of any other way that a family could get bigger?) Like if I grow up and marry somebody, then their family gets that big.

4B. Like when they grow really super old and they need people to help them more often. (When families get larger, do the things that they need change?) Yeah, it changes . . . it sort of changes . . . like they need more food and more food and more food, and they need more house room, and the kids need more space to play.

5A. Maybe somebody might go to the hospital and they might die maybe, and it would get smaller. Maybe somebody might leave the family.

5B. It's not as much as it used to be . . . they don't need as much money . . . the kids don't need as much stuff as they used to.

Grade Level Differences

Most of the response categories for these questions showed significant relationships with grade level. In each case, the younger students were more likely to be unable to respond to the question and the older students more likely to provide the most sophisticated responses (birth or adoption of new children will increase the size of the family and increase their needs for living space, food, clothing, etc. as well as create needs for new things such as baby clothes; families may shrink due to death, divorce/separation, or normal/traumatic moving out, and this will reduce the family's need for food, clothing, etc.) In addition to these predictable relationships, there were three other significant relationships with grade level. One was a negative relationship indicating that younger students were more likely than older ones to supply "other" explanations for how a family might get smaller. The other two significant relationships were nonlinear ones, one for stating that a family can get bigger through marriage and the other for supplying "other" explanations for how families' needs change when they get smaller. Overall, the grade level data for this set of categories indicate clearly that the older students tended to provide more sophisticated responses to Questions 4 and 5 than the younger students did.

Achievement Level and Gender Differences

The 19 categories for responses to Questions 4 and 5 yielded 16 significant relationships with grade level, but only 10 with achievement level and one with gender. Seven of the relationships with achievement level were linear ones indicating that the lower achievers were more likely to be unable to respond to these questions and the higher achievers more likely to supply sophisticated responses. The achievement level differences generally were parallel to, but weaker than, the grade level differences. There also were three nonlinear relationships with achievement level: Average achievers were more likely than other students to mention new step-siblings as one reason for gain in family size and to mention traumatic moving out as one reason for loss in family size. In addition, the average achievers were less likely than other students to mention "other" reasons for a drop in family size.

The only gender difference to reach statistical significance occurred because 11 boys but only five girls were unable to respond to the question about why families might get smaller. Other differences that approached significance were mixed in direction, some favoring girls but also some favoring boys. Overall, there was little gender difference in responses to Questions 4 and 5.

Relationships Among Response Categories

Students who said that families can get bigger through marriage were more likely than other students to say that families can get smaller through divorce or separation. Students who said that families can get bigger through birth of a new baby were more likely than other students to say that families can get smaller through death of a family member. Finally, students who said that families can get bigger by adding new pets were more likely than other students to say that they can get smaller through loss or expulsion of a pet.

Students who said that when families get bigger they need more food, clothing, and so on were more likely than other students to say that when families get smaller they need less of these things. Similarly, students who identified "other" needs that change when families get bigger were more likely than other students to identify "other" needs that change when families get smaller. In general, there was a tendency toward parallelism in the ways that students responded to the questions about families getting bigger and the ways that they responded to the questions about families getting smaller. Otherwise, the only noteworthy intercorrelations involving these response categories were relationships between the more sophisticated responses and the maturity set for the interview as a whole.

Rare and Unique Responses

Question 4A: Reasons why a family might get bigger

The categories accommodated everything said in response to this question except for statements by a kindergartener who said that if someone died, you might want to replace them with more people; a second grader who suggested that a family might be nice to people so that they would want to come and live with them; and a third grader who said that the family might discover previously unknown relatives.

Question 4B: How needs would change if a family got bigger

Most students could not respond beyond stating the obvious (that the family would need more food, clothing, etc.). Most of the remaining students talked about the addition of a baby and then went on to talk about needing special baby food, toys, clothes, etc.

Kindergarten: There would be more people to care for and kiss good night.

First grade: The family would have to accommodate a wider range of preferences in brands of cereal, etc. (several other students made similar responses).

Second grade: None.

Third grade: None except for Dale, the student quoted earlier whose family recently had a new baby and who was feeling neglected.

Question 5A: How a family might get smaller

Responses to this question were accommodated by the categories except for those of a second grader who suggested that a family might not be able to afford a child and would put the child up for adoption; a second grader who said that the family might take its dog and "throw it out in the street;" a third grader who talked about a child getting adopted "because nobody really wants them;" and a third grader who talked of a child being taken to an orphanage.

Question 5B: How family needs change when a family gets smaller

Most responses were accommodated by the categories except for those of a kindergartener who spoke of having fewer people to take care of and kiss good night; a first grader who spoke of needing to serve only a narrower range of preferences in cereals, etc.; and a third grader who thought that the family would have more money following divorce (mistakenly assuming that fewer people would be sharing the same income).

Discussion

The students' responses to Questions 4A and 5A were accurate as far as they went and free of misconceptions. The reasons they gave for why families might get bigger or smaller generally paralleled those likely to be given by adults, except for the mention of pets and many of the descriptions of traumatic departures. However, the students were unable to generate many ideas about how family needs would change following an increase or decrease in family size, except for the most obvious answer that needs for food, clothing, and other resources would increase or decrease. No student noted, for example, that there might need to be a redistribution of chores and responsibilities, that a new baby might mean a change in working hours for one or both parents or a need to arrange for childcare during part of the day, or that the departure of a breadwinner might bring financial pressures. Thus, in these respects the students lacked an adult perspective on these questions.

Marriage and Divorce

Questions 6 and 7 asked the students to define marriage and divorce.

Question 6. What is marriage? (If necessary): **What does it mean to get married?**

Question 7. What is divorce? (If necessary): **What does it mean to get divorced?**

All but nine of the students were able to say something about what it means to get married, although only 11 made reference to the ceremony itself. Most students simply said that the people get married or take a husband or wife without being able to explain further (35) or that they would live together, form a family, or join each other's families (29). In addition, 13 students made "other" responses, typically referring to things associated with marriage (formal clothing, receptions, dancing, cake, kissing, honeymoons, etc.). In response to the follow-up question about why people get married, many students were unable to respond but 40 said that the couple like/love each other and 27 that they want children or that the wife is pregnant. A few mentioned other motives such as that the people do not want to live alone. Only 7 students included both a description of the marriage ceremony and identification of one or more motives for getting married (one kindergartener, one second grader, and five third graders).

All but 13 of the students were able to say what it means to get divorced, although only 9 of them referred to the legal papers or court actions involved. A majority of those able to respond (47) spoke of physical separation: the partners break up, decide to live separately, one moves away, etc. (without mention of dissolution of the marriage as such). Most of the rest (21)

did refer to marital dissolution: the partners get unmarried, are no longer married to each other, etc. More than a third (36) of the students were unable to identify a motive for divorce, beyond saying that the people did not want to live together or stay married anymore. Motives identified by the remaining students included hostility or violence (the couple had a fight or one was mistreating or abusing the other) (33) and incompatibility (the spouses were not good for each other, had different needs and interests, were not meeting each other's needs, etc.) (18). In addition, 11 students made "other" comments about divorce. These included the desire to be free to marry someone else as a motive for divorce (4) along with comments such as that after a divorce (and presumably, remarriage) you have two moms and two dads or you alternate houses.

All of the common responses to these two questions were accurate and did not involve misconceptions, although a few of them took a child's rather than an adult's perspective on marriage or divorce (e.g., focusing on the wedding cake, dancing or kissing, or having two sets of parents and alternating houses following the divorce). The following examples from average-achieving boys and girls are representative of the responses from the students across the four grade levels.

Kindergarten

Jered

6. I don't know.

7. I don't know.

Kate

6. Marriage is when you get in love. (What does it mean to get married?) I don't know. (Why would people want to get married?) So they could have a baby.

7. Divorce means you're not in love. (What does it mean to get divorced?) To get love.

First Grade

Chris

6. Someone likes you and then you get married. (Why would people want to get married?) I don't know.

7. When they get in a fight and someone lives somewhere else. (Can you think of anything else it would mean to get divorced?) If someone didn't want kids because kids break stuff, so the mom or the dad could have it.

Lauren

6. Marriage is when you get married to somebody . . . a mom and a dad get married to somebody. That's when they have a honeymoon and celebrate and all that stuff. (What does it mean to get married?) It means when they do stuff together and it means you have to be nice and try not to break up and get a divorce with the one you're married to.

7. Divorce is when you break up, and then your mom and your whole family is not with his family. If you dad breaks up with your mom, then your dad's family is not with your mom's family. (What does it mean to get divorced?) It means you have to go to a court and get divorced. You go to a court and you won't be married anymore and you won't be with each other anymore and you probably won't see them anymore.

Second Grade

Mark

6. Marriage is when a girl or a guy can get married and then a couple of days later, they like have a baby. (What does it mean to get married?) You somehow start to get married to get other. (Why would people want to get married?) Because they want a child and they have to get married.

7. Divorce is when somebody is starting to get really angry because they get yelled at and stuff. He gets in a lot of arguments and he doesn't like it and he keeps on saying, "Stop it," and arguments keep on happening, and he doesn't want it to happen anymore so he'll go away so it won't happen ever again. (What does it mean to get divorced?) When you get divorced you're alone and stuff.

Emily

6. So you can have a husband or a wife. (Why would you want to do that?) So you can have a baby.

7. Divorce means that when you're broken up, and you yell at each other. That's what my dad and mama did.

Third Grade

Dale

6. Marriage is when you love somebody and you really love them and you think they look pretty and you usually marry them because you like them and love them. (What does it mean to get married?) Like being loved by somebody, like if you love somebody . . . and sometimes they have the same names.

7. Divorce is like usually when they fight and they sort of get mad at each other. They just get mad and don't feel like loving each other anymore, usually. (What does it mean to get divorced?) I just know that the girl doesn't love them anymore, and she's like mad because she probably got hit or something and they guy got hit too so they're probably mad at each other.

Chelsea

6. It's like when you're about 21 or something and you love somebody and you like really love them very much and you get married.

7. It means like if you're really mad at each other and you don't want to see them anymore, you just call this one therapy guy and you sort of get these divorce papers and you see each other no more, and if you have kids and stuff, some people have them on the weekdays and some people have them on the weekends, and sometimes the dad has weekends and the mom has weekdays—something like that.

Grade Level Differences

Younger students were more likely than older students to be unable to respond to these two questions, and older students were more likely to give most of the more sophisticated responses (describing the marriage ceremony, defining divorce as marital dissolution, mentioning court actions involved in divorce, or making "other" statements about divorce or its consequences). In addition, older students were more likely to be coded in the "motive unexplained" category, typically for saying that the couple wanted to get divorced simply because they didn't want to stay married anymore. We were somewhat surprised by this positive relationship with grade level because we viewed the "motive unexplained" responses as somewhat less sophisticated than some of the alternative responses, particularly the "incompatibility" response. However, that response showed no significant relationship with grade level (but an almost significant nonlinear relationship). The remaining divorce motive category (hostility or violence) did show a significant nonlinear relationship, being coded more often for first and second graders than for kindergartners or third graders. Two other categories for these two questions also showed nonlinear relationships with grade level: saying that marriage means to get married without explaining further and saying that divorce means physical separation of the partners (without mention of dissolution of a marriage). Overall, grade level differences were less clear and prominent in this set of responses than they were for most other sets, despite the high percentage of response categories showing significant relationships with grade level.

Achievement Level and Gender Differences

The 15 categories for responses to Questions 6 and 7 showed 10 significant relationships with grade level, but only 1 with achievement level and 3 with gender. The achievement level difference occurred because higher achievers were more likely than other students to mention "other" things associated with marriage.

Two of the gender differences occurred because more boys than girls were unable to respond to each of these questions. Consequently, most of the differences in coding for substantive responses favored the girls, significantly so for one of them (identifying incompatibility as a motive for divorce). Overall, more girls than boys were able to make substantive statements about marriage or divorce.

Relationships Among Response Categories

Students who were able to define marriage only to the extent of saying that people get married or marry someone were more likely than other students to define divorce simply as physical separation of the partners, without mention of dissolution of marriage. Students who described the wedding ceremony were more likely than other students to also mention "other" things associated with marriage (reception, cake, honeymoon, etc.). Students coded for "other" comments about marriage frequently were coded in "other" categories for other questions on the interview, indicating that they tended to give lengthy and detailed responses to our questions. Students who made "other" comments about divorce or its consequences were more likely than other students to have made "other" comments about how families' needs change when families get smaller and to answer Question 10 by saying that parents today want fewer children because it is more difficult to have or care for children now than in the past. It seems likely that more of these students had had direct experience with divorce and its consequences, and perhaps also that some of them blamed themselves at least in part for their parents' divorce. However, these students also were more likely than other students to be coded in "other" categories across the interview, so for many of them, these idiosyncratic statements about divorce and its consequences may have been nothing more than part of a more general trend to make idiosyncratic comments about all of the topics addressed.

Rare and Unique Responses

Question 6: What is marriage?

Although most of the students were able to make some response, the students had surprising difficulty with this question, seldom being able to give details about the marriage ceremony or what is involved in getting married. Even those who were coded for references to the marriage ceremony only made vague references—none of them used terms such as "love, honor, and obey," for example. The modal response was that people get married because they love each other and/or want to have children together, with little specificity about what is actually involved in getting married.

Kindergarten: None.

First grade: After they get married they have the same last name; described marriage and divorce accurately but mixed up the two terms; described the marriage proposal. The following first-grade girl is quoted for her "female" point of view: "It means that they live together and talk about mushy stuff. Yuck! And kiss—Yuck! (Why would people want to get married?) Because they love each other. Yuck!"

Second grade: Marriage means a lot more responsibility; a guy and a girl get married and a couple of days later, they have a baby; describes the marriage proposal; says that people get married because it would be against the law to do otherwise, adding that "you can either get a girlfriend or have a wife."

Third grade: After they get married they have the same last name (2).

The following third grader is quoted for the most complete response: "It's when a boy and a girl love each other, and what they do is, they decide on marrying each other and they answer those questions and they kiss. (What does it mean to get married?) That the man will treasure the woman forever and the woman will treasure the man forever and they will just love each other and care for each other until they die."

The following third grader is quoted for his "male" point of view: "You meet a girl or something and you start dating and you're like 20 years old and you go to this big sort of like a funeral, but no one's dead. And you like walk down the aisle with your bride and you do all this word stuff. Then you give her the ring and then you can kiss [makes disgusted face]."

Question 7: What is divorce?

Kindergarten: You get in trouble.

First grade: One wants children, the other doesn't.

Second grade: A brother or sister that you had would become a step-brother or step-sister because your parents got divorced; maybe there was a reason they had to get divorced but they didn't want to do it.

Third grade: They might still live together if they're not married anymore; you call this therapy guy and get those divorce papers.

Discussion

The students' comments about marriage and divorce were generally accurate and free of misconceptions, although sometimes focused on the child's rather than the adult's point of view. Their main focus was on the idea that a couple likes/loves each other and therefore wants to live together as the reason for marriage, and that the couple has grown apart or had a fight as the reason for divorce. Most of the students did not mention either the legal papers/ceremonies involved in marriage or divorce or the desire to have children and raise them within a family as a motive for marriage. No student specifically said that the actions of the children were the reason for divorce, although there were indirect hints that a few of them had something like this in mind. Few students mentioned court proceedings or legal papers, and none distinguished between formal marriage and informally living together (common law marriage), although one second grade was under the impression that the law required a man to have either a girlfriend or a wife (but not both, apparently).

These results suggest to us that students in these grades would benefit from instruction on marriage and divorce. In particular, they might be taught something about the vows that people make as the heart of the marriage ceremony, a little bit about the legal ramifications of marriage and divorce, and the idea that growing apart/incompatibility is the usual reason for separation or divorce (in part simply as information but also as inoculation against a tendency to think that hostility, violence, desire to marry someone else, or the actions of the children are typically involved).

Family Life in the Past and Present

The next series of questions asked the students to make past vs. present comparisons concerning family life in general and the roles/activities of fathers, mothers, and children. We were interested in any aspects of what they might be able to say about this topic, but especially in the degree to which they were aware that in the United States in the past (and still in many parts of the world today), most people lived on farms in extended families that functioned as economic as well as social units, whereas in modern industrialized countries, most people live in much smaller nuclear families in cities and suburbs. We also wondered whether students were aware that in the past families tended to be large because children were useful resources (as additional farm workers) and because many of them died in infancy or childhood.

Question 8. In what ways are families these days different from families in the past? . . . What are some other differences? . . . Any others?

Question 9. In what ways are families these days the same as families in the past? . . . How else are families the same as they always were?

Question 10. In the past, most parents wanted a lot of children, but these days most parents want only a few. Why is that?

Question 11A. Everyday life has changed for mothers, fathers, and children. What do mothers do? (Continue to probe until student can no longer respond to the original question, then ask the following more specific probes.)

Question 11B. What did mothers in the past do?

Question 11C. What did mothers in the past spend a lot of time doing that today's mothers don't do? . . . What do today's mothers spend a lot of time doing that mothers didn't do in the past?

Question 12A. What do fathers do? (Continue to probe until student can no longer respond to the original question, then ask the following specific probes.)

Question 12B. What did fathers do in the past?

Question 12C. What did fathers in the past spend a lot of time doing that today's fathers don't do? . . . What do today's fathers spend a lot of time doing that fathers didn't do in the past?

Question 13A What do children spend their time doing? (Continue to probe until student can no longer respond to the original question, then ask the following specific probes.)

Question 13B. What did children in the past spend their time doing?

Question 13C. What did children in the past spend a lot of time doing that today's children don't do? . . . What do today's children spend a lot of time doing that children didn't do in the past?

Question 14. These days, most kids live with just parents and brothers or sisters, but in the past, they often lived with their grandparents, aunts, uncles, and cousins too. Why did things change?

Question 15. In some other countries, even these days, most kids live not only with parents and brothers and sisters, but also with their grandparents, aunts, uncles, and cousins. Why is that?

Question 16. When have kids spent more time with their parents—these days or in the past? Why?

Question 8 proved too difficult for the students. Only six of them generated valid responses to it—too few to analyze statistically. Consequently, no information about responses to Question 8 appears in Table 1. Almost half of the students were unable to respond to the question, and most of the rest drew past vs. present comparisons in general life conditions rather than in factors specific to families or family living (e.g., we have more or better food, clothing, and shelter today than in the past, inventions have improved communication and transportation, we have television and other forms of entertainment, etc.). A few students made vague or questionable responses (e.g., in the past, grandparents loved their children but then moved away; in the past, all of the sons in the family had the same first name). The six relevant and accurate (or at least supportable) statements contrasting families in the past vs. the present included: a kindergartener's statement that families today are more spread out geographically; a second grader's statement that some people were not allowed to marry in the past (apparently thinking about racial barriers); and third graders' statements that there is more divorce today, that "coloreds" now can be families too (i.e., black people now are allowed to marry), and that medical treatment and delivery of babies now is done by doctors in hospitals rather than at home by family members (2). No student said anything to the effect that families were larger in the past, that extended families worked together on family farms, or that many children failed to survive to adulthood.

About 40% (39) of the students were unable to respond to Question 9 (asking about ways that families today are similar to families in the past). In addition, 37 students made responses that drew comparisons between past and present life, but were not specific to families as such

(e.g., people still need food, wear clothing, etc.). The students who were able to draw past vs. present comparisons concerning families or family living focused on family composition (families still consist of father, mother, children, grandparents, etc.) (10), basic family characteristics (people still live in families, family members still love and support one another and share traditions, etc.) (9), stage phenomena (babies are still born and raised in families, then leave to establish their own households, older family members eventually die, etc.) (7), or "other" responses (family members show physical resemblances, etc.) (6). Only 29 students were coded for one or more of these responses that identified similarities in families or family living.

Concerning why most parents want fewer children today than parents in the past did, 32 students were unable to respond and 42 gave responses that did not include past vs. present comparisons (e.g., statements that taking care of children is a lot of work, that children clutter up the house with their toys, and so on). Only 22 students drew one or more past vs. present comparisons on this issue. These included 9 who suggested that it cost less to have or care for children in the past, 7 who suggested that it was easier to have or care for children in the past, and 7 who made "other" suggestions.

Question 11A asked about the everyday activities of contemporary mothers. All of the students were able to make at least some relevant response to this question (this was one of the few instances in which this occurred in any of our interview studies). Majorities of the students mentioned birthing/caring for children (76) and housework and household maintenance (65) as mothers' activities. In addition, students sometimes also mentioned working in paid jobs outside the home (41), relaxation and recreation (27), and "other" activities such as acting as head of the family, volunteering at school, or doing "girl stuff" (7). More than a third (35) of the students were coded in three or more of these categories.

Question 11B asked about the activities of mothers in the past. Here, almost half (42) of the students were unable to respond. Those who did respond mentioned activities similar to those mentioned for mothers today, although in different proportions: housework and household maintenance (35), birthing and caring for children (26), paid work outside the home (7), and "other" activities (17), including three mentions of relaxation and recreation. Thus, the students knew less about the activities of mothers in the past than in the present, but those able to respond knew that mothers in the past were less likely to have paid jobs and had less time for relaxation and recreation.

Question 11C focused on these differences more particularly by asking what mothers in the past spent time doing that today's mothers don't do, and vice versa. Here, 38 students were unable to draw relevant past vs. present comparisons. However, the others suggested that today's mothers are more likely to work outside the home (17), said that either mothers in the past (13) or mothers today (11) have more work to do and thus less time for leisure or spending with children, named at least one other thing that distinguished mothers in the past (had to make their own baby food, worked at growing crops, hand-washed and hung laundry, etc.) (25), or named at least one thing that distinguishes today's mothers (volunteering at school, working in a modern office rather than a primitive job shop, etc.) (22). All of the common responses to these questions can be seen as accurate or at least defensible, particularly if we take into account that

some of the students were thinking about mothers who have jobs outside of the home when answering these questions, but others were thinking about mothers who do not have such jobs.

Question 12A asked about the activities of today's fathers. Only one student was unable to respond to this question. Activities identified by the remaining students included working outside the home/making money (65), caring for/helping/teaching children (40), household chores (34), relaxation and recreation (34), activities associated with the traditional male role (heavy lifting, playing sports or rooting for sports teams, cooking on the grill, mowing the lawn, household repairs, drinking beer, etc.) (30), playing with children (20), disciplining or punishing children (6), and "other" activities (6). Forty students were coded for at least three of these categories.

Question 12B shifted attention to the activities of fathers in the past. Once again, the students found this shift difficult: 37 of them were unable to respond, although 13 mentioned household chores, 11 mentioned caring for/helping/teaching children, 8 mentioned working outside the home to earn money, 7 mentioned relaxation and recreation, and 33 mentioned "other" activities such as working on the family farm, building the family's log cabin, trading with Indians, etc.

Question 12C asked for specific comparisons between the activities of fathers in the past and fathers today. Here, 39 students were unable to generate such comparisons, and there was disagreement between 21 students who said that fathers in the past spent more time working and had less time for family or leisure activities, and 10 students who said that this was more true of fathers today. Other responses to Question 12C included statements that today's fathers work in offices or do other modern jobs instead of working as farmers or blacksmiths (20), other valid comparisons (fathers watch more television today, mow lawns, and take their children to parks) (19), and invalid or questionable comparisons (fathers play in the snow more today, fathers get married more today than in the past, fathers in the past worked more as janitors or policemen) (9).

The students' responses to all of the parts of Questions 11 and 12 were coded for whether they drew clear distinctions between the roles of mothers and fathers (vs. indicating overlap in their activities). This coding indicated that almost half (43) of the students drew clear gender role distinctions.

Question 13A asked about the activities of today's children. Here again, only one student was unable to respond. Furthermore, all 95 of the other students said that today's children spend some of their time playing, relaxing, or sitting around watching television. Play, relaxation, and television viewing were the only activities mentioned by 35 of these 95 students, but 49 of the others mentioned homework and other school-related activities and 22 mentioned chores such as taking care of one's clothing or room.

When asked (Question 13B) about the activities of children in the past, 28 students were unable to respond. The remaining responses paralleled those for Question 13A, but with lower frequencies. This time, 42 students mentioned play and relaxation activities, and these were the only activities mentioned by 23 of them. In addition or instead, 15 students mentioned school or

school-related activities and 35 mentioned chores. Comparisons of responses to Questions 13A and 13B indicate that the students viewed children in the past as spending more time on chores but children today spending more time on school-related activities and play and relaxation.

Question 13C focused on these issues more directly by asking for comparisons between children's activities today and in the past. Here, 26 students were unable to respond, but the others said that children today have more time for play or recreation (30), as well as modern toys, games, and sports equipment (28). A third (32) of the students made comparisons relating to school. Most said that children in the past did not go to school or did not attend for as many months of the year as modern students. However, a few said that children in the past went to school all year round, and a few made comments about differences in schooling other than the time spent there (e.g., that children in the past went to one-room schools or were home schooled). Eight students made "other" comments that were valid or at least defensible (e.g., children in the past had to play with dusty things, had adventures in the woods, gathered firewood, and fewer had less opportunities to visit relatives; children today take camping trips, visit their (divorced) dad, and swim in a swimming pool instead of a swimming hole). Finally, eight made responses that were invalid or questionable (e.g., children in the past had no toys, buried food in the fire, or had more time to play). Most students took the view that children in the past lived a life of chores and drudgery but today's children have lots of time for play and recreation and lots of modern toys and games to use.

Question 14 asked about the shift from a predominance of extended families in the past to a predominance of nuclear families today. Only 16 students were able to generate responses to this question, and none of them cited a drop in the percentage of the population living and working on farms run by extended families. Instead, the students suggested a variety of possible reasons, including the notions that people in the past didn't have enough money to buy separate houses so they had to live together, that they had older relatives who were sick and needed to be taken in, that they discovered that it is easier to care for a smaller family than a larger one, or that they were Indians and living in large families was their custom.

Question 15 asked about national differences in family size. This time, only 17 students were able to generate responses, and once again, none of these responses referred to a difference in the prevalence of family farms. Instead, the suggested reasons included notions such as that people in these countries have less money and can save money on housing and meals by living together, that help is available on site if a parent should die, or that family members live closer together in these countries than they do here.

Question 16 concluded this set by asking whether kids spend more time with their parents today or in the past, and why. A majority (52) of the students said that children spend more time with their parents today. Of the rest, 25 said that children spent more time with their parents in the past and 19 said that they didn't know or that there was no difference. Most observers would suggest that children spent more time with their parents in the past when they lived and worked on family farms. Of the 25 students who made this choice, 17 offered valid rationales for it (children didn't go to school then, they worked along side their parents on the farm, there was no child care or babysitting then, etc.). In contrast, only 10 of the 52 students who said that kids spend more time with their parents today offered a valid rationale (parents do not work as many

hours today, kids do not have to spend so much time doing chores, etc.). Most of these students could not offer any rationale for their choice. Finally, 10 students offered invalid or questionable rationales (e.g., parents in the past would go away to work for a week or two at a time and leave the children at home). The following examples from average-achieving boys and girls are representative of the responses from the students across the four grade levels.

Kindergarten

Jered

8. I don't know.

9. I don't know.

10. I don't know. Now there's more people in the world. (How would that make people think differently?) I don't know.

11A. They hug their children. (What does your mother do while you're at school?) Sometimes she goes to the dentist, and I don't know what else she does because I'm not at home to see what she's doing. (Good point. What does she do when you're at home?) Cooks dinner and cooks lunch, and . . . I forget.

11B. I forget.

11C. I forget. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) I don't know.

12A. My dad watches the football a lot, and hockey, but he mostly watches hockey and he also plays hockey, and he cooks dinner too, and lunch. That's all I think. (What do fathers do while you're at school?) I don't know. Feeds my little brother at lunch time.

12B. I don't know. (What did fathers in the past spend a lot of time doing that today's fathers don't do?) A lot of helping and a lot of work. (What sort of work did they do?) I forget.

12C. I don't know.

13A. Play with their toys and stuff and going to other places, and I don't know what else. Actually, I know one more thing. They go to the playground.

13B. Watching TV. (What did children in the past spend a lot of time doing that today's children don't do?) I don't know. Actually, I know—not going to school. (What did they do if they didn't go to school?) They did other things.

13C. I forget.

14. I don't know. Sometimes that happens, doesn't it. Some people get babies and stuff.

15. I don't know.

16. These days. (Why do you say that?) I don't know.

Kate

8. Because they were grown up. (Anything else that was different?) No.

9. I don't know.

10. I don't know.

11A. They help children. (How do they help children?) By feeding them, by taking care of them. I don't know. (What else does your mom do?) My mom takes care of me, she takes me shopping, and a lot of different things.

11B. I don't know.

11C. I don't know. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) Today? I don't know.

12A. Take care of their children and they go to work. (Anything else?) Takes care of his children and feeds his children.

12B. I don't know.

12C. I don't know. (What do today's fathers spend a lot of time doing that fathers didn't do in the past?) Not working and I don't know.

13A. Spend it at school. (Besides going to school, what do children do?) Stay home sometimes. (What do they do when they stay home?) Taking care of their family.

13B. Going to school and getting teached by teachers. (Anything else?) No.

13C. I don't know. (What do today's children spend a lot of time doing that children didn't do in the past?) I don't know.

14. I don't know.

15. Because. I don't know, but just because. (Do you have any ideas why that might be?) No.

16. These days. (Why?) I don't know.

First Grade

Chris

8. They get old. (Would life have been different for families a long time ago?) Yeah, like if you had a mom and she gets old and then it'll change. (How would it change?) I think she wouldn't look like your mommy.

9. You weren't even born and your grandma and grandpa aren't old, and they didn't even know about your mom and your dad. (How would that be the same?) I don't know.

10. I don't know.

11A. They work and they work in their office because my mom and dad have an office, and when someone is sick in school, their mom and dad can't go to work—they have to stay home so they have to try to remember in their office. My mom goes to work but she has to go to her office first before she goes. (What else do mothers do?) They make you go to sleep, and they make your breakfast.

11B. I don't know.

11C. I don't know. (Can you think of anything that mothers a long time ago might have done that mothers today wouldn't do?) They had to take care of the baby and she really wanted to go to the store and didn't go to the store because the baby would be alone. (Can you think of any other things that mothers a long time ago might have done?) No. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) Work.

12A. Fathers . . . they work more than moms because . . . I don't know. (What else do fathers do?) They give you medicine, they make you go to the bus stop and then you go to school because they want you to go to school.

12B. I don't know.

12C. Smoke, because my dad promised he wouldn't smoke, but now he's never going to do it again, cause he promised. (Can you think of things that fathers a long time ago did that fathers today don't do?) They drive too fast and they used to speed. (A long time ago?) My dad didn't, but some fathers do, but not mine. (What do today's fathers spend a lot of time doing that fathers didn't do in the past?) I don't know.

13A. Working at school . . . they work on handwriting. (What sort of things do you like to do?) I like recess and lunch, and that's the only thing I like because it's fun. (How about when you get home from school—what sort of things do you do?) I have to do my homework, but if I don't have homework I can color or read. (What else do you like to do after school?) I like to go to the after-school program that I'm going to because today's gym day. Tomorrow is movie day at the after-school program. But on gym day

my brother doesn't get gym day. But today I get gym at school and at the after-school program.

13B. I don't know.

13C. They don't do their homework. One time I didn't do mine so I had to read a book and then I had to do it. (What do today's children spend a lot of time doing that children didn't do in the past?) I don't know. (Is there anything that you can do now that children a long time ago, way before you were born, things that they couldn't do?) Yeah, because they jumped on the bed.

14. Sometimes your sisters don't live with you anymore because they're grown up. My mom has a sister and she knows a lot about computers.

15. I don't know.

16. These days. (Why?) Because . . . I forgot.

Lauren

8. There weren't very many houses, there weren't very many fish, nor very many animals. Before that there was dinosaurs and no people. (How is family life different?) There was fish but not that much fish; there were schools but not that much. It was a very small town and you didn't have many friends because there wasn't very many people. There wasn't that much food like there is now. Now there's more farms and more people and more food and more fish and everything.

9. Well, most people don't have an aunt and some people do. You have an aunt but if you don't have an aunt and you do have an aunt, it means that your aunt's dead but she's in heaven. Same thing with your aunt and uncle and everybody. (How are families the same as they used to be in old days?) There's people, but there's more and there's fish. There's the same things as there were in the old times, but there's more of it.

10. Maybe because when they did have a lot of children, they got mad because they had to chase them all the time and they had a lot of babies to feed. That's when you run out of food—when you have too much kids. So that's when they decide to have only two or one. (Interviewer repeats question) It was too much work to do and they'd dirty up all their dishes if they had a lot of children, and they'd have to wash it and there wasn't enough parents there to watch them, and in case she needs to go somewhere and they didn't have a dad, it would be too much. They'd have to take the kids with them and they'd have to take a little car, it would take too long. And they'd be squished.

11A. Well, they have to feed them, and they do feed them, and they give children a bath and when there was a lot of children and you wanted a lot of children, well that's why they only wanted a few children is because they didn't have that much bathrooms and there wasn't enough to give them all a bath at the same time. It'd take almost all day if

you had to do that. Now they have two or three or four. (It doesn't matter whether they have lots of kids or just a few kids. What sort of things do mothers do?) They cook, they work, they take care of their children every day, but sometimes their dad has to do it, and if they don't have a dad, then they gotta have a babysitter. That's the most important thing everybody has.

11B. (What did mothers do in the past?) A long time ago they had to do the same thing, but their houses were much littler and there wasn't as many schools, and the schools were much littler and there just wasn't enough rooms cause the house was littler.

11C. These questions are hard. Well, it's like if they babysat yesterday, they didn't today. It's like a pattern—if they babysat yesterday and didn't today, then again . . . but sometimes they have to do it two times and then not, but sometimes mothers don't babysit, or dads babysit or boys babysit that aren't even married. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) Sometimes they buy dogs. I'm going to get one today when my mom comes home from work. Sometimes they get a cat or a rabbit or a bird. Sometimes they even have to buy stuff for the children, like a birthday present. (Can you think of anything else that mothers today spend a lot of time doing that mothers didn't do in the past?) They have to buy a camp-out pack or they wouldn't have anything to put their stuff in. (So they do lots of shopping.) Yeah, lots of shopping. (Why is that different from mothers in the past?) I don't know, but I know something else about mothers. Mrs. M. had a baby.

12A. They do what mothers do. Sometimes they have to wash the kid because the mothers are going to do all that shopping and stuff, but sometimes the dads do all that and the moms have to watch the kids, but mostly my mom works every day except Sunday and Saturday, but my dad only works Monday and Tuesday so he spends a lot of time with me and my brother and sister.

12B. They would shop sometimes, they buy clothes for birthday presents and Christmas presents. My dad says he's going to buy furniture for my dollhouse. (Can you think of anything else that fathers in the past spent a lot of time doing?) No, not really.

12C. (Sometimes they don't work. Sometimes they have days off. But sometimes they don't even have a day off and that's bad because you don't get to spend a whole day with your kids.

13A. Going to school, getting dressed, taking a bath if they're old enough to get their bath water.

13B. I don't really know.

13C. Not taking a bath because they're late for school, or not going to school because they're sick, or not having a birthday. (What do today's children spend a lot of time doing that children didn't do in the past?) Going to school every Monday and Tuesday and Wednesday and Thursday and Friday—every day but Saturday and Sunday. In the

past they didn't have stuff like they have now. (What like?) Like toys or backpacks, because there weren't a lot of stores. There were just a lot of trees.

14. Well, maybe because your mom and your dad died or they just got sick and had to stay in the hospital for a while, or they were really sick and got dead or they got so sick they couldn't get better and the doctors didn't know what to do and they died.

15. I don't know.

16. These days. (Why?) Because in the past, they weren't there or they didn't have enough money or they had to be at work and they had to be at the babysitter's or they were in the hospital.

Second Grade

Mark

8. The houses were made different probably, and they didn't have action figures and stuff, and they didn't have cool shows on like Spiderman and stuff. (Did families do things differently, do you think?) Like if they wanted to go out and get butter they could either buy it or they could make it, and these days it's really hard to make.

9. You still get to ride bikes and drive cars and stuff, and you still get to have a house, and you still get to watch cartoons and they didn't have cartoons as good as these days.

10. Because back then, probably the kids weren't as pouty and whiny as they are and stuff, and these days they do that a lot because they have more cool toys and stuff and there's more really cool shows on and a lot of other stuff.

11A [No response] (What does your mother do?) She works until five o'clock so she can save some money to go to Disney World, and my dad does that except he doesn't stay at work that long. He stays at work I think from like seven at night until 8:30, and my mom gets up at 8:00 and gets around and stuff and she gets home around 5:30 or 5:00. (What else does your mom do?) On some days instead of coming straight home . . . like when I was six she used to just come straight home, but now these days it takes a long time to get home because before she comes home, she goes shopping.

11B. I don't know.

11C. Probably some moms in the past didn't go to office buildings and work and stuff, and they probably didn't have to do as much work and stuff. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) They probably spend a lot of time working these days and stuff.

12A. . They probably do harder jobs than moms do, like men do a lot of building and stuff. (What does your dad do?) My dad, on Sundays, he runs the vacuum and stuff, and my mom on Sundays is a Sunday school teacher.

12B. They probably mostly did gathering up lumber and stuff to make fires.

12C. They spent a lot of time working and stuff and they mostly get things ready, probably like getting the lumber ready and stuff, to carry inside and if their son was around too, they could help the dad probably. (What do today's fathers spend a lot of time doing that fathers didn't do in the past?) I don't know.

13A. Playing with toys and stuff. (What do you spend your time doing?) I spend everyday, if we're not going somewhere, like every single day if I'm home and my friend's home, then we play with each other. The only time we don't play is if he's not home or I'm not home. But all the other days that he's home and I'm home, we always play together. (What sort of things do you play?) We pretend we're skydivers, and we pretend we're divers and we swing real high and then jump off into the grass. Sometimes we have weapons and stuff because we pretend we're fighting like bad guys or wrestling sharks or something. (Anything else you do besides play?) No.

13B. They probably were with their father a lot. (What were they doing?) I don't know.

13C. They didn't spend a lot of time playing—they mostly worked and today's children, they hardly have to do any work and they play a lot. Back then they had to do a lot of work, and these days they don't have to do so much, and back then they didn't hardly play a lot, and these days we can play a lot. (What sort of work did the kids do?) They would like help out their father carrying wood for the fire, and stuff. (What do today's children spend a lot of time doing that children didn't do in the past?) They watch a lot of TV and stuff.

14. I don't know.

15. Cause there are countries that have a lot of wars, and sometimes in China, they try to break down the Great Wall, and Kung Fu's try to break down the Great Wall. (So how would that make families want to live in larger groups?) In China they want to live in groups so they have lots more babies so they have more soldiers so they can fight off the bad people.

16. In the past because those kids mostly helped their dad a lot.

Emily

8. Like your great, great, great, great, great, great aunt could be a dinosaur. (Well, think about when your grandparents were your age—a long time ago. Do you think things would be different for their family than for your family today? Did they do different

things?) Yup, they might go to the store more than this family does. (Why would they go to the store more?) So they can get more food and survive, cause they might have less food.

9. I don't know. (Are there some things that families have always done?) I don't know.

10. Because families go strange once in awhile. (What does that mean—to go strange?) They might want to have a baby and then they changed their mind of having lots of babies. (Why would they change their mind?) Because it's hard to take care of lots of babies, so they might have one or two.

11A. They work mostly, and they don't pay attention to their kids because they think they can take care of themselves nowadays. (Can you think of some other things that mothers do?) They might send their children to school and they don't have to do work. (What does your mother do?) I forgot.

11B. I don't know.

11C. Drinking a lot. Cleaning up the cave. (What do today's mothers spend a lot of time doing that mothers in the past didn't do?) Go to work in cars, and in the past they didn't have any cars and they didn't have work.

12A. I don't know.

12B. Kill animals to eat. (Why did they do that?) So they can survive. But now they didn't survive.

12C. I don't know. (What do today's fathers spend a lot of time doing that fathers didn't do in the past?) They yell at kids most of the time when they get in trouble. (Can you think of anything else that today's fathers do that a long time ago they didn't?) They had babies and the other ones didn't have that much babies.

13A. Play, going to school , and playing games with their mother and their father. (What sort of things do their children play?) Jump rope or jump on the trampoline and swim in the pool and other stuff kids do. (What do you like to do when you're done with school—when you get home from school in the afternoon?) I go to an after-school program and play games. (How about when you get home?) I watch TV.

13B. Running around, finding stuff to do like taking the little hammers and breaking blocks. (Why did they do that?) So they can have fun and there wasn't that much things to do in the past. (What did children in the past spend a lot of time doing that today's children don't do?) Well, they didn't have trampolines and swimming pools like we do.

13C. I don't know.

14. Because they thought a big family in one little house would take up most of the rooms so they live in different countries or live in a different house.

15. Because they just might . . . if you have two kids and they might put one child with their grandma or their grandpa so they have just one child to take care of.

16. I don't know.

Third Grade

Dale

8. Like in the old days they didn't have tires—they had wooden tires. It's just the same thing. They didn't have clothes back then—they would have to usually knit them but here usually they don't have to usually do it that much. (But what about families—how are they different?) Cause like we had ancestors that were older and they probably had that house that we have and we have the same house probably, or we moved probably.

9. I don't know about that because they invented tires in the old days sort of coming into the 19s, sort of coming from the 18s . . . they made a tire, I think, and like here we have a tire.

10. Because like they wanted a bunch back then because they would think like "I want a bunch," but then they think it would be easy to do, but then when they got bigger, they think " Oh, now it's worse," because they're like running around and jumping around and fighting usually, with babies crying and kids are fighting and it's all wild or something, and it's hard. (OK. Can you think of any other reasons why they might have wanted lots of children a long time ago and now they just want a few?) I still say they thought it was easy, but they had to buy a bunch of food to feed them, and then they started to cry so I bet . . . maybe they needed to give them water. I think they didn't have milk back then—did they? Yeah, I think they did cause they might have had cows, I don't know about that. So they started thinking "If we don't have cows, then how are we going to make them stop," cause usually milk will make them fall asleep. Like when they're up at night going "Wah, wah," and they probably need milk, so they're like "Where are we going to get milk? Where are we going to get milk? We don't have cows."

11A. They sort of take care of the family, they love each other, and they love like the whole family, and she helps and she usually does all kinds of chores . . . mom usually does the chores. (What do you mean by the chores?) Like sometimes the dishes and something. Like mom would do the dishes and my dad would do the sweeping and my brother and me would clean up our room and our sister too.

11B. They would help babies like now. They would sort of do the same thing but they wouldn't do dishes because they didn't have the same dishes we do now. They didn't have glass. They probably just made some out of wood. They might have paper plates from the white trees, like the ones you find up at Higgins Lake. They could make paper

plates out of that. They could chop them up, but they wouldn't have machines so they couldn't make paper plates, they could make only wooden ones probably, or try to.

11C. Today they did chores and back then they would probably do the same thing but try to do something else with the baby probably, and probably back then they wouldn't be doing the baby—they would probably do the chores. (What do you mean by doing the baby?) Like doing his diaper and giving him milk when he cries and all that stuff. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) Like doing chores, especially. They sort of did but I don't know anything else that moms did back then.

12A They usually stop the fights with us like when we're trying to fight with each other. He could come and help us stop or make us stop or just say, "Stop please," or help us stop or something. It's fun. (OK, dads sort things out. What else do they do?) They usually sort things out and they help the moms too. They'll start doing the dishes and the boys will maybe come in and cook. Sometimes I'll help her because I'll do the dishes and she'll do the mopping, and then I'll do the next thing and then she does. (What else do fathers do?) They help everybody in our family—like mom and dads help us.

12B. They would help too. They would have to make all the bowls. They would have to get like a knife and carve them out of trees—from the branches. (What else did they do?) They might have to make every dish out of wood probably, cause they wouldn't have glass back then probably.

12C. Some would have jobs helping the king usually, but we don't have a king today. We have a president. We don't have any king in Michigan. We had one and dads usually served them. Sometimes they don't want to but they have to, and in the old days they had to do the same thing, but today we usually don't have to that much. It's our own choice, but back then they'd have to or they'd get in trouble. (Good point. What do today's fathers spend a lot of time doing that fathers didn't do in the past?) The fathers would make clocks a long time ago. A little, maybe.

13A. Riding their bikes. I might go out today but the roads are sort of icy right now, because like if I hit my brakes in the water, it'll crank the brakes. (What else do children spend their time doing?) Watching TV, taking naps too because usually we get tired. Like last night we went all over and I was like super tired so I was sleeping at Meijer's and I came home and I wasn't tired any more. Usually something like pop makes us not tired anymore [i.e., because of the caffeine].

13B. They would ride bikes too, because they could take a knife and carve the wheels and carve all the stuff. They could carve the bikes. (What did children in the past spend a lot of time doing?) Helping gather wood. Sometimes we do that now, but fathers do that instead of kids because bad guys will come and get the kids, but in the old days they got captured if the parents didn't go. They didn't know how to defend theirselves but like they were really little, but like big parents are big and could knock the other bad guy out. (What do today's children spend a lot of time doing that children didn't do in the

past?) Today they would help dad or watch TV or help me figure out a videogame sometimes.

14. Cause it would be harder to make houses because they didn't have much concrete back then but it would be hard and you'd have to probably make it and it's hard to make. You put a bunch of stuff, probably water, into it, and you have to get branches too, for the roof probably. They didn't have bricks back then. Today we have bricks. (Can you think of any other reasons why people don't live with all their brothers and sisters and aunts and uncles and . . .) Because now it's easier because we have bricks and we have metal, so it's easier, and we have concrete for everything.

15. Well, maybe it could be a rule. Like maybe old people would like to live with their grandsons and child but sort of like there's going to be a bunch of parents and all the parents would have to watch their kids—so it's like all that stuff. It could be a rule and it could be hard.

16. I'd say both, because back then they had bikes and these days they wouldn't do it that much. It'd probably be answering the phone a bunch or us, but if it's a bad guy, hang the phone up. (So what was your answer to the question, then? Do kids spend more time with their parents now or do you think in the olden days kids spent more time with their parents?) We spend more time today, I think. Going outside with our dad and sometimes we sit down with him. Our dad cares for us too. Our dad gives us hugs.

Chelsea

8. Like they didn't have TVs and VCRs maybe and they don't have as much stuff as we have nowadays, like probably next year you could do lots and lots of different kinds of stuff, like computers and faxes will change probably. (What would families do if they didn't have TVs or VCRs or computers or fax machines—what would they do?) They'd sort of be bored or something so they'd have books to read and stuff and entertain their selves, or maybe just watching somebody. It may be entertaining to them but that sounds boring. (Can you think of anything else that would be different about families a long time ago?) Maybe they didn't have as much stuff as we have now so they like sort of . . . like they didn't have much money and stuff was probably smaller, and families were small.

9. We're people and stuff and we all have like mom and dads.

10. Cause maybe they like . . . like my brother, they sort of get like a little bit crazy and do weird stuff like Marilyn Manson, and they just don't like that . . . and they don't want us to get involved in drug stuff and they want healthy bodies and they would start to yell at their moms and dads and they would start to take advantage of them and they would like not pay attention anymore and they just wouldn't listen to them. (How would that affect how many kids parents would want?) I don't know. (What would that make the parents think about wanting to have more kids?) They might want more kids because . . . I'm not sure.

11A. They like take care of the kids more than the dad because sometimes when they're little babies, they have to get milk for them and everything so moms take more care of lots of stuff. They do laundry, they clean the house more than dads do usually. The dads usually work all day, but my mom and dad—they both work. (Anything else that your mom does?) She does a lot of stuff. She takes care of everything.

11B. They might have did lots of work, like maybe like the Pilgrims they had to do housework and the guys have to do like field work and tree work.

11C. Working as hard. Now they don't have to do as much work. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) Working like at a store or something.

12A. They like work for their families—they work really hard for their family to survive and have a shelter and have food and clothes—all that stuff, and they protect their family. They're the boss of the family usually, and like if you ask to go somewhere, your mom goes "Ask your dad." So he's like the boss. (What else do fathers do?) They . . . take care of their family.

12B. They might have had a farm or something and had to do all that work. The mom wouldn't do like all the farm work. (What did fathers in the past spend a lot of time doing that today's fathers don't do?) Working like at the Board of Water and Light—they didn't do that in the past. (How about some things that fathers in the past did a lot that fathers today don't really do?) They probably don't work as hard as they used to—like really hard. (What sort of things would they have done in the past for work?) I don't know.

12C. Like working at shops and stuff, like where you have big buildings. I'm not sure.

13A. Like going to school sometimes and then after they get home, they go and play games with their friends or with their sisters or brothers.

13B. Most of the time going to school because their moms and dads were mostly working and stuff like that, and then their mom would be home before they came home.

13C. Right now we spend a lot of time at school and then we go home and then we play with our friends, but sometimes they don't go to school. (So that's what today's children spend a lot of time doing. What did children back then spend a lot of time doing?) Mostly going to school and then coming back and cleaning their rooms and stuff like that to make it nice. (And what do children today spend most of their time doing?) Playing.

14. Because they're more like attached to each other. (When were they more attached to each other—the past or today?) Today. (So why do you think a long time ago that families lived in larger groups, with kids and parents and grandparents and aunts and uncles and cousins all in one place?) Cause there's not like a subdivision anywhere, so it

was like a small place back then, so like there were no farms, and there's not like a bunch of houses.

15. I don't know. (Do you have any ideas why it would be different in other countries than it is here?) Maybe because there's probably an accident in the family or probably they had to go to jail or something. I don't know.

16. Maybe these days. (Why do you think that?) I don't know.

Grade Level Differences

In general, the younger students more often were coded for inability to respond to Questions 8-16 or for less sophisticated responses to these questions, whereas the older students were more likely to be coded for the more sophisticated responses. However, there were occasional exceptions or additions to this pattern. For example, the younger students were more likely to be unable to respond to Question 9, whereas the older students were more likely to say that families are still basically the same in their composition and basic characteristics, as well as more likely to be coded for any of the categories for responses that were specific to families. However, older students also were more likely to be coded for responses that were not specific to families (responses that referred to similarities across time in the needs or activities of people in general, whether or not they live in families). Thus, the older students were more likely to supply mid-level responses to Question 9, as well as with high-level responses.

A similar yet different pattern appeared for responses to Question 10. Here, the older students were more likely to supply valid responses to the question, such as by stating that it was easier or less expensive to have or care for children in the past than today. However, responses that did not include comparisons with the past were unrelated to grade level. Furthermore, although more younger students than older students were unable to respond to Question 10, failure to respond showed a nonlinear relationship with grade level (rather than a linearly negative relationship) because first graders were notably more likely to be unable to respond than students in the other three grades.

Inability to respond was not a significant issue for Questions 11A, 12A, and 13A, which asked about the activities of today's mothers, fathers, and children, respectively. Here, older students were more likely than younger students to identify housework and household maintenance and work outside the home as activities of today's mothers, as well as to be coded in three or more response categories for Question 11A; to say that today's fathers are more likely to work outside the home making money in response to Question 12A; and to mention school and school-related activities in talking about what today's children spend their time doing as they responded to Question 13A. Meanwhile, younger students were more likely to be coded for "other" responses to Question 12A and for mentioning play and relaxation activities in response to Question 13A. In general, categories for responses to Questions 11A, 12A, and 13A yielded fewer significant relationships with grade level than most sets of categories did.

The categories for responses to Questions 11B, 12B, and 13B yielded similar patterns of relationship with grade level. In each case, the younger students were more likely to be unable

to respond to the question and the older students were more likely to mention specific activities engaged in by people in the past (housework and household maintenance as well as "other" activities for mothers, caring for/helping/teaching children and "other" activities for fathers, and school-related activities and chores around the house for children). In addition, younger students were more likely to be coded for saying that children in the past spent a lot of time in play and relaxation.

Analyses of responses to Questions 11C, 12C, and 13C yielded parallel grade level patterns in ability to draw specific past vs. present comparisons. Younger students were more likely to be unable to do so. Older students were more likely to be coded for saying that past mothers had more work and less leisure time, that today's mothers are more likely to work outside the home, or to name "other" differences; to say that past fathers had to spend more time working and had less time for family/leisure activities and to note "other" differences in fathers' activities; and to say that children today have more time for play and recreation and to note "other" differences. There was also one nonlinear relationship for this set of categories: Second graders were more likely than other students to name "other" differences in the activities of past vs. present mothers.

Grade level differences on Questions 14-16 were predictable. More older students than younger students were able to supply valid responses to Questions 14 and 15. In response to Question 16, more younger students said that children spend more time with their parents today than in the past, and there was a nonsignificant tendency for more older students to say that children spent more time with their parents in the past than today. Regardless of which way they answered the question, older students were more likely than younger students to supply a valid rationale for their choice.

Achievement Level and Gender Differences

The 73 response categories for Questions 8-16 yielded 42 significant relationships with grade level, but only 17 with achievement level and 6 with gender. Four of the significant relationships with achievement level were nonlinear ones, but most of the rest were predictable relationships indicating that lower achievers were more likely to be unable to respond to these questions and higher achievers more likely to supply the more sophisticated responses. However, one possible exception to this trend is noteworthy, as well as one response that is not easily characterized within it. The possible exception is the finding that higher achievers were most likely and lower achievers least likely to say that fathers in the past didn't have to work as much as today's fathers, and thus had more time for family and leisure activities. Most observers probably would say that fathers in the past had more work to do and less time for leisure activities, particularly fathers in the frontier days. Thus, a negative relationship with grade level might have been expected for this response. However, some responses coded in this category could be seen as valid, depending on the historical time periods and particular circumstances of the fathers that the students envisioned as they answered this question.

The achievement level difference that does not fit easily into a "higher achievers knew more than lower achievers" summary is the finding that higher achievers were more likely than other students to draw clear distinctions between mothers' and fathers' roles in talking about the

activities of mothers and fathers in the past and present. Such a positive relationship might have been predicted by people who treat gender role differentiation as just another domain of social knowledge for children to acquire, but the relationship might not have been predicted by people who treat comments about gender role differentiation as indications that students who make them are mired in an obsolescent mode of thinking (unless such comments are accompanied by statements questioning or criticizing these gender role distinctions). The students who mentioned gender role differences usually did so matter-of-factly, without describing them as either desirable or undesirable.

The significant relationships with gender indicated that more girls than boys mentioned "other" ways in which families today are similar to families in the past and mentioned chores as activities typical of children today, whereas more boys than girls said that today's mothers have more work to do and less time for leisure than mothers in the past, identified playing with children as an activity of present-day fathers, identified "other" activities of present-day fathers, and identified only play and relaxation activities (without also mentioning school-related activities or chores) in talking about the activities of today's children. Overall, the responses of the boys and girls to this set of questions were much more similar than different. The only clear difference was in responses to Question 13A, where boys were more likely to mention only play in talking about what contemporary children spend their time doing, whereas girls were more likely to mention chores (as well as marginally more likely to mention school-related activities) as well as play. These differences might have been expected based on past research indicating that families tend to place more self-care and household maintenance expectations on girls than on boys and that girls tend to spend more time on homework than boys.

Relationships Among Response Categories

Students who mentioned birthing/caring for children as activities of mothers in the past were more likely than other students to mention these same activities in talking about mothers in the present, to talk about fathers in the past caring for/helping/teaching their children, to talk about mothers in the past doing housework and household maintenance, and to talk about playing with children as an activity of today's fathers. Students who said that mothers today are likely to work outside the home were more likely than other students to say that present mothers work outside the home more than past mothers.

Students who talked about mothers in the past doing housework and household maintenance also were more likely than other students to identify similarities between families it the past and in the present, to talk about housework and household maintenance as activities of today's mothers, and to name "other" specifics in talking about the activities of fathers in the past. Students who said that mothers in the past had more work and less time for leisure were more likely than other students to offer an explanation for why families were larger in the past, to name "other" activities of fathers in the past, to say that fathers in the past had to spend more time working and had less time for family or leisure activities than today's fathers, and to provide more "other" responses to several of the questions in this set.

Students who said that past mothers had more work and less time for leisure were more likely than other students to say that past fathers had less work to do and more time for leisure.

Thus, these students believed that in the past, mothers did most of the work and fathers did relatively less than they do today.

Students who spoke of caring for/helping/teaching children as activities of today's fathers were more likely than other students to talk about past fathers engaging in these same activities. Students who listed disciplining or punishing children as an activity of today's fathers were more likely than other students to make invalid or questionable past vs. present comparisons in fathers' activities, as well as to mention traumatic moving out as one way that families can get smaller. These students apparently had difficult relationships with their fathers or father figures in the home.

Students who talked about fathers today working outside the home were more likely than other students to draw a comparison suggesting that today's fathers work in offices or do other modern jobs, whereas past fathers farmed or worked as blacksmiths, etc. Students who talked about modern fathers relaxing, watching TV, or engaging in other recreation were more likely than other students to draw a gender role differentiation in responding to Questions 11 and 12.

Students who said that past fathers had to spend more time working and had less time for leisure were more likely to say the same thing about past mothers. Thus, in contrast to the subgroup of students who thought that past mothers worked more but past fathers worked less, these students held the more typical view that both parents worked harder in the past than they do today.

Students coded for making gender role distinctions in answering Questions 11 and 12 were more likely than other students to depict modern fathers as engaging in relaxation or recreation activities or activities associated with the traditional male role.

Students who talked about the school-related activities of today's children were more likely than other students to talk about school-related activities of children in the past. Students who talked about chores and self-care responsibilities of today's children were more likely than other students to talk about fathers in the past doing household chores. Students who talked about children in the past doing chores were more likely than other students to say that children today have more time for play and self-chosen activities and to say that children spent more time with their parents in the past because they worked alongside them.

Students who made comments about the nature of schooling in the past in responding to Question 13 were more likely than other students to mention schooling factors in responding to Question 16. Students who said that children spent more time with their parents in the past were more likely than other students to say that today's fathers work in offices but past fathers farmed, that children in the past had to do a lot of chores, and that today's farm families have to do more chores than other families.

Overall, where positive correlations might have been expected between responses in this set of categories (e.g., mentioning housework and household maintenance as activities of mothers in both the past and the present, mentioning school-related activities as activities of children in both the past and the present, etc.), positive correlations were in fact observed.

However, these correlations tended to be low to moderate, often failing to reach statistical significance.

Rare and Unique Responses

Question 8: Differences in families, past vs. present

We noted that only six students made valid responses to this question, and listed them previously. However, some of the other responses are worth noting.

Kindergarten: People have pets in the family today; their grandpas love them but then they move away; families live farther apart today, sometimes even in different states; if they had to drop their kids off here, they would do that and then drive away to do something else, not take the kids with them; it's cleaner today because we have more houses and more sunshine; black and white people like each other now.

First grade: We no longer have to hunt for food; they didn't go anywhere then because they didn't have any money; they would have fewer kids, just one.

Second grade: They traveled in wagons pulled by oxen and used fob watches; they didn't go bowling; they could either make or buy butter, but these days it is hard to make; they spent less time cleaning buildings because the buildings were smaller; milk was delivered to people's homes; some people who wanted to get married were not allowed to; they drank cow's milk instead of milk that you buy from a grocery store (apparently thought that grocery store milk is not from cows); some people were slaves.

Third grade: A lot more people break up today (probably cued by previous question); families today have better businesses and work more (apparently speaking of more opportunities to work away from the home at more pleasant jobs); they used to only let white people be families but now some families are colored too; now we have babies at the hospital instead of at home (she learned this from watching the history channel); families were smaller (inferred on the grounds that they had smaller houses and fewer possessions); today it is quicker and easier to get to a doctor's office or hospital; then they had to treat themselves at home because no doctor or hospital was available.

Finally, one third grader said, "A long time ago, last names and first names were the same. There would be three people in a family with one name and three people in another family with another name that was the same. Like, there were three Jacobs in one family and four Joshuas in another. They would have the same first name and no last name. I saw this on the computer on Zack's Look It Up."

Question 9: How families are still the same

Kindergarten: People in families often resemble one another.

First grade: Families still split up.

Second grade: Parents still pass on their things to their children (inheritance); families still resemble one another, especially in skin color.

Third grade: If their house burned down, they could move in with relatives.

Question 10: Why fewer children today?

Kindergarten: There are more people in the world now (2) (these two students inferred that people no longer feel as pressed to develop the population as they did when it was much smaller); my mother won't have any more babies because she is taking the pill; today parents don't want a whole lot of kids who will all look like one another (unexplained further).

First grade: They don't want to see a lot of kids—they just love the one they have (a response from an only child); if there are too many children or they are too rambunctious, the parents might try to sell them; kids today are harder to handle; modern life (night jobs, balancing school and work) keeps parents very busy.

Second grade: In the past, people cared more about their kids, but today there are smaller houses and less room for large families; parents had less out-of-home work then, so more time to play with their children; kids were less pouty and whiny then—today's kids are spoiled with cool toys and TV shows; today, babysitters are too costly to use as much as they were used in the past; back then they wanted the population to grow, but now we have plenty of people; they didn't want the house to be crowded; it used to be easier to take care of kids because a lot of them had things to do (chores); kids are more expensive today because back then you could just make whatever you needed but today you have to buy it; maybe people had more money back then; things cost more now because they are of better quality; it was easier to care for children then—now they are disobedient and don't want to listen.

Third grade: Kids were more obedient then and less costly—their stuff cost less and there was less of it that had to be bought; today you have to buy more and it costs more; there's more to handle in the new generation because they want to be alone and they want to grow up faster; you could go out and hunt for food then, but now you have to buy it; kids had quiet things to do then, but now they're noisy; things didn't cost money then but now they do; everything costs more now; kids have more stuff now, so caring for them is harder.

Question 11: Mothers in the past and today

Kindergarten: Mothers in the past would try to find food and water for their children; mothers today yell and scream at their children (says the same thing about fathers); mothers today volunteer at school; mothers today discipline their children by sending them to their rooms or giving them time-outs; mothers do girl stuff, like me (later says that fathers do boy stuff); in the past, mothers had to make baby food and take their children with them whenever they left the house, because there were no babysitters; mothers today work in offices, but in the past they were available all day long to feed their children every time they needed feeding.

First grade: Past mothers had to go out and find food in the forest; past mothers did more hunting, cooking, and cleaning; past mothers stayed home with their children because there were no babysitters; past mothers lived in tipis; today's mothers cook because fathers might burn themselves, and they do laundry because fathers might ruin the clothes (such as by bleaching the color out); mothers sometimes fix things, but this is mostly what dads do; past mothers cooked more, like four meals a day; mothers shop more today because there are more stores selling more things; past mothers had to help build their houses out of rocks, a long time ago when people lived in rock houses; past mothers worked because they were slaves; today's mothers visit their children's schools; today's mothers "work with each other to get a man."

Second grade: Today's mothers take care of sick people in the family; past mothers would churn butter and wash clothes in a tub, but today they use washing machines; mothers today use computers; past mothers cooked a lot and stayed home most of the time; past mothers didn't buy as many clothes (they made their own); Indian mothers would gather corn and Pilgrim mothers would stay home with their kids; past mothers made clothes for the family; mothers today mostly work and don't pay much attention to their kids because they think the kids can take care of themselves; past mothers drank a lot and cleaned up the cave; past mothers sewed clothes and gathered corn, but today's mothers are lazy and sit around watching TV; past mothers did the laundry outside; past mothers grew crops; past mothers tended gardens; past mothers made their clothes whereas today they shop for them; past mothers would grind butter and milk cows but now they buy these things at stores; past mothers had more work to do because they had more kids.

Third grade: In the past they wore poor, plain clothes (this was one of many students who depicted past lives as drab); today's mothers argue with their husbands a lot about their smoking and drinking; past mothers hunted for food; past mothers used wooden bowls rather than the dishes of today; past mothers were neglectful of their children; past mothers had to make a lot of stuff that we buy today; today's mothers do more shopping; past mothers did slavery work—black women were slaves and white women were bosses; they made their own clothes; they grew food; they grew food and picked it to cook when they needed it; they used covered wagons to shop, maintained a family garden, took lots of time to get on complicated dresses, then went to balls and fancy parties, but they didn't brush their teeth because there were no tooth brushes; today's mothers talk on the phone a lot and run errands; past mothers mostly did farm work because there were few jobs for women back then.

This third grader is quoted for an unusual response: After stating that today's mothers cook meals and generally take care of their husbands and children, she said that past mothers "usually worked at farms. Some mothers worked at bars—they usually worked on farms for money. Some at the bars, but not many mothers work at bars today. (What do you mean, worked at bars?) Well, some men a long time ago got together and said, 'Where are we going to get our own food without our women going after us about it? Where are we going to sneak off to?' So they gathered their wives and said 'Can you start something called a bar? It'll have drinks that kids can't have and stuff like that.' That is how the bar got started and usually women worked there. Because last time I went to a bar, all I saw was women coming up and saying 'Man, here's your whiskey' or something like that. I got sort of tired hearing that."

The following third grader is quoted for one of the better responses: "Mothers are pretty much the main source of the family and they take care of like everybody. They're the ones that mostly cook and stuff like that. They do a lot for their family and they're loving and caring for most of it, too. (What sort of things do they do?) They help when people get sick, they'll go out almost anywhere if their children get sick and get the medicine so they'll still live. And they take care of their family a whole lot. (What did mothers in the past do?) They pretty much did the same thing, only they had more children, so it was harder to do. (OK, what did mothers in the past spend a lot of time doing that today's mothers don't do?) They had to hang their clothes on lines outside to let their clothes dry, instead of putting them in the dryer. And to wash the clothes, they had to do it in a bucket with soap and water. (What do today's mothers spend a lot of time doing that mothers didn't do in the past?) They do laundry in dryers and washers and they cook, and they go to better works than they used to. (What do you mean?) Well, like my mom works in this nice office with brick walls and stuff. Back then, they had sort of like wooden cottages that they'd go to work for like a tinsmith or something like that."

Question 12: Fathers past and present

Kindergarten: Now they work to make money and buy us food and drinks, so we are not poor people and live outside with nothing; they yell and scream at their children; they are mean; they get angry at their children and go to bars; they take their children to parks (there were no parks in the past); they pick on you; they do boy stuff, like root for football teams; past fathers drank beer or root beer; they move heavy things and cheer for the Detroit Lions; he yells at my dogs; past fathers cut wood; today's fathers watch football games on television; they do drag racing.

First grade: They hunted for food; they hunted and fished; today there is less hunting and fishing but more housework for fathers; they watch TV; they worked near the house, not like today's jobs; they built houses for their families, grew crops with help from the Indians, cured sick people, and went to church; they drive mothers to the hospital when they are going to have babies; in the past, fathers invented things; in the past they worked making bricks and building towers; they made shoes and sold trinkets to the Indians.

Second grade: They watch television and work with machines; they work and play sports more, where in the past they just sat around the house; they did farm work (3); they gathered firewood; they hunted for food (4); today's fathers spend more time with their kids and going shopping; they pay for houses from their job earnings; they sometimes cook, not just mothers; they are couch potatoes watching TV all day (mothers are not); they built their own homes and taught their children how to do it—there were no schools then; fathers have more babies today (not explained); today's fathers are lazy (and mothers too!); they mow lawns; they went to work at men-only jobs.

Third grade: They used to work for low pay at dirty jobs and were often homeless; they hunted for food; they made wooden bowls and clocks for use at home, and worked for the king; they worked as coal miners, store clerks, barbers, or farmers; they would fish, hunt, build tipis, and make clothes from deer, but today they work with computers, play basketball, and go scuba diving; they take their kids to more places today, because there are more places to take kids to;

they were slaves if they were black or bosses if they were white; they cut wood and built their own homes; today's fathers change diapers (adds that in the past, fathers didn't do this because they were "grossed out or something"); they were at home because there weren't many jobs and the jobs cost a lot of money (young children commonly believe that people have to pay for jobs).

Question 13: Children in the past and present

Many students spoke of children in the past as not only doing chores but carrying major family responsibilities such as helping to grow crops or build the family home. They often pictured these children either as working long and hard or as sitting around with nothing to do (or occasionally both). Several responses concerning modern children mentioned opportunities afforded by modern means of travel (use cars to go shopping, visit relatives, etc.).

Kindergarten: In the past, the children just sat around; today's children go to stores; read books at night; get in trouble; just sit around the house; in the past they spent a lot of time cleaning, sweeping, and playing with dusty things; today's kids are spoiled with candy and everything, but in the past, kids had red butts because their moms spanked them hard; in the past, they would listen to their teachers and then do the work, but now we have group time (that is, today's kids can talk more in the classroom and do a greater variety of things there).

First grade: Today we get our vision and hearing checked and sometimes get glasses, but in the past the girls had layers of bulky clothing that they had to wear, so they couldn't do cartwheels or handstands as easily; they couldn't jump rope or get dogs in the past; they would bury their food in the fire.

Second grade: They played different games than kids play now; we visit relatives more now; they went to school "for a long day" then; they would have adventures in the woods and go on nature walks with their parents.

Third grade: They didn't go to school or have toys, and they were real skinny because they didn't get enough to eat and they didn't have many clothes and sometimes no home; they had more homework and they were more likely to "get biffed upside the head" if they didn't do the homework when their dad told them to; today kids can play the drums; they went to school year round; they used to cut out paper dolls to play with, and they had more school and homework then; they didn't have clean glasses to drink from and no forks, so they ate with their hands; they didn't have yoyos and probably played with puzzles that were really old and blocks that they would stack up to make castles, and they would spend a lot of time reading and playing games like Fox and Geese and hiding under their beds, and they had to do what they were told or they would be struck with a whip—they used whips in schools like in the 1920s or 1900s; back then they had home schooling.

Question 14: Why smaller families today?

Only 16 students could suggest reasons why the large extended families of the past have shrunk to the nuclear families of today. None mentioned reduction in the percentage of people living on farms. Most said either that there were fewer houses available in the past or that people

had less money then and thus were less able to afford a house for independent living. The remaining responses were a first-grader's suggestion that "Indians invented that idea—we didn't take it up because we don't want to be crowded;" a second-grader's statement that houses now have become so expensive that they can no longer build them big enough to hold extended families; a third-grader's statement that bigger families can protect one another better and have more fun; and a third-grader's statement that people can live in smaller families safely today, but back then you needed protection against wolves, robbers, and other threats.

Question 15: Why extended families in other countries?

Only 17 students could offer explanations for why extended families are common in other places but not in America. Again, many of the responses centered on the idea that there are not as many houses in these countries, that the houses are very expensive, or that few people are able to make enough money to afford a large house. The other noteworthy responses all came from second- and third-graders.

Second grade: In China they want big families because they are always being attacked and want to make sure that they have a lot of soldiers from their army—there are always people trying to knock down the wall (this child had recently seen the movie *Mulan)*; the extended family arrangement makes it easier for cousins to babysit the children; adults in these countries go to lots of different places to work (so they are away from the home a lot and other people must be available to care for the children); extended families save on food because they can have big meals for dinner and younger children can wear the older children's hand-me-down clothes.

Third grade: The parents might want to go somewhere or take a vacation (and someone else can watch the children); if someone gets hurt, there will always be someone there to help them; some people don't work because they can't get jobs, so they have to live with relatives; if both parents work, they will need an arrangement for child care; in some places like Africa, the people live in tribes, all in one hut because the families want to be together and keep each other company; "Some people believe, and it's true, that if you have more people living together, if someone dies there will still be people to take care of the children. Plus, you get to see your grandparents more often."

Question 16: Parent-child shared time

Few students could give rationales for why children spend more time with their parents either today or in the past, and only about half of these rationales seemed valid. Several kindergarten students (and a few older ones) simply said that parents spend more time with their children today "because they love them."

Kindergarten: More today, because parents in the past didn't talk to or play with their children much—they mostly ignored them.

First grade: More today, because in the past children would run off into the woods and never come back; more in the past, because mothers worried more about their children then and

wouldn't let them stray far from home; more today, because in the past children lived with their grandparents (unexplained).

Second grade: More today, because kids need more attention now so that they don't run off and get hurt; more in the past, because they had nothing to do then.

Third grade: More in the past, because kids and even teenagers had to stay with their parents then, but now they are allowed to go away from the home and do things with friends; no difference because in the past fathers had to work more and had less time to be with their children, but today's fathers are into "golf and all that kind of stuff;" more today, because in the past people had less money and anyway there were fewer places to go; more today, because we don't have slavery and stuff; more today, because parents in the past were always out at balls and parties; more today because parents in the past were often gone for weeks at a time.

Discussion

Questions 8-16 asked for past vs. present comparisons on various topics related to family living. Some of the students were initially confused by these questions and began to respond in terms of changes within their own families in recent years. However, the question would be clarified and the students would begin making comparisons with the more distant past. Most of what they said in response to these questions was accurate or at least defensible (accuracy was sometimes difficult to judge because the historical time, geographic location, and particular circumstances of the past families that the students were envisioning as they made their responses were not always clear to us). Even some seemingly contradictory responses, such as that children spend more time with their parents today vs. they spent more time with their parents in the past, could be seen as equally defensible.

There was extreme variance in the students' ability to respond to these questions. All of them were able to respond to one of the questions, and all but one were able to respond to two of the others. In contrast, only six students generated relevant and valid responses to Question 8, and only 16 and 17 students, respectively, did so for Questions 14 and 15. In general, the students responded readily when asked about today's families, but most had difficulty when asked about families in the past or when asked to draw comparisons. Few if any of them were aware of the sweeping changes in family living that accompanied the industrial revolution and the shift from extended families living together on farms to nuclear families living separately in cities or suburbs.

As has been the case with all of our interviews, the students' images of the past were noteworthy for what historians call presentism—the tendency to judge the past by today's standards instead of viewing the time and place in question through the eyes of the people who lived there. Presentism is rather pervasive in young children's views of the past, leading them to view past life as drab and past people as stupid (or at least, limited in creativity) because contemporary technology and conveniences had not yet been invented. Many of the students viewed people of the past as sitting around idly with little to do whenever they were not engaged in finding or growing food, and many others viewed these people (more accurately) as working

hard all day long with little or no time for schooling, leisure, visiting, or much else other than their chores.

Some students did identify general shifts between the past and today: More mothers work outside the home, fathers are more likely to work in offices now than to be farmers or blacksmiths, and children now go to school for most of the year throughout childhood and adolescence. Many more consumer products are available now, and most people buy the things they need at stores rather than make them at home.

Some children kept coming back to certain themes as they responded to the questions: In the past there was slavery or restrictions on opportunities for black people to marry and enjoy family life, but things are different today; past families rarely left their farms because their means of transportation were limited or they couldn't get babysitters to watch the children; people didn't buy much then because they didn't have the well-stocked stores that we have today and because they didn't have much money; they grew most of their food and made most of their clothes; they didn't have access to modern medicine and hospitals; the population was sparse at the time, so people felt a need to increase it and therefore tended to have large families; people back then were hardworking and responsible, whereas today we are spoiled and lazy; childrearing and schooling have become more humane; gender roles now overlap more than in the past, and so on. Most of these themes were accurate as far as they went (although often tinged with presentism), but there were exceptions such as the girl who believed that people in the past spent much of their time getting ready for and then going to balls and fancy parties.

References to conflict between the parents or between one or both parents and the child were disturbingly frequent, as were intimations that one or both parents (but typically fathers) did little but sit around all day and watch TV. Some of these students not only did not look up to their parents as role models but held them in contempt. Even though these were relatively young children mostly living in what would be described as modest but pleasant communities, their comments about family living in general and their own families in particular were characterized much more by realism (and sometimes even cynicism) than romanticism or idealism. Apparently, even children these days are post-modern.

Occasional rare and unique responses were notable for their precocity: Modern grandparents love you but nevertheless often move away (e.g., to Florida); relatives are obligated to take you in if you become destitute; modern parents tend to focus on quality rather than quantity in raising children, although some are too busy with career or other things to have much time for their children; it is nice to be able to buy lots of things although this complicates our lives; modern jobs involve more pleasant work done in more pleasant surroundings, but they take parents away from their children and require them to make childcare arrangements; women do not passively wait for male attention but planfully pursue desired men; conflict often arises between men and women because men like to drink and go to bars; in the past, children played games that involved little or no equipment, but today they play more with computers and complicated toys; due to a history of invasion, the Chinese are unusually defense-conscious; large families present opportunities to take advantage of economies of scale; and modern sports and recreation opportunities are nice but sometimes parents (especially fathers) are more involved in them than in their families.

Despite a couple of mildly surprising findings and some complications involving nonlinear relationships, the group differences for this set of categories generally followed the typical pattern. That is, relationships with grade level were frequently significant and typically showed the younger students less able to respond to the questions and the older students more likely to supply the most sophisticated responses; achievement level differences favored the higher achievers but were much weaker and less often statistically significant than the grade level differences; and the gender differences were infrequent, mixed in direction, and scattered across unrelated categories, except for the finding that in talking about how children spend their time, girls were more likely than boys to mention chores, self-care responsibilities, and school-related responsibilities in addition to play and recreation activities.

Geographical Contrasts

The next four questions asked students to draw contrasts in the family living circumstances or activities of people living in different geographical areas or types of communities. Questions 17 and 18 assessed students' knowledge of national/cultural differences in family-related customs, initially in any country that the child might identify, and subsequently in Japan specifically. The next two questions asked the students to talk about family living on farms, in small towns, and in big cities.

Question 17. People all over the world live in families, but different countries have different customs. Do you know of a country where families do things differently than we do here? (If yes, probe for explanation.)

Question 18. What about Japan—do Japanese people do things differently than American families? (If student talks about differences in physical characteristics, ask **OK, so they look different. But what about everyday family life at home? Is that any different?**)

Question 19. How is family life different for people living on farms than for other people?

Question 20. How is family life different for people who live in small towns than for people who live in big cities?

When asked about family-related customs in other countries, more than half (57) of the students were unable to give any specific examples. Furthermore, most of the rest (33) drew comparisons that were not specific to family living (different languages, foods, housing styles, climate, etc.). Only six students were able to identify differences in family living patterns (e.g., bath time is handled differently in Japan) or in larger social patterns that affect family interaction patterns (e.g., in some places most families are farmers; some places have less schooling or no schools at all). Thus, this question was very difficult for students because they lacked knowledge about contemporary national/cultural differences in family living patterns, just as their inability to respond to Question 8 showed that they lacked knowledge about family living patterns in the past.

Their performance was slightly better when asked about Japanese families. Here, 43 students were unable to respond, 44 gave responses that talked about Japanese vs. U.S.

differences that were not specific to family living, but 9 students were able to cite examples (e.g., bath time handled differently, Japanese houses are partitioned in ways that separate the parents from the other family members). Even so, it was clear that the vast majority of the students had little or no image of family living in Japan.

All but 17 of the students were able to respond when asked about how family life is different for people living on farms. A majority (63) said that farm people have to do more work/chores such as feeding animals or tending to crops. The only other common response, made by 11 students, was that farm people own larger properties, have more land, have barns, etc. The students offered an additional 36 miscellaneous responses, of which 22 were judged accurate or at least defensible (e.g., farmers know their neighbors better, they need rain, they have to put up with stinky smells, and they have to make sure that their animals do not hurt their children) and 14 were judged invalid or at least questionable (e.g., their houses or barns have to be red, they own their own houses but city people do not, they have smaller houses than city people, and their children do not go to school). These suburban students held generally negative images of farm life, viewing it as difficult (involving more work) and less desirable than city or suburban living.

Question 20 asked for comparisons of life in small towns compared to big cities. Here, 33 students were unable to respond and 44 offered generic town vs. city comparisons that did not specifically address family life (e.g., cities are bigger and have bigger buildings and more sidewalks, there are more people in the neighborhood, there is more traffic and noise). No single comparison appeared often enough to be analyzed as its own category of response. However, 9 students gave one or more reasons for wanting to live in a big city (e.g., better quality or variety of schools, better shopping, more playmates, higher paying jobs). In addition, 13 students gave miscellaneous other responses that we considered to be valid or at least defensible (e.g., cities have playgrounds, there are more people in the neighborhood, you meet rich people).

Overall, the students were not able to respond to these questions very effectively because their knowledge about family living in different types of communities, and especially in different countries, was very limited. Many of them were unable to respond and most of the rest identified differences between the communities or countries but did not include contrasts specific to family living. The following examples from average-achieving boys and girls are representative of the responses from students across the four grade levels.

Kindergarten

Jered

17. I don't know.

18. Yes, they talk in Spanish. (What about the families—do the families do anything different?) I don't know.

19. I don't know. (If you lived on a farm, how would your life be different from how it is now?) I wouldn't feel that good. (Why?) Cause it would be stinky all the time. (Why would that be?) Because the pigs and stuff, . . . chickens and roosters.

20. I don't know.

Kate

17. I don't know.

18. Yes. (What do they do differently?) I don't know, but they do things differently.

19. They take care of the animals on the farms. (What do they have to do to take care of the animals?) Feed them. (If families have to take care of animals, what does that mean for their life? Is their life different than for other people who don't live on farms?) Yeah. (How?) They both have to take care of pets, but they both don't have to garden. (Who has to garden?) The farmers.

20. People who live in small towns have little houses and people in cities have big houses. (What if your family lived in a very large city—how would life be different for you?) We would have to do things and get all different stuff. (What sort of different things?) We'd have to have new furniture. (How about if your family lived in a very small town—how would life be different?) You'd have a small house and not very much stuff.

First Grade

Chris

17. Yes, in Africa. (What do they do differently in Africa?) They have little huts and sand and it never snows. (What does that mean for the family?) There's different people cause the kids have no school. (What do they do if they're not in school?) They don't have recess and everything. (What else is different about life in families of people who live in Africa?) I don't know.

18. Very different. They talk different. (What else is different about families in Japan?) They have eyes like this (student lifts outside corners of eyes with his fingers).

19. Because they don't have that much pets as farms. (So what would that mean if people on farms had many more pets?) They would have a pig, and a dog and a cat. (So what sort of things would the family have to do if they had all these animals?) They would have to take care of the animals and they would have to get their food and their water and food for pigs cause pigs eat corn. Pigs like corn. (Can you think of any other ways that family life would be different for people living on farms?) They go to school and only if the kids have a field trip is the only time they go to a farm. (How would life

be different for the people living on farms?) Their farms have to be red and some people don't want their house to be red.

20. A large city . . . you'd have a big neighborhood and other people don't live in big neighborhoods. I have a big neighborhood. (What would it mean to have a big neighborhood?) There would be a lot more people in your neighborhood. (What about in small towns?) Small towns—they have little houses and in big towns they have big houses. (Anything else that would be different about living in a small town?) They would have small stuff and you would be too big for the house.

Lauren

17. Well, most countries do the same things and most countries have the same things. Most countries have lots of animals—more animals than we do here. (Do you know of a country where families do things differently than we do?) (pause) Minnesota . . . it has a country in there but I don't know the name of it and it's really different than us. (They do different things.) Yeah, and there's another country but I don't know the name of it and they do different things. They do their bath at a certain time and they wash their hands at a certain time, different than we do. Or they could even know more things than us and do more things than us.

18. Those are the people I'm talking about—Japanese people. They do different things too. They can know more things than us and they can even have lions where they live. (But what about everyday family life at home—is that any different in Japan or do the moms and dads and kids live the same ways?) I think they might live the same ways but they might live different. Some people live there the same as us and some people don't.

19. Well, you have to have a lot of money to get it. (Yeah, but what about when they live there with their animals on the farms?) They have to take good care of the animals and they have to feed them every day. If they don't, they'll die.

20. Well, the people that live in small towns . . . they don't have to pay that much money for their houses. They don't have enough food because there's not that much stores if it's a small town, and there's not that much schools if it's a small town. But in a big, big town like this town—then you have to pay a lot of money for the schools and you have lots of things to do.

Second Grade

Mark

17. No.

18. Yes, because they do a lot of shows and stuff, like a dragon show and stuff.

19. Because when you live on farms you have to do a lot of work or else the cows and chickens and the plants and stuff might die. (What does that mean for a family that lives on a farm?) I don't know. (You said they have extra work to do if they live on a farm, so what would be different for people who live on farms than for people who don't live on farms?) They don't have to do as much work as the people that have farms. The people who live on farms—it's not very fun to live on a farm because you'd never get to spend a lot of time with children because the whole time, the only thing you're doing is working.

20. There wouldn't be as much noise and stuff, because we used to live by a highway and my dad could never get to sleep because of all the traffic and stuff going by, so we moved, and now there's not even one sound at night, except for the crickets. (So can you think of any other ways family life would be different if a family lived in a very large city?) No. (What if your family lived in a very small town? How would family life be different?) I don't know.

Emily

17. They might speak Chinese or . . . I forgot the rest.

18. I don't know.

19. They do most of the work and take care of the animals. (What other work do they do?) They plant vegetables and other stuff that I don't even know about.

20. I don't know.

Third Grade

Dale

17. China, sort of. Usually sometimes on toys, you look at the bottom and it says "Made in China," but other toys are made in the U.S.A. (Right, and how does that affect family life?) We celebrate things differently, like China, French, Great Britain, France. (What do the families do differently?) I don't know. I think one of them makes flags or signs. They make signs, I think. Israel probably. That's a sign. We did it over there in third grade.

18. I'd have to say yes. They celebrate things different, cause here we celebrate things like Christmas, and they'd probably have Valentines. They have one thing before us probably. (What about everyday family life at home?) Just sit around and do stuff. (Do you think it's very different from here?) They would usually probably be outside gathering wood or doing something and probably having their birthdays, and we'd be sitting home doing something else, and then when our birthdays come up they'd probably be doing the holiday coming up next.

19. They have to do a bunch of chores on a farm and they have to feed the pigs, but here in your yard, you don't have to feed anything—only your dogs or cats or any animals you have. You don't want to have too much pets cause you have to feed them a bunch.

20. Like in small towns they don't have that much room for a bunch of houses or many buildings, but like in New York City they build a bunch of places. In a small town . . . it's sort of little cause they don't have that much room. (Yeah, but how is family life different?) I don't know that.

Chelsea

17. Probably Texas or Mexico—they speak differently or something, and how the family would be . . I don't know.

18. They don't live in larger communities like we do very much. They don't like that . . . I'm not so sure. (Why don't they live in larger communities?) Because . . . I don't know.

19. They have to like cut the corn or something and they have to feed all the animals and do a lot of work, and they have a barn and they have to build haystacks and all that, and it's a lot of hard work.

20. Maybe because their jobs were different and maybe because there's not many schools in the city—like there's not many at all, and . . . (So what would it mean if there weren't very many schools in the city?) They would be like . . . like no kids would be there, like in New York there's a lot of grown ups all over the place. (So if there aren't as many schools, do all the kids in the city go to school?) I don't know. (You said that people who live in small towns instead of big cities do different jobs. What sort of jobs do they do in big cities?) Maybe they could be lawyers or something like that, but in little cities they usually work in a pizza place or something. I'm not sure.

Grade Level Differences

On each of these questions, the younger students were more likely to be unable to respond and the older students more likely to offer valid or at least defensible responses. Categories reflecting marginally relevant or questionable responses showed no significant relationships with grade level. Overall, this set of response categories yielded the typical pattern for grade level differences even though the questions were very difficult for the students.

Achievement Level and Gender Differences

The 17 categories for responses to Questions 17-20 yielded 12 significant relationships with grade level, 9 with achievement level, and 4 with gender. Significant relationships with achievement level appeared more frequently for this set of categories than was expected. Furthermore, all of these were linear relationships that generally paralleled the grade level

relationships and indicated that the lower achievers more often were unable to respond to the questions but the higher achievers more often supplied valid responses. Perhaps this should not be surprising, given that much of what young children know about life in the past and in other countries has been learned at school.

The first two gender differences favored the boys, indicating that they supplied all six of the responses to Question 17 that were specific to family living, as well as seven of the nine responses to Question 18 that were specific to family living. However, the other two gender differences favored the girls. More girls than boys said that farm people have to do more chores than other people, and nonsignificant differences on other categories for Question 19 generally favored the girls as well. There was no clear gender difference across the categories for responses to Question 20, but the girls supplied 11 of the 13 "other" valid comparisons of towns with cities. Overall, then, the boys had slightly more to say about comparisons of America vs. other countries, whereas the girls had slightly more to say about comparisons of rural, small town, and big city settings in this country.

Relationships Among Response Categories

Students who gave examples specific to family living in responding to Question 17 (about other countries in the world) were more likely than other students to give such examples in responding to Question 18 (about Japanese families). These students also were frequently coded in the maturity set categories for the interview as a whole. Students who answered Question 20 by identifying one or more reasons for living in a small town were more likely than other students to identify a reason why people might emigrate in responding to Question 21. Otherwise, the only noteworthy intercorrelations involving responses to Question 20 were relationships between categories for valid responses to this question and categories for the maturity set of responses to the interview as a whole.

Rare and Unique Responses

Question 17: Families in other countries

Kindergarten: Different hats, clothing, guns; some countries don't have schools, sidewalks, cars, trees or grass, or even snow; they don't have schools "in the west;" in Hawaii they get their water from a river; in China they talk and work differently.

First grade: In Mexico they eat more food and have less night; they don't milk cows like we do; in Africa they live in little huts and have a lot of sand and no snow and no schools; they speak a different language; in Belgium they call Santa St. Nick, use wooden shoes, and speak Spanish; they have different times for taking a bath than we do; they speak a different language; in China they eat with chopsticks and use different toys.

Second grade: They speak a different language (7); they have no cars and have to live in the desert and have to hunt for food; they celebrate Christmas on a different day; in Australia they drive on the left side of the road and most families are farmers; in China they eat different food, using chopsticks; in Texas the children play on dirt roads and in Egypt they live in

pyramids; they farm a lot; they have no Santa Claus and different customs; they eat different food and have no forks.

Third grade: Different language (6); in Australia they don't invite their grandparents and celebrate Christmas, and it's hot there with no snow; in Australia there are headhunters and they use slaves to cut the grass; in Germany they celebrate Hanukkah instead of Christmas; the people look differently than we do; they have different celebration customs; they allow people to drink and drive and allow kids to have guns; in Australia they hunt for food using bows and arrows, in England they work a lot or take the subway because they don't have many cars, and in France they drink wine and fly airplanes; in Germany they play a lot of croquet (learned this from a TV program), and in China they have more people and they live in smaller houses; children are not allowed to play outside the house; they have less schooling than we do; in Asia and Africa they work outside on chores, not in offices; in China they have different art and writing (script).

Question 18: Families in Japan

Kindergarten: Different dress, hats, dances; they speak Spanish; they have Ninjas; they dance and eat funny; they speak a different language (3); they have different food and drinks; they eat from bowls; they have more parades with dragons and fireworks; they have different foods and houses.

First grade: More food, more playing with toys, more building; different holiday celebrations, different Christmas, no piñatas on birthdays; different language (5); slanted eyes; they eat differently; they look different; they dress fancier; they talk and bow differently and use chopsticks; they have different bath times than we do and have lions (dragons?) where they live.

Second grade: Different language (5); different art; they talk "weirder;" different food and eating utensils; different entertainment, with dragons; they make different things at their jobs; they have different festivals, not the same Christmas, and different party customs; they sit on pillows during celebrations; different food; they don't have many televisions so they do a lot of work around the neighborhood instead of sitting around watching TV (this is the same student who said today's parents in this country are lazy couch potatoes); different foods and physical appearance; different chairs and no Santa Claus; parents live in their own separate section of the house.

Third grade: Different language (8); they have martial arts and don't invite their extended families to celebrate our holidays; different clothes and they eat a lot of fish; they do a lot of bowing and have dragon parades; they have different crops and cars and they take their kids to schools outside of Japan (not explained); different celebration dates and customs; they have different clothes and food and "they don't know what money is;" they do lots of skiing because there are lots of mountains there; they sew patterns on clothes; some of them are poor; they don't live in large communities like we do; they have to grow their own food; they have to pick their own food; they use chopsticks and have less sturdy houses; they eat different foods and use different toys and clothes; they have different celebration customs; they have different writing (script); they use chopsticks and have pandas.

Question 19: Family life on farms

Kindergarten: Farm people grow some of their own food; farms have a bad smell because of the pigs; they don't have homes—they live in barns; they see more stars at night and if they run out of gas, they can share a ride because it is a long dirt road to the city. Also, they get their milk and meat from their own cows.

First grade: Their homes (barns) have to be red; they have more food but fewer toys; they own their own homes whereas city people have to rent; they have to get up early; they don't have much stuff because farms are little and there is not much room to put things; farms cost a lot of money; they make food for themselves and their cows, and their kids work all the time and don't have time for play, school, or learning to read.

Second grade: They can see more stars at night; the parents have less time for the kids (2); they only have babies so that they can take on their tradition of running the farm; "on farms you have to wear barn stuff;" farm kids have more chores and less playtime (3); city people have bigger houses; they have to get up early to milk the cows; they have to put up with stinky smells.

Third grade: Farmers don't usually have kids—they just live alone and raise their animals; they live in small houses and grow all of their own food (no shopping); some farmers (Amish) have no electricity; farm people are "a little bit stinky" and "they don't have a lot of things that we do;" the family works together; the kids have less play time; the farms are smelly; farm kids can't go to school, "so all the farming children are dumb." In addition, one third grader said, "Farming guys don't have the resources that we do. They don't know how to live like real people do."

Question 20: Small towns vs. big cities

Kindergarten: In small towns, you can live close to your relatives; they have smaller houses than in the city (2); there are fewer sidewalks; you are less likely to get lost; there are smaller schools and room for houses (i.e., cities are full and you cannot buy a house in them); you can live wherever you want (i.e., you can build a house almost anywhere, in contrast to cities); the roads are less busy but the houses are smaller.

First grade: Houses are smaller than in the city (2); there is danger from bears; if you work in a city you have less commuting time if you live in the city; city people like to take time doing things and they try travel a lot, whereas small-town people wear different clothing, pick flowers, and hunt and gather for food; city children can get lost easily; rich people live in cities; "People that live in small towns don't have to pay that much money for their houses. They don't have enough food because there's not that much stores if it's a small town, and there's not that much schools. But in a big town like this, you have to pay a lot of money for the schools and you have lots of things do to."

Second grade: City people live in apartments, and there is only one room (thinking of hotels); most city people live in big buildings instead of houses; kids play in the streets more in the city; small town people are hungrier because there aren't as many stores and therefore less

food, and their schools get less money and therefore have fewer supplies; there are more jobs in the city; you have to live in an apartment in the city and it's harder to find stores or job sites because everything is so big and the buildings all look alike.

Third grade: City people are always in a rush but small town people may not have cars or electricity; city people have to share a house and often do not have a car; city people drive fast and run lights; city people have to live in apartments; city people can only live in apartments or small houses; cars are more expensive in the city, so people have to ride the bus; city kids have more other kids to play with, so they have more friends, but they have to live in apartments and can't have pets; "Their jobs are different and there's not many schools in the city because like no kids would be there, like in New York, but there's a lot of grown ups all over the place. (So if there aren't as many schools, do all of the kids in the city go to school?) I don't know. (You said that people in small towns and big cities have different jobs. What sorts of jobs do they do in big cities?) Maybe they could be lawyers or something like that, but in little cities they usually work in a pizza place or something."

Discussion

Few of the students had much knowledge about family living in different countries or different types of communities, so few of them were able to speak to Questions 17-20. Most of those who responded drew comparisons between the countries or communities in question, but not comparisons that focused on aspects of family living. Most of what was said (especially by older students and higher achievers) was valid or at least defensible, but many misconceptions were expressed as well.

Most of the substantive responses made to Questions 17-20 are shown in the listings of rare and unique responses. Although few of them focused specifically on family living, most of them are interesting and informative nevertheless because they provide indications about how Americans suburban children in Grades K-3 think about life in other countries and in different sized communities.

The students' comments about other countries are rife with stereotyping and chauvinism. These are common features of young children's thinking about what is unfamiliar to them, and we have seen them frequently in our previous interviews. In the responses to Questions 17-20, there are many examples of stereotypes that have (or at least, had) some basis in fact (the English ride subways, the French drink wine, Africans live in huts, the Chinese eat with chopsticks, etc.), as well as numerous confusions and misconceptions (there is less night in Mexico, there are no schools in Africa, the Belgians speak Spanish, the Egyptians live in pyramids, Australia is full of headhunters who use bows and arrows, Germans celebrate Hanukkah instead of Christmas, etc.). There also were frequent instances of chauvinism, typically displayed simply in the disparaging way that the students talked about "different" customs, but sometimes expressed more directly through comments such as "they talk weird." The pervasive evidence of stereotyping and chauvinism in young students' comments about people and life in other places has prompted us to repeatedly call for teaching about geography and culture that develops empathy with the people being studied. It is important to help children understand other people's motives and actions within the context of their time and place, so that they come to see the people's actions as

adaptive behavior and not as weird, bizarre, or evidence of inferior intelligence. As anthropologists like to say, it is important to teach about cultures in ways that "make the strange familiar" and "make the familiar strange."

Also noteworthy in the students' responses to this set of questions is their projection of a child's rather than an adult's point of view. Compared to what adults would be likely to say, the students' responses made much more mention of child-oriented things such as holiday celebrations and Santa Claus, toys and games, bath times, and parades. We believe that this tendency is due not only to age-related interests but to the ways that other cultures are often taught at school or conveyed in books and television programs written for children. These exposures often pay disproportionate attention to aspects of culture that are particularly striking or interesting to children, especially celebrations.

Interesting ironies often appear in our findings. In this case, amid the frequent stereotyped and chauvinistic characterizations of foreign customs, we find occasional statements such as the first grader's belief that the Japanese people dress "fancier" than we do and the second grader's belief that the Japanese spend a lot of time improving their neighborhoods whereas Americans are prone to sitting and watching TV. Also interesting in this vein is the first grader's observation that the Japanese do not have piñatas on birthdays, like we do. Piñatas on birthdays have become commonplace enough in the United States that American children are beginning to think of them as American, rather than Mexican. We found similar responses in our food interview, when several children drew contrasts between prototypical Asian foods and "American" foods such as spaghetti, pizza, and tacos!

Whereas we were not surprised at the stereotyping and chauvinism that appeared in responses to Questions 17 and 18, we were quite surprised at the frequency with which chauvinism or serious misconceptions appeared in the responses to Question 19. These students lived in a bedroom suburb of a relatively small city. Their modestly sized metro area was surrounded for many miles in all directions by hundreds of farms. Some of these farms were located immediately adjacent to (and in a few cases, still within) the community in which the students lived. Yet, their responses made it clear that most of these students had little or no experience with farms or farm life, and many of them harbored major misconceptions.

In the first place, except for the idea that you can see more stars at night in rural areas, the students' images of farm life were almost entirely negative. In their view, farmers or farm families have to work most of the time and have little time for anything else, must endure unpleasant smells coming from pigs and other animals, must live in small houses that often lack amenities found elsewhere, and generally don't have much and "don't know how to live like real people do." In some cases, the students even believed that farm children do not go to school and are illiterate, that they live in barns (which must be painted red), and that they do not have children (or if they do, it is only because they want somebody to carry on the family's farming tradition). Few such chauvinistic comments and extreme misconceptions were expressed in our previous interview on food, which included questions about the steps involved in growing corn, the land-to-hand relationships involved in bringing various common foods to our tables, and other farm-related topics. Those questions tended to focus students' attention on the processes and machines involved in farm work rather than on the personal characteristics or family lives of

farm people, so few of the kinds of comments elicited by Question 19 in the family living interview appeared in the responses to the food interview. This is why we were so surprised by the present responses, which suggested that as much as they may respect farm people for their knowledge and skill in raising crops and animals, many of these students had very negative stereotypes of farm life. The obvious implication for teachers is that such students not only stand to benefit from instruction on land-to-hand relationships and other process and technical aspects of farming, but from instruction on the motives of farm families, the satisfactions they derive from their work and their lives generally, the fact that farm children go to similar schools and learn similar things, and so on. In short, these students need to learn to empathize with farm people and realize that they are "real" people who are much more similar to than different from other people.

Stereotyping and misconceptions were also evident in the students' comparisons between small towns and big cities, although to a lesser degree. Many students depicted small towns as backwaters in which not much occurs, and some of them embellished this with misconceptions (danger from bears, the people hunt and gather for food, they often lack cars or electricity, or they eat poorly because they don't have as many stores). Other students expressed misconceptions about cities, including several that we had seen previously in our shelter interview (the space in cities is all taken up so that you cannot build a house there, confusion between apartments and hotel rooms). They also drew some valid contrasts, although usually not about family living (small town people are more likely to live closer to their relatives, there are more sidewalks in cities, money is concentrated in cities, there is a greater amount and variety of shopping and jobs in cities, city life tends to run at a quicker pace, apartment building owners often do not allow tenants to have pets).

Overall, responses to Questions 17-20 showed noteworthy and predictable grade level and achievement level differences but only minor and unremarkable gender differences. The main implication from these findings is the need for instruction about life in other countries and in different types of communities that builds empathy for the people involved and confronts misconceptions, including those that stem from stereotyping or chauvinism.

Family Moves and Migrations

Questions 21-24 addressed students' knowledge about family moves (local) and migrations (to a new country). The questions focused on what motivated families to move/migrate and the effects of the move/migration on family living.

Question 21. Your ancestors came to America from somewhere else. Do you know where they came from? (If yes) **Where? . . . Why did they decide to come here?** (If necessary, define ancestors: "Your ancestors were your relatives back in time—your grandparents, great grandparents, and so on.)

Question 22. Families sometimes move, to a different house or even a different city. Why do families move from one place to another?

Question 23. Sometimes families move here from another country where they don't speak English. Why do they do that?

Question 24. How does family life change when a family moves to a new country?

When asked about what country their ancestors had come from, only 18 of the students named a specific country, and many of these answers were suspect (i.e., the students appeared to be just naming a country or taking a guess rather than speaking from actual knowledge about the national origins of their ancestors). Of these 18 students, only 9 could suggest a reason for the emigration (mostly to escape oppression, obtain freedom, or obtain better economic opportunities).

The students found it easier to answer Question 22 about why families move to a different house or even a different city. Even so, 29 were unable to respond or could offer only vague speculations (e.g., the family just wanted to move or needed to move, they didn't like or got tired of their old house, etc.). The most common of the more substantive responses, made by 28 students, was that a change in family size led to a need or desire for a larger or smaller house. Most of these responses suggested that the family had gotten larger and outgrown its old house. Other responses included the notions that the old house had fleas, had fallen into disrepair, or had developed leaks or other problems (20), a desire to leave a dangerous, noisy, or congested neighborhood (11), a parental job change or desire to move closer to a job site (11), and divorce or separation of the parents. In addition, 19 students suggested various "other" responses (e.g., to escape high or increased taxes, move closer to relatives, move to a better school district, or get away from someone that they wanted to avoid). Almost all of these responses were valid, although the students placed much less emphasis on job changes and desires to move to a better school district than most adults would.

Question 23 asked why people from a non-English speaking country would emigrate to the United States. More than two-thirds (66) of the students were unable to respond. The remaining students suggested that the people wanted to learn English (17) or escape oppression (9). In addition, eight students suggested miscellaneous "other" defensible explanations (e.g., the people were disliked in their old country and wanted to get a new start somewhere else or they were seeking something that was lacking at home). Most adults probably would focus on better economic opportunities (and secondarily, escape from oppression) in responding to this question, but only a couple of the students mentioned this factor.

Question 24 asked how family life changes when a family moves to a new country. Almost half (47) of the students could not respond to this question. The remaining students suggested that the family members would have difficulty understanding people and communicating with them if they didn't know the language (21), that they would have to get used to new food, clothing, language, etc. (15), that they would miss/lose their old friends (13), or that they would meet new people and make new friends (10). In addition, 10 students gave "other" valid or defensible explanations (e.g., they would enjoy lower taxes or they would experience feelings of strangeness or alienation). In general, the students' answers to these four questions were sensible and free of misconceptions, but different from those likely to be given by

adults. The following examples from average-achieving boys and girls are representative of the responses from students across the four grade levels.

Kindergarten

Jered

21. I think so. I want to go up north again to see my grandma. She's very, very old. (Where did they come from? Do you know which country they came from?) No.

22. I don't know. (Has your family moved houses?) Yes. (Why did they move?) Because somebody else wanted our house so we moved to a better house. It looks a lot prettier. It's not brick and it's plain white. It's not really plain white. It has a chimney.

23. Well, I don't know.

24. First they think it's a lot better place sometimes.

Kate

21. No.

22. Maybe because they don't like their house anymore. (Any other reasons why families would move?) Maybe their house is getting old.

23. I don't know. (How about a family from Japan—why would a family from Japan want to move to the United States?) I don't know.

24. I don't know.

First Grade

Chris

21. No.

22. Because they're divorced and because everything in their house is broken so they have to move.

23. Because they don't live in English because people don't understand what they're saying. (How about a family from Japan—why do you think a family from Japan would move to the United States?) Because they don't like it there—they like the United States. (Why would they like the United States?) Because they're good people; not bad people.

24. I don't know. (Imagine a family from Japan that moves to the United States. How would things be different for them?) Because the people from the United States don't

know what they're [people from Japan] doing, and the people from Japan don't know what they're doing [people from United States.] (What do you mean by they don't know what they're doing?) What they're saying.

Lauren

21. No, not really.

22. Because maybe that place is getting small and they're getting tired of living in that town with so much noise there and they want to live somewhere where it's going to be quiet, like in the forest where it's very quiet where there's no birds and cars and stuff, or maybe by a street that's not a busy street because there's not too much cars coming past. (Can you think of other reasons why families move?) Maybe because they don't want nobody to know where they live so they move, because maybe somebody comes to their house every day and every minute and says "Hello, are you there." Maybe that's why, or maybe because it's just too loud there and they want to move somewhere quiet.

23. Oh, they get taught to talk English like us by someone that can teach them really, really good. I read this book and this girl didn't know how to talk English but this boy or someone taught her really good. (OK, but why might they come here?) I don't know.

24. Well, families get bigger and they move to a new country because they get married and maybe the families get smaller.

Second Grade

Mark

21. My mom came from Germany. [couldn't say why]

22. Cause sometimes the first place they lived in is getting really old and stuff and they want to move cause stuff is falling on them and stuff. (Can you tell me again why your family moved from the house by the highway?) Because my dad couldn't sleep because of all the traffic from the highway.

23. Because the United States of America is a lot more fun and other countries . . . I don't know why, but in the United States of America there's a lot of toys and stuff to play with and in other countries almost all you do is work, and in the United States of America you're free and you can do a lot of cool stuff.

24. I don't know. (If a family from Japan moved to the United States, how would life be different for them?) They would have to get used to the stuff that's in the United States.

Emily

21. No.

22. Because they don't feel comfortable going back home. (Why wouldn't they feel comfortable?) Because . . . I don't know.

23. Because there might be a lot of Chinese sounds and they don't even like it, so they went to America.

24. I don't know.

Third Grade

Dale

21. Probably Jesus had one kid and then he must have got a bunch of other kids or something. So he had to send them off by theirselves or something like that. I don't know.

22. Because sometimes they would have to get out of town because they were being bad, probably like robbing stores, so they would have to move because probably the cops would come and get them. And like other people are bad. (Any other reasons?) Divorcing . . . you should probably get out of there. They don't want to be with them, or probably they would just marry somewhere else and the dad doesn't know. (Any other reasons?) Poor people, some people, if they don't pay their bills, they would have to be on the poor side.

23. I don't know.

24. Cause they have to speak differently . . . they have to do a different language, and you probably have to dress the same, but sometimes it's rules that you have to dress the same.

Chelsea

21. No.

22. Maybe because the house is getting too small because our family keeps growing and growing and growing, and we need more room for us, so if you have a small house, you'd need a big house, and maybe because your community is not very nice or something.
No.

23. To check it out to see what's new or something, or do see Mexico and then they come over here . . . they're sort of different, so they might want to check things out, like

see how the schools are and see how their stores and stuff like that are . . . maybe see if the concession stands are a lot different and see how different they are maybe.

24. It would be like really sad because they would miss them, sort of. (Who would they miss?) The person that came to a new country.

Grade Level Differences

Once again, the younger students were less able to respond to these questions and the older students more likely to provide substantive responses. In particular, the older students were more likely to be able to name a country of origin and identify a reason for emigration when talking about their ancestors, to suggest that a change in the size of the family, a change in job site, or an "other" reason would prompt a local move; to suggest that people might come here from a non-English speaking country because they wanted to learn English; and to be coded in any of the categories for substantive responses for Question 24. The only categories in this set that did not show significant linear relationships with grade level were categories for relatively infrequent and often unsophisticated responses.

Achievement Level and Gender Differences

The 20 categories for responses to Questions 21-24 yielded 15 significant relationships with grade level but only 7 with achievement level and 2 with gender. Six of the 7 significant relationships with achievement level were linear ones, and these tended to parallel the grade level differences by indicating that the higher achievers tended to supply more substantive answers to these questions than the lower achievers. There also was one nonlinear relationship: Average achievers were less likely than other students to say that new immigrants from a non-English speaking country would have difficulty understanding and communicating if they didn't know the language spoken in their new country.

The two gender differences indicated that the boys were more likely than the girls to generate "other" explanations for why a family might move here from a non-English speaking country and how the family's life might change after the move. Overall, however, there were no trends favoring either gender in the responses to these four questions.

Relationships Among Response Categories

The only noteworthy intercorrelations involving this set of response categories were relationships between the more sophisticated responses and the maturity set for the interview as a whole.

Rare and Unique Responses

Question 21: Ancestors coming to America

Only 18 students were able to name a country, and it is doubtful that even half of these were actually the countries of origin of the students' ancestors. Furthermore, only nine could list

possible reasons for emigration, and again, fewer than half of these sounded genuine. For example, one student claimed that his ancestors came here for freedom but then elaborated that "Christopher Columbus discovered it and said that it would be a free country." The most credible responses came from two second graders, one who spoke of ancestors coming from Germany to escape oppression and the other who spoke of Irish and Russian ancestors who came here because relatives who were already here told them about good farm land.

Question 22: Why people move

Kindergarten: We moved because our TV wasn't working good and we had a bunch of storms; somebody else wanted our house and we moved to a better house; change in income.

First grade: Can't afford to stay in the house; wants to get new friends; tells about grandfather who moved to New Zealand but then came back because he didn't have a house there and his daughter living here gave birth to a grandchild.

Second grade: Get new friends; the old house was getting gross and my mom didn't want to pay taxes for the new school; moved to a warmer climate; move if the power goes out and you can't fix it; wanting to move closer to someone or something.

Third grade: Just to move on and see new places; to move closer to friends; because you can't afford to stay where you are (2).

Question 23: Why people move here from a non-English speaking country

Kindergarten: Their house is too small; to meet new friends; they want to do different things but they can't where they are (oppression/freedom); the family moved to escape Castro.

First grade: To get something they can't get at home; an enemy used to live next door to them.

Second grade: To get more toys, less work, and more freedom in the United States; to escape oppression; to escape laws that they didn't like; to get freedom; to get a bigger house (2).

Third grade: To join family members already living here; to escape oppression (3); lost job and moved to a better economy; better economic opportunities; wanted to meet new people and escape crowded conditions; wanted to learn about life in another country.

Question 24: How life changes following immigration

Most responses were indications that the people would be exposed to different language, food, clothing, utensils, type of house, etc. The following are unique responses.

Kindergarten: Better food, more CDs; they would speak with an accent.

First grade: None.

Second grade: It would seem weird to them—not like they were used to; they might feel nervous, like "What am I doing here" or "What if I make a mistake and don't even know it?"

Third grade: They would have to get used to the traffic and stuff; they would pay lower taxes here; at first they wouldn't know their way around.

Discussion

Only a few of the students had any specific knowledge about their ancestors' national origins. The vast majority couldn't say, simply took a guess, or in a couple of instances, recounted the story of the Pilgrims escaping the oppression of the king. This lack of information about the "family story" suggests the value of genealogical activities in early social studies (in which students are asked to interview their parents about their ancestors and perhaps develop a family tree chart).

Most of what the students had to say about why families might move or migrate and about how migration would affect the family was sensible and free of misconceptions. However, the students clearly approached these questions with a child's point of view, seldom mentioning things that most adults would mention immediately. Thus, few of them talked about a change in job or a desire to move to a better school district in explaining local moves, and few of them emphasized a desire for economic betterment in talking about migrations. Many of them did, however, show an ability to empathize with people who migrate to a new country, understanding that these people would miss their old friends, have difficulty communicating in an unfamiliar language, and feel strange or out of place when dealing with new social experiences and customs.

Unsurprisingly, most of the responses were micro-level ones focusing on the families' satisfaction with its house or neighborhood, rather than macro-level ones focusing on economic opportunities or political climates in the countries involved. Very few of these students had yet acquired key ideas connected with the notion of the United States as a nation of immigrants, a land of opportunity, or a haven for people seeking freedom and democracy.

Learning at School and at Home

Questions 25 and 26 focused on learning and socialization. Question 25 noted that children today go to school for much longer than they did in the past, and asked why this is so. We were interested to see if the students would say anything about child labor laws, mandatory schooling laws, and related legislation designed to protect children from exploitation and guarantee their educations. Question 26 asked about things that children typically learn at home from their families. Follow-up probes addressed what children learn specifically from their mothers and their fathers (or where appropriate, from male relatives and female relatives).

Question 25. In the past, most kids went to school for just a few years, but these days most go for a lot longer. Why is that?

Question 26. Kids learn things from their families. What are some things that most kids learn at home, from their families? . . . What else?

More than two-thirds (66) of the students were unable to say why children go to school for more years now than they did in the past. The remaining students said that less schooling was available in the past (fewer schools, fewer grades at the schools, etc.) (16), said that there was less to learn in the past or that teachers didn't know as much as they do now (10), or gave various "other" reasons, such as that most students came from farm families and didn't need much education or that there were no computers in the past (8).

Surprisingly, more than a third (33) of the students were unable to name anything that kids typically learn at home from their families. The remaining students suggested a variety of responses, including academic skills (23), manners and morals (18), self-care skills and responsibilities (15), health and safety rules (10), sports and physical skills (6), and "other" knowledge and skills such as planting, coloring, or using computers (23). When asked about things learned specifically from mothers or female relatives, 25 students were unable to respond but the rest suggested academic skills (23), traditional female role behaviors such as caring for children, acting female, cooking and other domestic arts, etc. (22), manners and morals (16), health and safety rules (9), self-care skills and responsibilities (8), sports and physical skills (7), and "other" skills (14). The students were less able to respond to the follow-up question asking about what is learned from fathers or male relatives. Here, almost half (43) of the students could not respond and the rest identified traditional male role behaviors such as how to act masculine, how to assemble or repair things, using machines, and participating in traditionally masculine sports (17), other sports and physical activities (not so identified as masculine) (12), academic skills (11), manners and morals (7), and "other" skills (26).

In general, the students identified more things learned from mothers than from fathers, notably in the areas of manners and morals, self-care skills and responsibilities, and health and safety rules. The differences in the numbers of students responding to these questions appeared related to the presence of a father in the home. About 15 students said that they did not have a father in the home and couldn't really say what kids learn from their fathers. The following examples from average-achieving boys and girls are representative of the responses from students across the four grade levels.

Kindergarten

Jered

25. I don't know.

26. I don't know.

Kate

25. Because their school is longer and other schools don't have it longer. (Why would they have school longer?) It's because they don't want to have school that long—teaching.

26. I don't know. (Have you learned anything from your mom?) Just learning how to tie and zip. (How about from your dad?) Nothing.

First Grade

Chris

25. I don't know.

26. What they did a long time ago. (What have you learned from your mother?) My mom always wants me to help her cook. (How about your father—has your father taught you to do anything?) He taught me how to kick the football high because we have a little fence thingy and I can kick the ball, but you have to kick it under so it can go up high, because my dad used to play football and he kicked it over our fence. (Has your father taught you to do anything else?) How to play soccer.

Lauren

25. Well, maybe because one person was sick and they got to another person and he had to stay home but when he came back to school he was still sick but he wanted to try to go to school and another person got sick and another person got sick and all the kids were doing it. They got all sick in the classroom and maybe because they were all so sick and because that's probably why they didn't go to school that much in the past but now they do because they're not sick anymore.

26. They learn to write, they learn to color and they learn to walk, get dressed, get their ownselfs a bath and wash their hairs. They learn to do everything. They learn to teach in case they want to be a teacher. So they learn to do anything and when they grow up they can do anything. Just like I'm going to do—I'm going to be a nurse. I wanted to be a nurse but now I think I want to be a doctor for animals. But some people can do that, some people don't like that. Some people don't want to do anything. (What sort of things did you learn from your mom?) Well, I learned how to write . . . and the most important thing I learned how to do was not to go outside without a parent, and I learned a safety rule like if there's a fire in the house, and I learned how to call 9-1-1. A lot of things. (What did you learn from your dad?) Well, I didn't have a dad back then, but after my mom got married and I was like four years old. I didn't know what marriage meant. She forgot to teach me that. I have a movie of it. She taped it. (What do dads teach kids?) When my mom and my dad got married, my dad taught me how to hold the camera and he taught me how to turn the TV off and on and how to put a backpack on, and how to put a rubber band in my Barbie's hair because that's the most important thing

I needed to know and then I would know how to do it for my kids when I grow up. Some people can't even have kids because their body's not right.

Second Grade

Mark

25. Because these days they want more kids to get smarter and stuff. (Why do people want kids to be smarter?) Cause now they've made up harder jobs.

26. I don't know. (Have you learned anything from your mom?) No. (How about from your dad? Have you learned some things from your dad? (No, but I learned something from getting hurt. You can't play with electrical things without an adult.

Emily

25. So they can learn more.

26. Don't jump off a cliff when your brother or sister says. (Sounds like a good thing to learn. Anything else you learn from families?) No. (How about from your mother? Have you learned things from your mother?) Obey the rules. (How about from your father? Have you learned anything from your father?) Yeah, yelling at him makes him cry.

Third Grade

Dale

25. Because we have to spend more time, and they just had to go up to some grade and stop. They would think they knew everything, but they probably didn't. (Why could they do that?) I don't know why . . . probably teachers got too tired out and all the teachers expired or something.

26. Don't fight usually, listen to the rules, don't let things break , stop, look, and listen. (Can you think of anything else that kids learn from their families?) To care for other people.

Chelsea

25. Because a long time ago, there wasn't a college probably. Before colleges, they went to school for a short time and now you go to one step, and you keep on going until you graduate. Back then they didn't go all those steps . . . just went to kindergarten and first grade. They'd go just five grades and then they stopped. ?

26. How to talk . . . like if you're a baby and your mom and dad talk a lot, maybe you'd learn some words and stuff like that. I'm not sure. (What are some things you've learned

from your mom?) Lots of stuff, like how to draw because I like to draw a lot and she teaches me how to draw and talk and how to behave appropriately, say nice stuff, and stuff. (How about from your father—have you learned some things from your father?) Yes. My dad sort of teaches me a lot, like how to fix things and stuff. He teaches me a lot of things.

Grade Level Differences

More younger students were unable to respond to Question 25, and more older students said that students go to school longer now because there is more to learn or gave "other" reasons.

Significant relationships with grade level were less frequent for responses to Question 26 than for most response sets, but all were predictable in the sense that they were linear and indicated that the younger students more often were unable to respond and the older students more often supplied substantive responses.

Achievement Level and Gender Differences

The 25 categories for responses to Questions 25 and 26 yielded 11 significant relationships with grade level, 10 with achievement level and 4 with gender. All but one of the relationships with achievement level were linear and indicated that lower achievers were less able to respond to questions and higher achievers more likely to supply substantive responses. The remaining relationship was a nonlinear one that occurred because average achievers were more likely than other students to say that schooling was less available in the past. Thus, generally predictable grade level and achievement level differences were found for this set of categories, but the relationships reached significance a little less often than usual for grade level and a little more often than usual for achievement level.

The gender differences indicated that five of the six students who identified sports and physical activities as things learned from their families were boys, but girls were more likely than boys to identify things that children learn specifically from their mothers or female relatives. Sixteen boys but only nine girls were unable to respond to this question, and more girls than boys identified academic skills and self-care skills and responsibilities as things learned from mothers. Perhaps it is not surprising to find that girls had more to say than boys about what is learned from mothers. However, there was no parallel tendency in the opposite direction for statements about what children learn from their fathers. In fact, the nonsignificant trends indicated that the girls once again had more to say than the boys.

Relationships Among Response Categories

Students who mentioned a particular category of learning (e.g., academic skills or manners and morals) in talking about what children learn from families in general were more likely than other students to mention these same categories in talking about what they learned from mothers specifically or from fathers specifically. Similarly, students who mentioned traditional female role behaviors as things learned from mothers were more likely than other

students to mention traditional male role behaviors as things learned from fathers. However, the latter response also correlated consistently with the maturity set for the interview as a whole, where as the former response did not.

Rare and Unique Responses

Question 25: Why more schooling today?

Kindergarten: Parents work longer today and have to leave their kids in child care (this and a few other responses focused more on the notion of a longer day than a longer school year or more years of schooling).

First grade: None.

Second grade: In the old days, you could learn just by watching things happen around your small town or farm, but today there is more to learn; fewer wanted to teach in the past; today's jobs require more education (2); they didn't have weekends off from school in the past; because when they grow up, they have to be smart, so they don't use their fingers to count at the grocery store—if they stay in school a long time, they can become doctors; parents didn't want their kids at school all the time because then they wouldn't be doing all the work they needed to do at home.

Third grade: So they learn the law and how to cross the road without getting hit by cars and how to say "no" to drugs if someone asks them if they want to smoke or something; we need more school today because computers give us access to more information; "because long ago a lot of people worked on farms, and so when they had enough education to get out of school, they would go out of school to help on the farm or whatever other jobs they had."

Question 26A: Learned from families in general

All of the responses are covered in the coding categories except for that of a kindergartener who spoke of learning how to feed spiders and how to play CDs and a first grader who spoke of learning "what they did in the past."

Question 26B: Learned from mothers and female relatives

All of these responses are covered in the coding categories except for that of a second grader who said that his mother taught him that "sometimes you can listen to your father, but most of the time he lies."

Question 26C: Learned from fathers and male relatives

This question produced more variability, including negative statements indicative of unhappy homes and resentment toward or contempt for the father.

Kindergarten: How to play computer games; "how to bake stuff" (this was one of four responses indicating the learning of traditionally female role behaviors from fathers; there were no parallel responses indicating the learning of traditionally male role behaviors from mothers). One kindergartener gave the same answer for both fathers and mothers (how to play games, etc.) but added "how to think" for fathers.

First grade: How to cook and how to play computer games; taking care of people, helping them, giving them their medicine, and helping people that don't got anything (it appeared that this child had a sick mother and a father who spent a lot of time caring for her); how to hold a camera, work the television, put on a backpack, and put a rubber band on my Barbie's hair (added that this was the most important thing she needed to know at the time).

Second grade: That you have to be strong in the world (from the student whose mother told him that his father lies much of the time); how to put things together and make things; how to stay on the couch all day; "that yelling at him makes him cry."

Third grade: How to treat women and girls nice—you can't hit them.

Discussion

A majority of the children could not even guess why children go to school more today than in the past, and most of those who did respond guessed either that schooling was less available in the past for some reason or that there was less need to go to school as much because there was less to learn. Only one student clearly articulated the idea that in the past most people were farmers and most students received only a basic education because they were needed to work on the farm, although three other students gave responses that incorporated at least part of this idea. In talking about what children learn at home, most students gave relatively generic responses (e.g., how to act) rather than highly specific ones (e.g., how to pick up the dog). Responses concerning what was learned from families in general, from mothers and female relatives specifically, and from fathers and male relatives specifically were generally similar, with two main exceptions. First, all 17 mentions of learning traditional male role behaviors were made in the context of talking about what is learned from fathers, and 18 of the 22 mentions of female role behaviors were made in the context of talking about what is learned from mothers. Thus, the students generally spoke of learning male role behaviors from fathers and female role behaviors from mothers, although four students did mention female role behaviors that they had learned from their fathers.

The second exception concerned the relative frequencies of responses coded in certain categories. Specifically, students talked about the learning of academic skills, manners and morals, self-care skills and responsibilities, and health and safety rules about twice as frequently when talking about learning from mothers as they did when talking about learning from fathers. If taken at face value, these differences would indicate that children ordinarily learn more of these things from their mothers than their fathers. However, it should be kept in mind that 71 students named one or more things that children learned from their mothers but only 53 students named one or more things that children learn from their fathers, and that most if not all of this difference in general response rate is explained by the presence vs. absence of a father (or step-

father, etc.) in the home. If we only had interviewed students from intact families in which both parents lived in the home, it is likely that most if not all of the differences in coding of these "gender neutral" categories would disappear.

Some of the responses were consistent with the traditional ideal of a happily married couple raising children who admire and identify with them. However, a significant minority of the responses included negative comments about one or both parents (typically the father), such as contempt for their failure to carry out their personal or parental responsibilities appropriately or resentment for their harsh or neglectful treatment of the child. It is sobering to consider that these comments may have amounted to just the tip of the iceberg: Given that they were expressed in response to questions about what is learned from parents, what might the students have said in response to questions about parental behaviors that make them angry or unhappy?

Other Questions

The last four questions raised issues relating to rules, citizenship, and families in society. We asked about family rules to see if students understood that rules are not just constrictions on individual freedom but mechanisms to make it possible for groups of people to live together in harmony. We asked about options available to families in emergency situations, to determine the degree to which students were aware of the public services and "safety nets" available in their communities. Finally, we asked about ways in which families can demonstrate good citizenship, both by helping other individual families and by helping their communities in general.

27. Why do families need rules? What would happen to a family if it didn't have rules?

28. If families have a fire, a flood, or some other emergency, who can they turn to for help? . . . Who else?

29. What can families do to help other families?

30. What can families do to help their communities?

Seven-eighths (84) of the 96 students were able to respond to the question about why families need rules. Most of the responses were clustered in four general categories: health and safety (rules help you stay healthy or safe, keep you from getting sick or hurt) (47), fairness or morality (rules guide you in treating other people fairly and help keep you from doing bad things) (29), clarification of responsibilities (rules make it clear to children that they need to go to school, do their homework, keep their room clean, and avoid destructive behavior) (29), and avoidance of chaos (without rules, things would get wild, crazy, or out of control (29). In addition, there were 13 "other" responses (e.g., rules tell people how to act, parents have rules so that they can boss you around, if there were no rules it might mean that your parents didn't love you). The responses were generally accurate and free of misconceptions.

All of the students were able to name at least one person or service that families could turn to for help in an emergency. The most common responses were the police (52), the fire department (51), and relatives, neighbors, or friends (45). Other common responses included

medical institutions or personnel (hospital, ambulance, doctors, paramedics) (30), calling 9-1-1 (25), or specialists who could be helpful in the event of a flood (plumber, lifeguard). In addition, there were 19 "other" responses (e.g., someone who would know what to do, someone who would let you live in their home for awhile, insurance companies, the Red Cross). Again, the responses tended to be sensible and free of misconceptions.

When asked about how families could help other families, 27 students were unable to respond, but 44 talked about providing direct help with the problem (e.g., help them get out if their car was stuck in snow, guide lost children home, help them move into their home, cheer them up, etc.) and 30 spoke of giving or lending them money, clothing, or other things that they might need (e.g., if their home had burned down). In addition, 7 students spoke of taking in destitute people and 6 identified "other" ways to help (check in on homebound sick or vulnerable people, mow the lawns of neighbors when they are away).

The students found it more difficult to talk about how families could help their communities. A majority (52) were unable to respond. Among the remaining students, 34 mentioned avoidance of littering or picking up litter dropped by others, 10 mentioned working on some community improvement project (e.g., getting rid of a fallen tree or other hazard, drumming up support for a new stop sign), and 17 mentioned "other" activities (e.g., recycling, keeping up your property, obeying the law, working to change the law, avoiding pollution).

In general, responses to these four questions were sensible and free of misconceptions. The following examples from average-achieving boys and girls are representative of the responses from students across the four grade levels.

Kindergarten

Jered

27. Because if you're naughty and stuff, you won't get any toys from them, and not from Santa. (What would happen to a family if it didn't have rules?) Some would be good and some would be very, very bad sometimes. (Why is that?) Because sometimes kids are good and sometimes kids are bad, and some kids might be bad and some might be nice.

28. 9-1-1. (What do you mean by 9-1-1?) If there's an emergency, somebody will come to help.

29. They have tools and stuff to try to fix some stuff on their house or something.

30. I don't know.

Kate

27. So their house doesn't get so messy. (Can you think of any other reasons why families would need rules?) Maybe it's because they don't like their house dirty. (What would happen to a family if it didn't have rules?) Then it would get messy and dirty.

28. 9-1-1. (And if you called 9-1-1, who would come to help you?) Cops or firemen or an ambulance.

29. Bring stuff over that they need or they could bring their tools over to help them.

30. I don't know.

First Grade

Chris

27. I don't know. (What would happen to a family if it didn't have rules?) I don't know. (Do you have rules at your house?) Yes. (What's a rule at your house?) Not to jump on my bed and not to hide from my mom, and I forgot the other ones. (What would happen if there weren't any rules?) Your life would change funny. (How would it change?) Because you don't know what to do.

28. Firefighters, a doctor. (Is there anyone else you could turn to for help if there was an emergency?) A policeman.

29. I don't know.

30. Have a good house. (How would that help your neighborhood?) Because you can have directions on what to do.

Lauren

27. Oh, that's an easy one. If they didn't have a fire safety rule, they would get caught up in a fire and die. If they had rules, they wouldn't, and you have to know something in case there comes a fire, like if there's a fire, you have to like put your hand on the door and feel it, and see if it's hot, then it's a fire down there. So then you go out your back door, but I don't really got a back door because I live in an apartment. (Are there other reasons why families need rules?) Families need rules to know how to call 9-1-1 or their mom can die and nobody will know. If you don't know how to call 9-1-1 then your grandma can call 9-1-1.

28. Well, if their house was full of water or the bathtub overflowed, you can just open the door or turn the faucet off and the water will go out the door. (Assuming you can't fix it yourself, who do you turn to for help?) This water guy, but I don't really know. (Who do you turn to in an emergency?) You call your grandma or your aunt or anybody

and that person will call them, and if that person doesn't know, then they will call someone else.

29. Families . . . like if there's an emergency, we can call for them . . . you could call and they wanted to check on your mom and it was an emergency, and she called right back when it happened, then that's how we can help other families. My grandma does that—she checks on me and my brothers and sisters.

30. You can like call your . . . like if it's by you, you can go over to their house to check on them and see if they're OK, and if there's an emergency, you can use their phone so they know where they're at, because if you use your phone at home, then they'll think it's you at your house.

Second Grade

Mark

27. Because if you didn't have rules, then you'd get hurt a lot. (What would happen to a family if it didn't have rules?) I don't know.

28. I don't know. (Well, if there was a fire at your house, who could you call for help?) A firefighter. (If you had some other sort of emergency, who could help you?) Sometimes you can help yourself if there's a fire or something and if there's an automatic hose way outside and firefighters had two hoses, you could make the hose out longer and you could use that. (Anyone else that could help in an emergency?) If there was a flood, you'd have to do it yourself because there aren't any flood people, or find some people that could do something with the water.

29. I don't know.

30. I don't know.

Emily

27. So they wouldn't get hurt or stolen or need to go to the hospital. (What would happen to a family if it didn't have rules?) They would crack their head or trip and hurt theirself. (Anything else?) Or they might get stolen.

28. OK, a fire—you can get a firefighter or call 9-1-1. (Who else could you call in an emergency?) Like if a tornado is coming, you get down in your basement. (What if someone was ill?) A doctor and a nurse, and your mother.

29. Like if someone you don't know trips, you help them back up. That would be generous. (What if a family that you knew was having a problem or needed help?) If they were fighting, I would like, "Guys, guys, guys—stop." Then I would tell someone else that they were fighting.

30. What does a community mean? (Community means like the place where you live, like your town. What could a family do to help make their town a nicer place to live?) Don't shout, just be quiet.

Third Grade

Dale

27. So like if we were fighting and we didn't stop, if that wasn't a rule to stop, then we'd be hurting each other. (What would happen to a family if it didn't have rules?) If you didn't have rules . . . like clean up your bedroom, and if you didn't clean up your bedroom and somebody came over, they'd say, "Look at the room. You shouldn't have that." Then we would come over to our house and have the same thing, and it would be all bad.

28. That one's easy. Friends or cousins from down there, cousins' friends, maybe the school too. The school, cousins, even some friends. (Can you think of anybody else?) Yeah, people we help. They have to pay us right back, you know.

29. When we were talking about fires, other people probably helped us, so now we need to pay them right back, so we'll help them too.

30. Like if they could help do a job . . . like if somebody fired it . . . like somebody else could participate or whatever you call it, and then we could hear them again or something.

Chelsea

27. Because the family would be all bad and say bad things and they would hit each other and you have rules of no hitting and say nice things, and don't be a show-off if your brother's friends come over. (What would happen to a family if it didn't' have rules?) It would be out of control and stuff, and it would be sort of not a very good family.

28. Their neighbors and anyone that would help you—maybe your grandma and grandpa or someone like that or someone really close to you. (How about if there was a fire at your house—who could help your family?) My mom and dad. (Anybody else?) Your brothers or sisters. I don't know.

29. I don't know.

30. Maybe to help their communities they could clean up litter and stuff.

Grade Level Differences

The grade level analyses for responses to Question 27 yielded a slight twist on the more typical pattern. Here, there was no significant relationship with grade level for failure to respond to the question, nor for statements coded in the fairness/morality category (which included both relatively unsophisticated statements such as that rules keep you from going to jail and more sophisticated statements such as that rules guide you in treating other people fairly). A negative relationship with grade level did appear, however, for the "other" category, which included many questionable or unsophisticated statements. Meanwhile, positive relationships with grade level appeared for statements that rules promote health and safety, underscore responsibilities, and avoid chaos. The latter statement was especially strongly associated with grade level, being made by only one kindergartener but five first graders, eight second graders, and 15 third graders.

Only one significant relationship with grade level appeared in the responses to Question 28: Older students were more likely than younger ones to speak of turning to relatives, neighbors, or friends in emergencies. The general lack of significant relationships with grade level for these response categories, coupled with the fact that all of the students were able to respond to the question, indicates that even the kindergarten students were reasonably well informed about available options in emergency situations.

No significant relationships with grade level appeared for responses to Question 29, and inspection of the subgroup totals did not reveal even a nonsignificant trend. This was one of the rare instances in any of our interviews in which most of the students were able to respond to a question but their responses showed no relationship at all to grade level.

In contrast, the categories for responses to Question 30 yielded the prototypical pattern. Younger students were more likely to be unable to respond to the question and older students were more likely to be coded in all three of the categories for substantive responses. Given that older students are more likely than younger ones to know about community services and resources, the grade level differences in responses to Question 30 were not surprising. However, the absence of such differences in responses to Question 29 was surprising.

Achievement Level and Gender Differences

The 23 categories for responses to Questions 27-30 yielded 11 significant relationships with grade level, 6 with achievement level, and 7 with gender. Only 2 of the 6 significant relationships with achievement level were linear. These indicated that higher achievers were more likely than lower achievers to say that families need rules in order to promote the health and safety of their members and that one way that families could help other families is to take them in if they should become homeless or temporarily unable to use their homes. The other four significant relationships with achievement level were nonlinear, indicating that average achievers were less likely than other students to talk about calling the police or fire department in an emergency, less likely to respond to the question about what families can do to help their communities, and specifically, less likely to say that families can help their communities by avoiding littering or picking up litter.

The seven gender differences all favored girls. Boys were less able than girls to respond to Questions 27, 29, and 30; girls were more likely than boys to say that family rules are needed to teach fairness and morality, that families can help other families by providing them with direct help with their problem, that families can help their communities by avoiding littering or picking up litter, and that families can help their communities by working on community improvement projects. Clearly, the girls were more prepared than the boys to answer these questions. Looking across all of our interview findings, the gender differences for this set of categories were among the most consistent in favoring one gender over the other.

Relationships Among Response Categories

Students who said that family rules promote fairness or morality were more likely than other students to say that family rules are needed to underscore responsibilities. Also, students who said that family rules are needed to underscore responsibilities were more likely than other students to say that family rules are needed to avoid chaos. The latter response also correlated with the maturity set for the responses to the interview as a whole.

Students who talked about calling the police in an emergency were more likely than other students to mention calling the fire department or calling medical personnel. Finally, substantive responses to Question 30 were part of the maturity set for the interview as a whole.

Rare and Unique Responses

Question 27: Need for family rules

Kindergarten: So they can teach kids—otherwise, the family won't be good; otherwise it wouldn't be much fun at home; so if you're naughty, you won't get any Christmas presents; otherwise, things might be bad; otherwise, kids would eat too much sugar and get hyper; otherwise, kids would do whatever they wanted; you need rules because "when you grow up, you don't want to be a sassy, disgusting butthead, and you don't want to be calling names, and you don't want to say, 'give me that, give me that' and if you don't get it, you start throwing a fit."

First grade: So your parents don't get mad at you; to keep you out of trouble; no rules could mean that your family doesn't love you; so you don't think you can do anything you want; so your parents can boss you around.

Second grade: Otherwise, you would be wild and not able to live with your parents (they would get frustrated and send you away); there would be out-of-control partying and fighting; "To be safe and to learn and to be fair. I got that in social studies."

Third grade: So they don't go crazy and get in trouble; so kids don't do whatever they want to do; so kids don't go ballistic; otherwise it would be crazy; otherwise it would be a total disaster; otherwise it would be out of control (2); otherwise it would lead to a breakup of the family; otherwise it would get too wild.

Third grade: Pay your taxes and do what the government says; be a good neighbor (not noisy, not going in other people's yards); don't pollute the water; work with neighbors and maybe the police to cut down on speeding in the neighborhood; stop cutting down forests.

Discussion

Most of the students were able to supply one or more statements about why families need rules or what would happen if they didn't have rules. The older students tended to provide more specifics, and in particular, to say that family rules promote the health and safety of family members, underscore their responsibilities, and keep family life from getting wild, crazy, or out of control. Third graders in particular were likely to make the latter statement. Almost all of the students understood that rules are needed to promote harmonious living in the group context, and one first grader had the insight that a lack of rules could mean that your family doesn't love you.

All of the students had something to say about what families can do in an emergency, and the fast majority of these responses were sensible. However, a few of the younger students spoke of getting help from Superman, the FBI, or God. Only one student specifically mentioned the Red Cross, and none mentioned the Salvation Army or other social agencies, indicating that children in these grade levels have not yet acquired specific knowledge about these agencies. The police were mentioned more often than even the fire department, relatives or friends, or calling 9-1-1, indicating that these suburban children viewed the police at least partly as benign and helpful, not just as authority figures to be feared or avoided. It would be interesting to see how similarly aged minority/inner-city students would respond to this question.

When asked how families can help other families, about 70% of the students were able to respond and most of them essentially said, "Provide them with whatever help they need." The examples they generated varied from relatively minor one-time assistance (help free a car stuck in snow, guide lost children home, etc.) to helping in significant and often sustained ways (taking in homeless people and letting them live with you). There was a surprising absence of grade-level differences in response to this question.

Disappointingly, fewer than half of the students were able to say anything about how families might be helpful to their communities. However, the 46 students who were able to respond produced sensible and frequently inspiring responses. Several were potential neighborhood activists or office holders, one had been inspired by Martin Luther King, and one second grader (quoted) generated a noteworthy list of ways that people could improve their neighborhood through volunteerism and political activism.

As a set, these response categories yielded fewer significant relationships with grade level but more significant relationships with gender than is typical for our findings. Furthermore, all seven of the gender differences favored girls, indicating that they had more to say than boys about why families need rules and about what families can do to help other families or their communities at large. These differences may reflect findings from socialization research indicating that, relative to the socialization of boys, the socialization of girls is marked by an emphasis on responsibility and an ethic of caring.

General Discussion

The students' responses to the family living interview displayed many of the same patterns seen in earlier interviews. They knew much more about family living here and now than in the past or in other cultures, and the sophistication of their responses was related much more closely to age (grade level) and personal experiences with the topic than to achievement level or gender. There were frequent indications of chauvinism in talking about other cultures and occasional indications of presentism in talking about the past (i.e., viewing people in the past as less intelligent or well functioning than we are because they lacked modern inventions).

The initial questions were intended to define families and talk about why most people live in them. All but 14 of the students were able to define or describe a family, and what they said was accurate or at least defensible as statements about families. However, the students found it more difficult to explain and why people live in families. Most either were unable to respond or spoke of a desire for close social ties and support. Only 21 said that people live in families because they get married and/or want to have children. Knowledge about kinship relationships developed gradually across the age range studied, with younger students primarily emphasizing social ties among the people involved and older students beginning to learn about genealogical or legal ties. Overall, students found it easiest to define grandparents, somewhat more difficult to define aunts and uncles or cousins, and most difficult to define step-brothers and step-sisters. Legal relationships were even more difficult and confusing for the students than genealogical ones. Unless they could speak from direct experience, the students had difficulty talking about adoption or step-sibling relationships.

Perhaps the key idea to teach about kinship relationships is that there are two general categories: genealogical relations (blood relatives of one's biological parents) and step-relations (blood relatives of one's step-parent). The former relationships persist through changes in marital relationships or households, but the latter relationships can be severed through divorce or separation (although personal friendships and a subjective sense of kinship may persist).

Most students found it easy to talk about reasons why families might get larger or smaller, and the explanations they gave generally paralleled those likely to be given by adults, except for the students' frequent mention of pets and occasional descriptions of traumatic departures (a family member runs away, wanders off and gets lots, or discovers that he or she is in the wrong family due to a mix-up in identity). However, the students were unable to generate many ideas about how family needs would change following an increase or decrease in family size, except for the most obvious answer that needs for food, clothing, and other resources would increase or decrease. No student noted, for example, that there might need to be a redistribution of chores and responsibilities, that a new baby might mean a change in working hours for one or both parents or a need to arrange for childcare during part of the day, or that the departure of a breadwinner might bring financial pressures. Thus, the students lacked an adult perspective on these questions.

Most of the students were able to respond to questions about what it means to get married or divorced, and what they said was generally accurate and free of misconceptions. The most common responses were that a couple likes/loves each other and therefore wants to live together

as the reason for marriage, and that the couple has grown apart or had a fight as the reason for divorce. Few students mentioned either the legal papers or the ceremonies involved in marriage or divorce or the desire to have children and raise them within a family as a motive for marriage. Only 11 made reference to the marriage ceremony itself, and none described it specifically. Some responses focused on the child's rather than the adult's point of view, making reference to things such as the formal clothing, kissing, or cake involved in a wedding or the traveling between homes or loss of contact with step-siblings following a divorce.

No student specifically said that actions of the children were the reason for divorce, although a few of them hinted that they had something like this in mind. Few students mentioned court proceedings and none distinguished between formal marriage and informally living together. The students' responses suggested that they would benefit from instruction on the vows that people make as the heart of the marriage ceremony, some of the legal ramifications of marriage and divorce, and the idea that growing apart/incompatibility is the usual reason for separation or divorce (rather than hostility, violence, the desire to marry someone else, or actions of the children).

The next series of questions asked the students to make past vs. present comparisons concerning family life in general and the roles/activities of fathers, mothers, and children. There was extreme variance in the students' ability to respond to these questions. Almost all of them were able to respond to some of the questions, but only small minorities were able to respond to others. In general, the students responded readily when asked about today's families, but most had difficulty when asked about families in the past or when asked to draw comparisons. Few if any of them were aware of the sweeping changes in family living that accompanied the industrial revolution and the shift from extended families living together on farms to nuclear families living separately in cities or suburbs.

Repeating a pattern observed in all of our interviews, the students' images of the past were noteworthy for what historians call presentism—the tendency to judge the past by today's standards instead of viewing the time and place in question through the eyes of the people who lived there. Presentism is pervasive in young children's views of the past, leading them to view past life as drab and past people as stupid (or at least, limited in creativity) because contemporary technology and conveniences had not yet been invented. Many of the students viewed people of the past as sitting around idly with little to do whenever they were not engaged in finding or growing food, and many others viewed these people (more accurately) as working all day long, with little time for much else other than their chores.

Although they did not talk about a shift from extended families functioning as economic and social units on farms to contemporary nuclear families living in cities and suburbs with breadwinners working at modern jobs, some students did identify general shifts between the past and today: More mothers work outside the home now, fathers are more likely to work in offices than to be farmers or blacksmiths, and children go to school for most of the year throughout childhood and adolescence. Many more consumer products are available now, and most people buy the things they need at stores rather than grow or make them at home. In responding to these questions, some students kept coming back to certain themes: In the past there was slavery or restrictions on opportunity for black people to marry and enjoy family life, but things are

different today; families in the past rarely left their farms because their means of transportation were limited or they couldn't find babysitters to watch their children; people didn't buy as much then because they didn't have today's well-stocked stores and/or because they didn't have much money; they grew most of their food and made most of their clothes; they didn't have access to modern medicine and hospitals; the population was sparse so they felt a need to increase it and therefore tended to have large families; people then were hardworking and responsible, whereas today we are spoiled and lazy; childrearing and schooling have become more humane; and gender roles now overlap more than in the past. Most of these themes were accurate as far as they went, although often tinged with presentism.

Even though these children were relatively young and lived in modest but pleasant communities, their comments about family living in general and their own families in particular were characterized more by realism (sometimes even cynicism) than by romanticism or idealism. There were frequent references to conflict between the parents or between one or both parents and the child, as well as intimations that one or both parents (but typically the father) did little but sit around all day and watch television. Some of these students not only did not look up to their parents as role models but held them in contempt.

Some of the rare and unique responses were notable for their precocity: Modern grandparents love you but nevertheless often move away (e.g., to Florida); relatives are obligated to take you in if you become destitute; modern parents tend to focus on quality rather than quantity in raising children, although some are too busy with careers or other things to have much time for their children; it is nice to be able to buy lots of things but this complicates our lives; modern jobs involve more pleasant work done in more pleasant surroundings, but they take parents away from their children and require them to make childcare arrangements; women do not passively wait for male attention but planfully pursue desired men; conflict often arises between men and women because men like to drink and go to bars; in the past, children played games that involved little or no equipment, but today they play with computers and complicated toys; due to a history of invasion, the Chinese are unusually defense-conscious; large families present opportunities to take advantage of economies of scale; and modern sports and recreation opportunities are nice but sometimes parents (again, especially fathers) are more involved in these activities than in their families.

The next set of questions asked students to draw contrasts in the family living circumstances or activities of people living in different geographical areas or types of communities. First, they were asked about family living customs in other countries in general, and in Japan specifically, that differ from our own. Many of the students were unable to respond to these questions, and most of the rest drew comparisons between countries that did not focus on family living. Furthermore, much of what they said was rife with stereotyping or chauvinism. Some of these responses featured stereotypes that have some basis in fact, or at least did in the past (e.g., the English ride subways, the French drink wine, the Chinese eat with chopsticks, and Africans live in huts). However, there also were numerous confusions and misconceptions (e.g., there is less night in Mexico, there are no schools in Africa, the Belgians speak Spanish, the Egyptians live in pyramids, Australia is full of headhunters who use bows and arrows, Germans celebrate Hanukkah instead of Christmas). There also were frequent instances of chauvinism. Often these were displayed in the disparaging way that the students talked about "different"

customs, but sometimes they were expressed more directly through comments such as "they talk weird."

To counter the students' tendencies toward presentism in thinking about the past and chauvinism in thinking about contemporary life in other cultures, it is important to teach them about life in the past or in other cultures in ways that enable them to empathize with the people being studied. In particular, it is important to help students to view these people in the context of their time and place, so that their goals and motives become understandable and their behavior is seen as intelligent adaptation (and not as weird, bizarre, or evidence of deficits in intelligence or creativity). As anthropologists like to say, it is important to teach about cultures in ways that "make the strange familiar" and "make the familiar strange."

The students' responses to questions about life in other countries also were notable for their focus on child-oriented things such as holiday celebrations and Santa Claus, toys and games, bath times, and parades. We believe that this tendency is due not only to age-related interests but to the ways that other cultures are often taught at school or conveyed in books and television programs written for children. These treatments often pay disproportionate attention to aspects of culture that are particularly striking or interesting to children, especially celebrations.

Along with frequent chauvinistic characterizations of life in other countries, there were occasional statements critical of American society. One student said that the Japanese people dress "fancier" than we do and another said that the Japanese people spend a lot of time improving their neighborhoods whereas Americans are prone to sitting and watching television. There also were occasional ironies reflecting cultural diffusion. One student noted that the Japanese do not use piñatas to celebrate birthdays like we do. This student clearly thought of piñatas as an American (i.e., not Mexican) custom. We observed parallel responses to our food interview, when several students drew contrasts between prototypical Asian foods and "American" foods such as spaghetti, pizza, or tacos.

The students also were asked to draw contrasts between family life on farms, in small towns, and in large cities. Here again, most students either were unable to respond or (more typically) drew contrasts between the communities involved but did not focus specifically on family life. The students' views of life on farms were generally negative, viewing it as difficult (i.e., involving more work) and less desirable than city or suburban living. This was surprising both because these negative images of farm life did not appear in our earlier food interview (which included a series of questions on farming) and because the students lived in one of the outlying suburbs in a modestly sized metro area that is surrounded for many miles in all directions by hundreds of farms. Even though there are farms located immediately adjacent to (and in a few cases, still within) their community, it was clear that most of these students had little or no experience with farm life, and many of them harbored major misconceptions about it.

In their view, farmers or farm families have to work most of the time and have little time for anything else, must endure unpleasant smells coming from pigs and other animals, must live in small houses that often lack amenities found elsewhere, and generally don't have much and "don't know how to live like real people do." Some students even believed that farm children do

not go to school and are illiterate, that they live in barns (which must be painted red), or that farm families do not have children (or if they do, it is only because they want someone to carry on the family's farming tradition). Such responses indicate that city and suburban children with little or no direct experience with farms or farm life stand to benefit from instruction not only on the land-to-hand relationships and other processes and technical aspects of farming, but on the motives of farm families, the satisfactions they derive from their work and their lives generally, the fact their children go to similar schools and learn similar things as city and suburban children do, and so on. In short, city and suburban children need to learn that farm people are much more similar to than different from themselves and their families.

Stereotyping and misconceptions were also evident in the students' comparisons between small towns and big cities, although to a lesser degree. Many students depicted small towns as quiet backwaters, and some of them embellished this with misconceptions (e.g., danger from bears, people hunting and gathering for food, many people lacking cars or electricity, or people eating poorly because they don't have enough stores). Other students expressed misconceptions about cities, including several seen previously in our shelter interview (e.g., the space in cities is all taken up so that one cannot build a house there, confusion between apartments and hotel rooms). Some students drew valid contrasts, although usually not about family living (e.g., small-town people are more likely to live closer to their relatives, there are more sidewalks in cities, money is concentrated in cities, there is a greater amount and variety of shopping and jobs in cities, city life tends to run at a quicker pace, and apartment building owners often do not allow tenants to have pets).

The next set of questions addressed students' thinking about family moves (local) and migrations (to a new country). The questions focused on what might motivate families to move/migrate and what might be the effects of the move/migration on family living.

We began by asking the students if they knew where their ancestors had come from and why they had emigrated to America. Only a handful of the students had any specific knowledge about their ancestors' national origins, and most of them were unable to say why their ancestors emigrated. This lack of "family story" information suggests the value of genealogical activities in early social studies (e.g., asking students to interview their parents about their ancestors and perhaps developing a family tree chart).

The next questions asked about why families might move or migrate. Most of what the students had to say in response to these questions was sensible and free of misconceptions, although frequently limited to the child's point of view. Thus, most explanations of why a family might move emphasized that the family had gotten tired of their old house, had gotten larger and needed a larger house, or wanted to leave a deteriorating house or neighborhood. Few of them talked about a change in job or a desire to move to a better school district.

More than two-thirds of the students were unable to respond to the question about why people might move from a non-English speaking country to the United States. Those who did respond mostly guessed (e.g., that the people wanted to learn English or to escape oppression) or generated relatively vague responses (e.g., they were seeking something that was lacking in their country of origin). Only a few students mentioned a desire for economic betterment in talking

about migrations, whereas most adults would mention this first (perhaps along with a desire to escape oppression). Almost half of the students could not respond to the follow-up question about how family life changes when a family moves to a new country, although the remaining students mostly produced responses that reflected empathy with the people (e.g., understanding that these people would miss their old friends, have difficulty communicating in an unfamiliar language, or feel strange or out of place when dealing with new social experiences and customs).

Overall, most responses to this series of questions were micro-level ones focusing on the families' satisfaction with its house or neighborhood, rather than macro-level ones focusing on economic opportunities or political climates in the countries involved. Few of these students had yet acquired ideas connected with the notion of the United States as a nation of immigrants, a land of opportunity, or a haven for people seeking freedom and democracy.

We asked the students why children today go to school longer than they did in the past, to see if they would say anything about child labor laws, mandatory schooling laws, or related legislation designed to protect children from exploitation and guarantee their educations. Most of the students were unable to respond to this question, and most of the rest guessed that schooling was less available in the past (i.e., there were fewer schools or fewer grades at the schools) or that there was less to learn in the past. Only one student clearly articulated the idea that in the past most people were farmers and most students received only a basic education because they were needed to work on the farm, although three other students gave responses that incorporated part of this idea.

The next question asked about what things children learn at home from their families, and follow-up probes asked about what is learned specifically from mothers or female relatives vs. from fathers or male relatives. The students' responses to these questions emphasized academic skills (primarily reading, writing, and arithmetic), manners and morals, self-care skills and responsibilities, health and safety rules, and sports and physical skills. Most students gave relatively generic responses (e.g., how to act) rather than highly specific ones (e.g., how to pick up the dog).

The students mentioned generally similar things in talking about what is learned from mothers vs. fathers, with two main exceptions. First, there were 17 mentions of learning traditional male role behaviors (e.g., how to act masculine, how to assemble or repair things, how to use machines, how to play traditionally masculine sports) and 22 mentions of learning traditional female role behaviors (e.g., caring for children, acting female, cooking and other domestic arts). The students generally spoke of learning male role behaviors from fathers and female role behaviors from mothers, although 4 students did mention female role behaviors that they had learned from their fathers.

The second exception concerns the relative frequencies of responses coded in certain categories. Specifically, the students talked about learning academic skills, manners and morals, self-care skills and responsibilities, and health and safety rules about twice as often when talking about learning from mothers as when talking about learning from fathers. However, most if not all of this difference is likely explained by the presence vs. absence of a father (or father figure)

in the home. We suspect that "gender neutral" behaviors would be described as learned from fathers as much as from mothers by children with both parents living in the home.

Some responses to these questions were consistent with the traditional ideal of a happily married couple raising children who admire and identify with them. However, a significant minority of the responses included negative comments about one or both parents (but typically the father). These comments expressed contempt for the parents' failures to carry out their personal or parental responsibilities appropriately or resentment for their harsh or neglectful treatment of the child. Note that these comments were made in response to questions about what is learned from parents, not questions about parental behaviors that made the students angry or unhappy. Like some of the responses to the earlier questions about family life in the past and present, these responses are characterized more by realism (and sometimes cynicism) than by romanticism or idealism.

The next question asked about why families need rules, to see if students understood that rules are not just constrictions on individual freedom but mechanisms to make it possible for groups of people to live together in harmony. The students' responses were generally accurate and free of misconceptions, emphasizing that rules help keep you healthy or safe, guide you in treating other people fairly, clarify your responsibilities, and prevent chaos (i.e., without them, things would get wild, crazy, or out of control). Thus, almost all of the students understood that rules are needed to promote harmonious living in the group context, and one even had the insight that a lack of rules might mean that your family doesn't love you.

The next question asked who families can turn to in an emergency such as a fire or flood, to see if students were aware of the public services and "safety nets" available in their communities. All of the students had something to say in response to this question, and the vast majority of their responses were sensible (e.g., call the police, the fire department, relatives, neighbors or friends, or 9-1-1). However, a few of the younger students spoke of getting help from Superman, the FBI, or God, and only one student specifically mentioned the Red Cross and none mentioned the Salvation Army or other social agencies. Thus, children in these grade levels have not yet acquired specific knowledge about these agencies. The police were mentioned more often than even the fire department, relatives or friends, indicating that these suburban children had a benign view of the police as helpful public servants, not as authority figures to be feared or avoided. Minority/inner-city students might respond differently to this question.

When asked how families might help other families, most of the students were able to respond and essentially talked about providing the families with whatever help they needed (ranging from helping free a car stuck in snow to taking in people who were at least temporarily homeless). However, the students found it much more difficult to respond to the last question about how families might help their communities. A majority were unable to respond, and many of the others spoke only about avoiding littering or pollution. However, some students produced inspiring responses: Several were potential neighborhood activists or office holders, one had been inspired by Martin Luther King, and one generated a noteworthy list of ways that people could improve their neighborhood through volunteerism and political activism.

Grade Level Differences

Significant relationships with grade level were observed for 130 of the 221 categories shown in Table 1. Of the 130 significant relationships, 123 were for linear trends and the other 7 were for nonlinear relationships. The 123 linear trends can be summarized simply by stating that the younger students were more likely to be unable to respond or to be coded in categories reflecting low-level responses, whereas the older students were more likely to be coded in categories reflecting sophisticated responses. In a few cases, one of the responses in a category set that was expressed more often by older students fell short of an ideal response to the question (saying that a couple's motive for divorce was simply that they didn't want to stay married anymore), but this response was still preferable to the response categories coded more frequently for younger students (e.g., failure to respond to the question at all). Overall, the data show consistent tendencies for increases in knowledge across the K-3 grade level range, although much more clearly for some question clusters than for others.

Achievement Level and Gender Differences

Only about 30% (66) of the 221 categories showed significant relationships with achievement level. Of these, 52 were linear trends and 8 were nonlinear relationships. The linear trends can be summarized simply by stating that lower achievers were more likely to be unable to respond or to give low-level responses to the questions, whereas higher achievers were more likely to give sophisticated responses. However, higher achievers were more likely to make the questionable statement that fathers in the past didn't have to work as much as today's fathers and thus had more time for family and leisure activities. Other achievement-level differences that some might find surprising were that higher achievers were more likely than lower achievers to mention pets in naming family members and to draw clear distinctions between mothers' and fathers' roles in talking about the activities of mothers and fathers in the past and present. In general, the higher achievers provided more sophisticated responses than the lower achievers, although these differences were much smaller and much less often statistically significant than the grade level differences.

Once again, significant relationships appeared least frequently with gender. In this case, only 35 of the 221 categories in Table 1 showed significant gender differences. Eleven of these were for responses that represented contrasting orientations toward or styles of responding to a question rather than differences in knowledge about the topic. However, 20 of the remaining 24 categories that did represent knowledge about the topic favored the girls. Our more typical finding is that most gender differences are on stylistic categories rather than knowledge categories, and that the knowledge differences are relatively balanced, so there is no clear tendency for one gender to display more knowledge than the other. However, the girls displayed more knowledge than the boys about family living. They were more able than the boys to respond to several of the questions, and more specifically, were more likely to be coded for saying that the desire to get married or have children is a motive for living in families, correctly defining grandparents and step-siblings, identifying incompatibility as a motive for divorce, mentioning chores (i.e., not just play) as activities that children engage in today, saying that farm people do more chores than other people, generating more "other" town vs. city comparisons, stating that family rules teach fairness/morality, saying that families can help other families by

providing direct assistance with the problem they face, and saying that families can help their communities by avoiding/picking up litter and by getting involved in community improvement projects. The only categories favoring boys indicated that boys were more likely than girls to provide responses specific to family living in comparing the United States vs. other countries and towns vs. cities, as well as to generate more "other" statements about why people might migrate and how family life would change following the migration.

Although not necessarily predictable, most of these gender differences can be explained in terms of what is known about differences in the ways that American boys and girls are socialized. It should be kept in mind, however, that significant gender differences appeared for only about 11% of the response categories and that overall, the responses of the boys and girls were much more similar than different.

Limitations of the Study

Our interviewers generally established good rapport with students and our questions were tailored for the age levels involved, so we believe that our findings comprise a generally valid representation of the nature and development of K-3 students' knowledge and thinking about family living as a cultural universal. Some of the students might have been more responsive if they had been interviewed on another day. All of them might have been able to say more if we had included illustrations to provide visual stimuli. However, we believe verbal questions alone were sufficient to enable the students to understand what we were asking. Also, we have found that illustrations tend to "stimulus bind" children's responses, and we prefer them to respond using their own images of the objects, events, or processes we ask them about, not images that we might supply by showing them a photo or other illustration.

The sample was large enough to allow population differences by grade level, achievement level, or gender to be detected via statistically significant Chi-squares in our analyses. However, it was limited in at least three respects. First, it was limited to the lower middle portion of the socioeconomic status (SES) range. No subsamples representing the upper or lower SES levels were included.

Second, even though the sample was open to students of any race or ethnicity (as long as all or at least most of their lives had been lived in the U.S.), the population of the community involved was such that the students we interviewed were overwhelmingly European American in their ethnic composition. Few students from African-American, Asian-American, Latino, or Native American families were included. We believe that children's ideas about family living are more likely to be influenced by their common experiences growing up within the contemporary U.S. society and culture than by differences in their family backgrounds, so we do not believe that this sample limitation is as serious as it might have been if we were asking questions about race or ethnicity. This is an untested assumption, however, and it remains to be seen whether our findings will generalize to racial and ethnic minorities.

The third limitation in the sample was geographic. The students all lived in Michigan. It is possible that somewhat different patterns of response to at least some of our questions might have been elicited from students living elsewhere.

Another limitation of the study is its lack of systematic data on the origins of students' ideas. Interviewers were instructed to ask students about where they got their information when they gave unusually sophisticated or detailed responses, but we did not routinely ask about the sources of the students' information. This was because we view the work as initial, establishing-the-parameters research in an emerging field, rather than as more specifically targeted research in a more mature field. We are trying to establish initial norms or parameters concerning five-to-eight-year-old American children's knowledge and thinking about cultural universals, not to trace the origins of the knowledge, to establish the mechanisms through which development occurs, or to address other issues that might become more relevant farther down the road. This "outline the big picture first, then start filling in the details" approach is the way that science normally proceeds in emerging fields.

We assume that particular subsets of knowledge and thinking are developed through a mixture of mechanisms that will vary with the topic. For example, a lot of spontaneous knowledge development probably occurs in learning about aspects of cultural universals that are observable in the home and neighborhood. In contrast, most of what is learned about aspects that existed in the past or currently exist only in other areas or cultures would have to be learned primarily through transmission of knowledge (initially from family members and the media, later at school). Eventually we will learn more about the mechanisms through which knowledge is acquired, what experiences lead to growth or change outside of school, how easy or difficult it may be to teach particular networks of knowledge in school, and what materials and methods may be helpful in doing so.

Implications for Primary-Grade Social Studies

In the introduction to this report we noted that Ravitch and others have claimed that primary-grade students do not need to be taught about cultural universals because they already know this information, having picked it up through everyday life experiences. This may be true for the very limited and trite information contained in many primary-grade social studies textbooks. We have no doubt that most children do develop intuitive understandings of these ideas through informal life experiences, and further that those who have not developed the ideas on their own are likely to understand them readily when they are pointed out by a teacher.

However, our findings are showing that children do not routinely acquire all, or even a significant portion, of what is worth knowing about cultural universals through everyday experiences (primarily because these experiences are informal and do not include sustained discourse structured around key ideas). Furthermore, the mostly tacit knowledge that they do accumulate is limited, disconnected, and frequently distorted by naïve ideas or outright misconceptions. We conclude from this that primary-grade students do stand to benefit from instruction about cultural universals, although the kind of instruction that we envision is much more coherent and powerful than the kind that students are likely to receive from teachers who confine themselves to the content in the major publishers' elementary social studies textbook series and the questions and activities suggested in the accompanying teachers' manuals.

We believe that such instruction belongs in the primary-grades social studies curriculum, although in addition to (not instead of) efforts to develop students' prosocial values and

dispositions and a variety of skills ranging from map reading to critical thinking and decision making. The questions asked in this study reflect our notions about key ideas that might be emphasized in teaching about family living. They tap networks of knowledge that we believe to be basic for developing initial understandings of the topic. Like others who have focused on the primary grades, we believe that the curriculum in these grades should feature pre- or pandisciplinary treatments of topics designed to develop "knowledge of limited validity" (Levstik, 1986) or "protodisciplinary knowledge" (Gardner & Boix-Mansilla, 1994) about the topic, rather than attempts to teach children disciplinary knowledge organized as such.

We favor an appropriate balance between the three traditional sources of curricula (knowledge of enduring value, including but not limited to disciplinary knowledge; the students' needs, interests, and current zones of proximal development; and the needs of society in terms of the knowledge, skills, values, and dispositions that our society would like to see developed in future generations of its citizens). Within this context, we argue that a pandisciplinary introduction to the social world (past and present, taught with emphasis on developing understanding, appreciation, and life application of big ideas) makes more sense for primary-grade students than what we view as premature attempts to socialize these students into the academic disciplines.

In conclusion, we believe that primary-grade students stand to benefit considerably from curricular treatments of cultural universals that are more powerful than those typically offered by textbook series. We define powerful treatments as treatments that enable students to develop understanding of how the cultural universal addressed in the unit works in our society, how and why it got to be that way over time, how it varies across locations and cultures, and what all of this might mean for personal, social, and civic decision making.

Such units would still focus on elementary and familiar content in that they would address fundamental aspects of the human condition and connect with experience-based tacit knowledge that students already possess. However, they would not merely reaffirm what students already know. Instead, they would raise students' consciousness of, and help them to construct articulated knowledge about, basic aspects of the cultural universal about which they have only vague and tacit knowledge (this refers to aspects that are concrete and comprehensible to them given their limited cognitive structures and prior knowledge; aspects that were too abstract or macro analytic would not be included). Such units also would introduce students to a great deal of new information, develop connections to help them transform scattered understandings into a network of integrated knowledge, and stimulate them to apply the knowledge to their lives outside of school and to think critically and engage in value-based decision making about the topic. For more information about such units, see Brophy and Alleman (1996), and for detailed unit plans, see Alleman and Brophy (2001, in press a, in press b). The Alleman and Brophy (in press b) volume includes plans for an instructional unit on transportation.

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FAMILY LIVING INTERVIEW

1. **TODAY WE'RE GOING TO TALK ABOUT FAMILIES. WHAT IS A FAMILY?** (Probe for whatever the student can say about the composition and nature or functioning of a family.)

2. **WHY DO MOST PEOPLE LIVE IN FAMILIES?**

3. **FAMILIES INCLUDE GRANDPARENTS, AUNTS AND UNCLES, AND COUSINS. WHAT ARE GRANDPARENTS? . . . WHAT ARE AUNTS AND UNCLES? . . . WHAT ARE COUSINS? . . . WHAT ARE STEPBROTHERS AND STEPSISTERS?** (Probe to see if student can define these relatives in terms of relationships to his or her parents, if necessary using examples from the student's own family, e.g., OK, you have an Aunt Missy. What makes Missy your aunt? . . . How is Missy related to you?)

4. **THE NUMBER OF PEOPLE IN A FAMILY CAN CHANGE OVER TIME. SOMETIMES FAMILIES GET BIGGER. HOW MIGHT A FAMILY GET BIGGER?**
   . . . WHAT IS ANOTHER WAY THAT A FAMILY MIGHT GET BIGGER? . . . ETC. . . . HOW DO FAMILIES' NEEDS CHANGE WHEN THEY GET BIGGER?

5. **SOMETIMES FAMILIES GET SMALLER. HOW MIGHT A FAMILY GET SMALLER? . . . WHAT IS ANOTHER WAY THAT A FAMILY MIGHT GET SMALLER? . . . ETC. . . . HOW DO FAMILIES NEEDS CHANGE WHEN THEY GET SMALLER?**

6. **WHAT IS MARRIAGE?** (If necessary:) **WHAT DOES IT MEAN TO GET MARRIED?**

7. **WHAT IS DIVORCE?** (If necessary:) **WHAT DOES IT MEAN TO GET DIVORCED?**

8. **HOW ARE FAMILIES THESE DAYS DIFFERENT FROM FAMILIES IN THE PAST? . . . WHAT ARE SOME OTHER DIFFERENCES? . . . ANY OTHERS?**

9. **IN WHAT WAYS ARE FAMILIES THESE DAYS THE SAME AS FAMILIES IN THE PAST? . . . HOW ELSE ARE FAMILIES THE SAME AS THEY ALWAYS WERE?**

10. **IN THE PAST, MOST PARENTS WANTED A LOT OF CHILDREN, BUT THESE DAYS MOST PARENTS WANT ONLY A FEW. WHY IS THAT?**

11. **EVERYDAY LIFE HAS CHANGED FOR MOTHERS, FATHERS, AND CHILDREN. WHAT DO MOTHERS DO? WHAT DID MOTHERS IN THE PAST DO?** (Continue to probe until student can no longer respond to the original question, then ask the following more specific probes.) **WHAT DID MOTHERS IN THE PAST SPEND A LOT OF TIME DOING THAT TODAY'S MOTHERS DON'T DO? . . . WHAT DO TODAY'S MOTHERS SPEND A LOT OF TIME DOING THAT MOTHERS DIDN'T DO IN THE PAST?**

12. **WHAT DO FATHERS DO? WHAT DID FATHERS IN THE PAST DO?** (Continue to probe until student can no longer respond to the original question, then ask the following specific probes.) **WHAT DID FATHERS IN THE PAST SPEND A LOT OF TIME DOING THAT TODAY'S FATHERS DON'T DO? . . . WHAT DO TODAY'S FATHERS SPEND A LOT OF TIME DOING THAT FATHERS DIDN'T DO IN THE PAST?**

13. **WHAT DO CHILDREN SPEND THEIR TIME DOING? WHAT DID CHILDREN IN THE PAST SPEND THEIR TIME DOING?** (Continue to probe until student can no longer respond to the original question, then ask the following specific probes.) **WHAT DID CHILDREN IN THE PAST SPEND A LOT OF TIME DOING THAT TODAY'S CHILDREN DON'T DO? . . . WHAT DO TODAY'S CHILDREN SPEND A LOT OF TIME DOING THAT CHILDREN DIDN'T DO IN THE PAST?**

14. **THESE DAYS, MOST KIDS LIVE WITH JUST PARENTS AND BROTHERS OR SISTERS, BUT IN THE PAST, THEY OFTEN LIVED WITH THEIR GRANDPARENTS, AUNTS, UNCLES, AND COUSINS TOO. WHY DID THINGS CHANGE?**

15. **IN SOME OTHER COUNTRIES, EVEN THESE DAYS, MOST KIDS LIVE NOT ONLY WITH PARENTS AND BROTHERS AND SISTERS, BUT ALSO WITH THEIR GRANDPARENTS, AUNTS, UNCLES, AND COUSINS. WHY IS THAT?**

16. **WHEN HAVE KIDS SPENT MORE TIME WITH THEIR PARENTS--THESE DAYS OR IN THE PAST? WHY?**

17. **PEOPLE ALL OVER THE WORLD LIVE IN FAMILIES, BUT DIFFERENT COUNTRIES HAVE DIFFERENT CUSTOMS. DO YOU KNOW OF A COUNTRY WHERE FAMILIES DO THINGS DIFFERENTLY THAN WE DO HERE?** (If yes, probe for explanation.)

18. **WHAT ABOUT JAPAN--DO JAPANESE FAMILIES DO THINGS DIFFERENTLY THAN AMERICAN FAMILIES?** (If student talks about differences in physical characteristics, ask **OK, SO THEY LOOK DIFFERENT. BUT WHAT ABOUT EVERYDAY FAMILY LIFE AT HOME? IS THAT ANY DIFFERENT?**)

19. **HOW IS FAMILY LIFE DIFFERENT FOR PEOPLE LIVING ON FARMS THAN FOR OTHER PEOPLE?** (If yes, probe for explanation.)

20. **HOW IS FAMILY LIFE DIFFERENT FOR PEOPLE WHO LIVE IN SMALL TOWNS THAN FOR PEOPLE WHO LIVE IN BIG CITIES?**

21. **YOUR ANCESTORS CAME TO AMERICA FROM SOMEWHERE ELSE. DO YOU KNOW WHERE THEY CAME FROM? (If yes:) WHERE? . . . WHY DID THEY DECIDE TO COME HERE?** (If necessary, define ancestors: "Your ancestors were your relatives back in time--your grandparents, great grandparents, and so on.) (If necessary:) **WHAT WOULD HAPPEN TO**

22. **FAMILIES SOMETIMES MOVE, TO A DIFFERENT HOUSE OR EVEN A DIFFERENT CITY. WHY DO FAMILIES MOVE FROM ONE PLACE TO ANOTHER? . . . ANY OTHER REASONS?**

23. **SOMETIMES FAMILIES MOVE HERE FROM ANOTHER COUNTRY WHERE THEY DON'T SPEAK ENGLISH. WHY DO THEY DO THAT?**

24. **HOW DOES FAMILY LIFE CHANGE WHEN A FAMILY MOVES TO A NEW COUNTRY?**

25. **IN THE PAST, MOST KIDS WENT TO SCHOOL FOR JUST A FEW YEARS, BUT THESE DAYS MOST GO FOR A LOT LONGER. WHY IS THAT?**

26. **KIDS LEARN THINGS FROM THEIR FAMILIES. WHAT ARE SOME THINGS THAT MOST KIDS LEARN AT HOME, FROM THEIR FAMILIES? . . . WHAT ELSE? . . . ETC.**

27. **WHY DO FAMILIES NEED RULES? WHAT WOULD HAPPEN TO A FAMILY IF IT DIDN'T HAVE RULES?**

28. **IF FAMILIES HAVE A FIRE, A FLOOD, OR SOME OTHER EMERGENCY, WHO CAN THEY TURN TO FOR HELP? . . . WHO ELSE? . . . ETC.**

29. **WHAT CAN FAMILIES DO TO HELP OTHER FAMILIES?**

30. **WHAT CAN FAMILIES DO TO HELP THEIR COMMUNITIES?**

Table 1. Distributions and Correlation Coefficients Showing Relationships of Coding Categories to Grade Level, Achievement Level, and Gender[1]

	Total Sample	Grade Frequencies K	1	2	3	Grade Phi	Achievement Level Frequencies Low	Avg.	High	Ach. Phi	Gender Frequencies M	F	Gender Phi
Number of Students	**96**	**24**	**24**	**24**	**24**		**32**	**32**	**32**		**48**	**48**	
1. Today we're going to talk about families. What is a family?													
0. Doesn't know/no relevant response	14	7	6	1	0	-36	6	4	4		9	5	
1. A group of people who are related (through birth or marriage)	11	1	0	4	6	31	1	4	6	20	6	5	
2. Parents and their children (or some larger group centered around this nucleus)	10	3	4	2	1		1	5	4		3	7	
3. People who live together	30	8	5	9	8		12	8	10		15	15	
4. People who do things together	35	7	8	11	9		12	10	13		13	22	19
5. People who love/help/take care of each other	37	7	9	10	11		12	13	12		17	20	

Table 1 (cont'd.)

6. Includes grandparents, uncles, aunts, cousins, step-siblings or other relatives	38	7	12	10	9		11	15	12		15	23		17
7. Includes pets	34	7	10	7	10		9	6	19	36	12	22		22
2. Why do most people live in families?														
0. Doesn't know/no relevant response (they want to, they're family, etc.)	31	9	10	5	7		9	13	9		18	13		
1. To get basic physical needs met (food, shelter, etc.)	14	2	4	5	3		7	1	6	NL	7	7		
2. So that they are not alone and have others to live with	12	1	5	4	2		4	4	4		5	7		
3. Because they love/want to take care of/want to help one another	27	9	6	5	7		10	8	9		12	15		
4. Because people get married/have children	21	2	4	7	8	24	7	9	5		7	14		18

Table 1 (cont'd.)

3A. Families include grandparents, aunts and uncles, and cousins. What are grandparents?

0. Doesn't know/ no relevant response/ incorrect response (they are your mom and dad, etc.)	25	13	8	4	0	-46	10	9	6		13	12	
2. They are old/look old/ look like grandparents	14	6	3	3	2		7	3	4		10	4	-18
3. They are your parents' parents	52	5	10	16	21	51	14	18	20		22	30	17

3B. What are aunts and uncles?

0. Doesn't know/no relevant response	24	12	9	0	3	-46	13	5	6	-26	14	10	
1. Incorrect response (confuses them with godparents, cousins, etc.)	10	2	3	4	1		3	4	3		5	5	
2. Says that they are special to you, love you, etc. but does not specify relationship	9	4	2	1	2		3	4	2		5	4	

Table 1 (cont'd.)

3. Can give only partial information (says that they are brothers or sisters but cannot say to whom, that aunts are female and uncles are male, that uncle became uncle because he married aunt, they are related to you, etc.)	13	4	4	2	3		2	6	5		7	6
4. Correctly states that aunts and uncles are sisters and brothers to one's parents (or sons and daughters of one's grandparents, or parents of one's cousins)	41	3	6	17	15	50	11	14	16		17	24
3C. What are cousins?												
0. Doesn't know/no relevant response	25	9	11	4	1	-38	13	6	6	-24	14	11
2. Friends/playmates (no relationship specified)	19	7	7	2	3	-24	6	6	7		8	11
3. Knows that cousins are related but cannot state how	16	6	4	3	3		5	7	4		8	8

Table 1 (cont'd.)

4. Correct definition (e.g., your moms and dads are sisters or brothers, so you are cousins; they are the children of your aunts and uncles; they have the same grandparents)	37	2	2	15	18	63	8	13	16	21	18	19		
3D. What are step-siblings?														
0. Doesn't know/no relevant response	42	18	6	11	7	-40	13	13	16		25	17		-17
2. Has part of the idea, but does not explain completely or accurately (if you get remarried, they're your step-brothers or sisters; they're half of your mother's; they are the nephews and nieces of your step-parent, etc.)	15	1	5	5	4		4	7	4		10	5		

Table 1 (cont'd.)

3. Correct definition (sons and daughters of your step-parent or children that your mother or father has with a new spouse after a divorce)	26	0	7	7	12	40	11	7	8	8	18	23
4. Other (friends, people that you love, they are mean, etc.)	13	5	6	1	1	-28	4	5	4	5	8	

4A. The number of people in a family can change over time. Sometimes they get bigger. How might a family get bigger?

0. Doesn't know/no relevant response/ answers only in terms of growth in size due to eating or getting older	13	9	4	0	0	-45	7	3	3	9	4
2. Birth: new babies, new kids	71	14	12	23	22	46	20	24	27	20	34	37
3. Marriage: single person/parent takes spouse	15	1	4	8	2	NL	4	6	5	6	9	

Table 1 (cont'd.)

4. New step-siblings: parent's new spouse brings own child(ren) from previous family to new family	6	1	0	3	2		0	5	1	NL	4	2
5. Adoption of new children	16	1	2	2	11	45	4	4	8		7	9
6. Add new pets	10	1	3	3	3		2	4	4		4	6
7. Other (invite/allow someone to live with you, gain more cousins or other extended family members)	19	4	7	2	6		6	5	8		10	9
4B. How do needs change when families get bigger?												
0. Doesn't know/no relevant response	43	18	11	9	5	-40	21	13	9	-31	20	23
1. The family will need a bigger house/more stuff or the money to buy it (food, clothing, etc.)	46	5	12	13	16	34	9	18	19	28	25	21

Table 1 (cont'd)

2. Other: Student supplies a relevant, substantive response other than responses included in Category 1)	23	1	5	8	9	30	5	6	12	23	12	11	
5. Some families get smaller. How might a family get smaller?													
0. Doesn't know/no relevant response/ answers only in terms of loss of body mass due to poor nutrition	16	10	4	2	0	-42	9	4	3	-22	11	5	-17
3. Death: a family member dies	53	8	11	14	20	37	13	21	19		27	26	
4. Divorce/separation: loss of one parent	26	0	5	16	5	55	9	8	9		14	12	
6. Normal moving out: children grow up and leave the family for marriage, college, etc.	27	4	5	6	12	29	8	7	12		11	16	

Table 1 (cont'd.)

7. Traumatic moving out: family member runs away, wanders off and gets lost, discovers that s/he is in the wrong family, etc.	12	2 2 2 6	22	1 7 4	NL		6	6
8. Other	9	3 4 2 0	-21	3 0 6	NL		3	6

5B. How do needs change when families get smaller?

0. Doesn't know/no relevant response	67	23 16 17 11	-39	27 23 17	-28		31	36
1. The family doesn't need as much living space or as much food, clothing, etc., or the money to buy them	19	0 5 6 8	31	5 5 9			12	7
2. Other (student supplies a relevant, substantive response that is not classifiable in Category 1)	12	1 5 1 5	NL	0 4 8	31		6	6

Table 1 (cont'd.)

6. What is marriage? What does it mean to get married?

0. Doesn't know/no relevant response	9	5	3	1	0	-27	4	3	2		8	1	-25
1. You get married/ marry someone/take a wife or husband (not explained further)	35	9	8	14	4	NL	14	11	10		20	15	
2. Partners will live together, form a family, come into another's family	29	4	9	7	9		8	11	10		13	16	
3. Describes ceremony (minister, oath, etc.)	11	1	1	3	6	27	2	3	6		4	7	
4. Describes other things associated with marriage (formal clothing, reception, dancing, cake, kissing, honeymoon, etc.)	13	3	3	3	4		2	2	9	30	5	8	
5. Motive: couple wants children/wife is pregnant	27	7	7	6	7		7	10	10		11	16	
7. Motive: they like/ love each other	40	7	11	9	13		14	14	12		18	22	

Table 1 (cont'd.)

7. What is divorce? What does it mean to get divorced?

0. Doesn't know/no relevant response	13	10 3	0 0	-50	7	3	3	10 3	-21
1. Physical separation: partners break up/decide to live separately, one moves away, etc. (no mention of dissolution of marriage)	47	10 15	15 7	NL	15	18	14	24 23	
2. Marital dissolution: partners get unmarried, are no longer married to each other, etc.	21	3 3	5 10	29	6	6	9	8 13	
3. Court actions: student specifically notes that divorce involves going to court, getting legal/ divorce papers, etc.	9	0 1	3 5	27	2	3	4	4 5	
5. Motive: unexplained (unmentioned or confined to the idea that the people do not want to stay married to each other anymore)	36	4 8	10 14	31	14	13	9	20 16	

Table 1 (cont'd.)

6. Motive: hostility or violence (they had a fight, one is mistreating or abusing the other, etc.)	33	3	12	12	6	NL	9	10	14	15	18
7. Motive: incompatibility (spouses are not good for each other, they have different needs and interests, they are not supplying what the other needs, etc.)	18	7	3	2	6		3	7	8	5	13	21
8. Other: desire to marry someone else, then you have two moms and two dads, you alternate houses, etc.	11	2	1	2	6	25	3	2	6	6	5
9. In what ways are families these days the same as families in the past?											
0. Doesn't know/no relevant response	39	15	14	8	2	-44	14	17	8	NL	21	18
1. Response not specific to families (people still need food, wear clothing, etc.)	37	6	4	13	14	37	12	11	14	19	18

Table 1 (cont'd.)

4. Basic family characteristics: people live in families, family members love and support one another, families share traditions, etc.	9	0	1	2	6	33	1	3	5	18	4	5
5. Stage phenomena: babies are born and raised in families; they grow up and marry and establish their own household; family members grow old and eventually die, etc.	7	1	3	1	2		2	2	3		3	4
6. Family composition: families consist of husband/father, wife/mother, child(ren), grandparents, aunts, uncles, cousins, etc.	10	2	0	3	5	25	3	3	4		6	4
7. Other response specific to families (e.g., family members show physical resemblances)	6	1	3	2	0		2	1	3		1	5	17

Table 1 (cont'd.)

8. Student was coded in Category 4, 5, 6, or 7	29	4	6	7	12	27	8	8	13	14	15

10. In the past, most parents wanted a lot of children, but these days most parents want only a few. Why is that?

0. Doesn't know/no relevant response	32	8	13	6	5	NL	18	8	6	-35	16	16
1. Responses that do not include comparisons of the past with the present (taking care of children is a lot of work, children clutter up the house with their toys, etc.)	42	14	9	8	11		10	18	14		20	22
2. It was easier to have/ care for children in the past	7	0	1	3	3	21	1	2	4		4	3
3. It cost less to have/ care for children in the past	9	0	0	4	5	33	2	3	4		4	5
4. Other	7	2	1	3	1		2	1	4		5	2
6. Any valid response (2, 3, or 4)	22	2	2	10	8	35	4	6	12	25	12	10

Table 1 (cont'd.)

11A. Everyday life has changed for mothers, fathers, and children. What do mothers do?

1. Birthing/caring for children: have children, take care of children, feed them, teach them, take them places	76	18	20	17	21		27	22	27			39	37
2. Housework and household maintenance: cooking, cleaning, shopping, sewing, dusting, etc.	65	13	18	14	20	26	22	17	26	NL		33	32
3. Work outside the home	41	5	9	12	15	31	15	14	12			20	21
4. Relaxation and recreation: sits doing nothing, reads, visits, watches TV, etc.	27	6	5	9	7		9	7	11			13	14
5. Other: acts as head of family, works with other women to get a man, volunteers at school or elsewhere, does "girl stuff," etc.	7	2	2	1	2		3	3	1			4	3

Table 1 (cont'd.)

6. Student is coded in three or more categories	35	4 8	7 16	38	11	9	15		16	19

11B. What did mothers in the past do?

0. Doesn't know/no relevant response	42	17 14	10 1	-51	13	16	13		22	20
1. Birthing, caring for children: have children, take care of children, feed them, teach them, take them places, etc.	26	6 5	5 10		9	9	8		14	12
2. Housework and household maintenance: cooking, cleaning, shopping, sewing, dusting, etc.	35	1 6	12 16	49	11	11	13		17	18
3. Work outside the home	7	1 2	1 3		4	1	2		4	3
5. Other: sit around, visit, read, etc.	17	2 4	3 8	25	6	5	6		8	9

11C. What did mothers in the past spend a lot of time doing that today's mothers don't do?

0. Student doesn't draw relevant past vs. present comparisons	38	15 14	6 3	-44	14	16	8	NL	18	20

Table 1 (cont'd.)

1. Past mothers had more work, less time for leisure or spending with children	13	1	2	5	5	22	3	3	7	6	7	
2. Present mothers have more work, less time for leisure or spending with children	11	3	2	3	3		3	5	3	9	2	-23
3. Today's mother more likely to work outside the home	17	2	4	4	7	19	7	5	5	9	8	
4. Names at least one other thing that distinguishes today's mother from past mothers (volunteers at school, works in a modern office rather than a primitive job shop, etc.)	22	2	4	5	11	33	8	4	10	10	12	

Table 1 (cont'd.)

5. Names at least one other thing that distinguished past mothers (had to make own baby food, worked at growing crops, hand-washed and hung laundry, etc.)	25	3	4	13	5	NL	6	8	11	11	14	
12A. What do today's fathers do?												
1. Caring for/helping/ teaching children	40	10	11	6	13		16	10	14	18	22	
2. Playing with children	20	3	7	3	7		6	6	8	14	6	-21
3. Disciplining or punishing children	6	1	1	1	3		1	3	2	4	2	
4. Household chores, shopping, cooking, etc.	34	7	10	8	9		12	12	10	15	19	
5. Working outside the home/making money	65	10	16	20	19	35	23	18	24	30	35	
6. Relaxing, watching TV, listening to radio, playing computer games, smoking, sleeping	34	7	8	8	11		14	8	12	16	18	

Table 1 (cont'd.)

7. Activities associated with traditional male role: lifting heavy things, playing sports or rooting for sports teams, cooking on grill, mowing lawn, household repairs, drinking beer, etc.	30	10	8	6	6		8	11	11		15	15		
8. Other: relevant, substantive response that does not fit into previous categories	6	4	1	1	0	-26	2	1	3		5	1		-17
9. Student is coded in three or more categories (1-8)	40	8	10	8	14		14	9	17		19	21		
12B. What did fathers in the past do?														
0. Doesn't know/no relevant response	37	15	14	6	2	-47	17	11	9	-22	17	20		
1. Care for/help/teach children	11	2	0	1	8	41	4	3	4		6	5		
2. Household chores, shopping, cooking, etc.	13	2	4	4	3		5	1	7	NL	6	7		

Table 1 (cont'd.)

3. Relaxing, smoking, sleeping, etc	7	4	1	1	1			2	2	3			3	4
4. Names something else specific to the past: farm work, traveling to get medicine, building home (e.g., log cabin) and teaching children to do so, making shoes or furniture, trading with Indians, etc.	33	1	5	11	16	50		7	14	12			14	19
6. Work outside the home/earn money	8	2	1	2	3			2	2	4			6	2
12C. What did fathers in the past do that fathers today don't do?														
0. No past vs. present comparisons made	39	15	16	4	4	-49		18	13	8	-26		20	19
1. Past fathers had to spend more time working, had less time for family/leisure	21	2	1	8	10	39		5	7	9			8	13

Table 1 (cont'd.)

2. Past fathers didn't have to work as much as today's fathers, had more time for family/leisure	10	4	3	1	2	1	3	6	21	7	3
3. Today's fathers work in offices or do other modern jobs; past fathers farmed or worked as blacksmiths etc.	20	2	5	7	6	4	7	9		9	11
4. Other, questionable: student draws some other comparison that is invalid or at least questionable (fathers play in the snow more today; fathers get married today but in the past they didn't get married; in the past they worked as janitors or policemen, etc.)	9	1	1	4	3	1	4	4		3	6

Table 1 (cont'd.)

5. Other, valid: student draws a valid comparison that doesn't fit into previous categories (fathers watch television now; fathers mow lawns today; fathers take kids to parks today whereas there were no parks in the past, etc.)	19	2	3	5	9	28	6	4	9		7	12
6. Gender role differentiation: in responding to Questions 11 and 12, student draws clear distinctions between mother's and father's roles	43	10	9	12	12		11	13	19	21	23	20
13A. What do children spending their time doing?												
1. Play, relaxation, games, TV, sitting around (no codes in Categories 2 or 3)	35	14	8	5	8	-28	14	12	9		22	13	-19
2. School, homework, other school activities	49	7	11	17	14	31	14	17	18		22	27	

Table 1 (cont'd.)

3. Chores, care of self, clothing, room	22	5	9	5	3		6	4	12	25		7	15	20
13B. What did children in the past do?														
0. Doesn't know/no relevant response (includes comparison of older with younger children rather than children today vs. children in the past)	28	10	11	6	1	-36	14	9	5	-25		14	14	
1. Play, relaxation, games sitting around (no codes in Categories 2 or 3)	23	10	6	3	4	-26	5	8	10			14	9	
2. School, homework, other school activities	15	3	1	5	6	22	5	4	6			7	8	
3. Chores: care of self, clothing, room	35	2	7	11	15	42	9	12	14			15	20	
13C. What do today's children spend a lot of time doing that children didn't do in the past?														
0. No past vs. present comparisons made	26	11	8	4	3	-30	14	9	3	-32		12	14	

Table 1 (cont'd.)

2. Children today have more time for play or other self-chosen activities	30	2	5	11	12	37	9	10	11			15	15
3. Children today have modern toys, games, sports equipment that didn't exist in the past	28	5	6	8	9		4	9	15	31		16	12
4. School: children in the past didn't go to school, went to one-room school, were home schooled, went to school year round	32	6	9	8	9		11	11	10			18	14
5. Other, questionable: they had no toys in the past, they buried food in the fire, they had more time to play, etc.	8	1	3	2	2		3	1	4			2	6

Table 1 (cont'd.)

6. Other: valid: children in the past had to play with dusty things, had adventures in the woods, gathered firewood, had less opportunity to visit relatives; children today take camping trips, visit their dad, go to a swimming pool instead of a swimming hole, etc.	8	1	1	2	4	18	3	1	4	3	5

14. These days, most kids live with just parents and brothers or sisters, but in the past, they often lived with their grandparents, aunts, uncles, and cousins too. Why did things change?

1. Student generated a valid response to Question 14	16	2	3	3	8	26	3	4	9	22	6	10

15. In some other countries, even these days, most kids live not only with their parents and brothers and sisters, but also with their grandparents, aunts, uncles, and cousins. Why is that?

1. Student generated a valid response to Question 15	17	2	2	5	8	27	3	8	6	10	7

Table 1 (cont'd.)

16. When have kids spent more time with their parents—these days or in the past? . . . Why?

0.	No choice: doesn't know/no relevant response/says that there was no meaningful difference on this variable between the past and today	19	3	6	4	6		9	8	2	-24	9	10
1.	The past	25	5	4	9	7		5	10	10		15	10
2.	Today	52	16	14	11	11	-18	18	14	20		24	28
3.	Valid rationale for past: kids didn't go to school then, kids worked along side their parents, there was no childcare or babysitting available, etc.	17	1	3	7	6	26	5	7	5		9	8
4.	Valid rationale for present: parents do not work as many hours these days, kids do not have to spend as much time doing chores, etc.	10	0	2	5	3	25	3	3	4		5	5

Table 1 (cont'd.)

6. Other rationale: questionable rationale or one that is not classifiable in previous categories (in the past, parents would go away for a week or two at a time and leave the children at home)	10	1	3	2	4		4	2	4			5	5

17. People all over the world live in families, but different countries have different customs. Do you know of a country where families do things differently than we do here?

0. Doesn't know/no relevant response/ initially says "yes" but cannot give one or more examples in subsequent categories	57	19	16	12	10	-30	22	20	15	-19		27	30
1. Talks about differences in other places but not differences specific to family living (different language, foods, housing, climate; use of chopsticks; presence of headhunters or slaves; etc.	33	5	7	11	10	21	9	9	15			15	18

Table 1 (cont'd.)

2. Gives one or more examples specific to family living: bath time is handled differently in Japan, most families in some places are farmers, some places have less schooling or no schools at all, etc.	6	0	1	1	4	26	1	3	2		6	0	-26

Question 18. What about Japan—do Japanese families do things differently than American families?

0. Doesn't know/no response/no example classified in subsequent categories	43	14	13	11	5	-29	19	14	10	-23	20	23
1. Talks about differences not specific to family living: different foods, housing types, language, slanted eyes, different jobs, etc.	44	10	9	10	15		12	13	19	19	21	23

Table 1 (cont'd.)

2. Gives one or more examples specific to family living: bath time handled differently; partitioned houses that separate the parents from other family members, etc.	9	0	2	3	4	21	1	5	3		7	2	-18
19. How is family life different for people living on farms than for other people?													
0. Doesn't know/no relevant response	17	6	7	3	1	-26	11	5	1	-34	11	6	
1. Farm people have to do more work/chores, feed animals, use tractors to tend to crops, etc.	63	11	14	17	21	32	18	22	23		27	36	20
2. Farm people own bigger properties, have more land, have barns	11	4	1	3	3		2	3	6		4	7	

Table 1 (cont'd.)

3. Other, questionable: offers invalid or questionable statement about farm life (houses, barns have to be red, farmers own their own homes but city people do not, city people have bigger houses, farm children do not go to school, etc.)	14		1	5	4	4			4	4	6		9	5
4. Other, valid: offers an accurate or at least defensible statement about farm life (farmers know their neighbors better, farmers need to be sure that animals do not hurt their children, farmers have to put up with stinky smells, farmers need rain, Amish farmers have no electricity, etc.)	22		4	3	8	7			6	6	10		10	12

20. How is family life different for people who live in small towns than for people who live in big cities?

0. Doesn't know/no relevant response	33		13	11	4	5	-34		16	12	5	-30	17	16

Table 1 (cont'd.)

1. Generic town vs. city comparisons that do not specifically address family life (cities are bigger, have bigger schools, more sidewalks, big buildings, more people in the neighborhood, more traffic, more crime, more noise, etc.	44	5	8	15	16	39	12	12	20	24	20	24
2. Gives one or more reasons for wanting to live in a big city: you get better quality or variety of schools, shopping, etc; you have more friends/ playmates; jobs pay more	9	0	1	4	4	26	0	4	5	23	5	4

Table 1 (cont'd.)

3. Gives one or more reasons for choosing to live in a small town: you can live close to your relatives, afford a house/get more house for the money, avoid urban hassles, enjoy flowers/woods/ countryside	15	2	1	3	9	36	3	3	9	24			7	8
4. Other, questionable: invalid or question-able statements not classified in previous categories (town people own but city people rent; cities are full, so you might not get a house; there is/ you have more space in the city; bigger families live in bigger cities; most people in cities live in big buildings rather than houses; people in cities have to share housing and don't own cars. etc.)	16	5	4	2	5		4	6	6				9	7

Table 1 (cont'd.)

5. Other, valid: (valid or at least defensible statements that do not fit into previous categories (cities have playgrounds, if you live in the city you know rich people, cities have trademark places/symbols such as the Statue of Liberty or the lights of Las Vegas, etc.)	13	1	3	4	5	18	1	4	8	26	2	11	27

21. Your ancestors came to America from somewhere else. Do you know where they came from?

0. Doesn't know/no relevant response	78	22	22	18	16	-28	26	29	23		37	41
1. Names at least one country of origin	18	2	2	6	8	28	6	3	9		11	7
2. Identifies a reason for emigrating (escape oppression, obtain freedom, better economic opportunities)	9	0	0	3	6	36	2	1	6	23	6	3

Table 1 (cont'd.)

22. Families sometimes move to a different house or even a different city. Why do families move from one place to another?

0. Doesn't know/no relevant response/ vague speculations (they wanted or needed to move, they didn't like or got tired of the old house, etc.)	29	13	6	7	3	-33	12	13	4	-27	15	14
1. Outgrew old house/ needed more space; old house too big, wanted smaller space	28	5	5	9	9	18	7	6	15	28	17	11
3. Other problems with old house: fleas, dis-repair, messy, leaky etc.	20	5	6	6	3		7	7	6		8	12
4. Problems with old neighborhood: crime, noise, traffic, etc.	11	0	5	2	4		0	6	5	25	5	6
5. Divorce/separation	7	1	4	0	2		2	3	2		2	5
8. Job change/move closer to job site	11	0	1	2	8	41	1	4	6	20	5	6

Table 1 (cont'd.)

9. Other: escape high or increased taxes, move closer to relatives, get away from someone they wanted to avoid, move to better school district, etc.	19	1 3 6 9	32	9	3	7	9	10	

23. Sometimes families move here from another country where they don't speak English. Why do they do that?

0. Doesn't know/no relevant response	66	21 17 15 13	-27	26	19	21	31	35	
1. They want to learn English	17	0 5 5 7	28	4	7	6	10	7	
2. Escape oppression	9	2 0 4 3		2	4	3	4	5	
3. Other defensible explanation (they were disliked in their old country and wanted to come here and meet new friends, they are seeking something that was lacking at home)	8	1 2 1 4		1	4	3	7	1	-23

Table 1 (cont'd.)

24. How does family life change when a family moves to a new country?

0. Doesn't know/no relevant response	47	19	16	8	4	-50	18	17	12		25	22
1. They miss/lose their old friends	13	1	2	4	6	23	2	7	4		6	7
2. They meet new people, make new friends	10	1	1	4	4	20	2	2	6	19	3	7
4. They have difficulties understanding and communicating if they don't know the language	21	0	5	8	8	33	6	4	11	NL	11	10
5. They will have to get used to new food, clothing, language, etc.	15	3	1	5	6	22	4	5	6		6	9
6. Other: valid or defensible explanations not classifiable in previous categories (lower taxes, strange feelings, etc.)	10	1	0	2	7	37	3	3	4		8	2	-20

Table 1 (cont'd.)

25. In the past, most kids went to school for just a few years, but these days most go for a lot longer. Why is that?

0. Doesn't know/no relevant response (they didn't want to go to school, their parents didn't want them to go, etc.)	66	21	19	12	14	-33	28	18	20	-29	31	35
1. Schooling was less available then (fewer schools, fewer grades at the schools, etc.)	16	3	3	4	6		2	10	4	NL	10	6
2. There was less to learn then (teachers didn't know as much as now, etc.)	10	0	2	5	3	25	1	1	8	34	5	5
3. Other: most students came from farm families; didn't need that much education; were needed to work on farms; there were no computers then	8	0	0	6	2	37	3	3	2		5	3

26A. Kids learn things from their families. What are some things that most kids learn at home, from their families?

0. Doesn't know/no relevant response	33	13	11	8	1	-40	13	13	7		19	14

Table 1 (cont'd.)

1. Academic skills: ABCs, reading, writing, math, help with homework, etc.	23	3	9	6	5		6	8	9		9	14	
2. Manners and morals: how to be polite, how to treat people well, how to act, etc.	18	4	2	4	8	23	2	6	10	26	12	6	
3. Self-care/responsibility: getting washed and dressed, combing hair, taking care of clothes and possessions, cleaning up room, tying shoes, etc.	15	3	2	3	7	22	6	3	6		9	6	
4. Health and safety rules: avoiding bad habits or dangerous activities, emergency/9-1-1 rules, avoiding strangers or danger on the street, etc.	10	1	0	3	6	31	3	5	2		5	5	
5. Sports/physical activities: playing catch, using jungle gym, using a sandbox, riding a bike, etc.	6	1	2	1	2		2	2	2		5	1	-17

Table 1 (cont'd.)

8. Other: relevant, substantive responses not codable in previous categories (planting, coloring, using computers, how to pick up the dog, how to use toys, family and past history, etc.)	23	5	2	7	9	25	8	5	10		10	13			
26B. What do kids learn from their mothers?															
0. Doesn't know/no relevant response/ doesn't speak of learning specifically from female relatives	25	5	6	8	6		10	12	3	-27	16	9		-17	
1. Academic skills: ABCs, reading, writing, math, help with homework, etc.	23	5	9	5	4		2	12	9	31	8	15		17	
2. Manners and morals: how to be polite, how to treat people well, how to act, etc.	16	7	1	5	3		7	4	5		7	9			

Table 1 (cont'd.)

3. Self-care/responsibility: getting washed and dressed, combing hair, taking care of clothes and possessions, cleaning up room, tying shoes, etc.	8		2	2	2	2		1	2	5	19		1	7	23
4. Health and safety rules: avoiding bad habits or dangerous activities, emergency 9-1-1 rules, avoiding strangers or danger on the street, etc.	9		1	3	2	3		4	1	4			5	4	
5. Sports/physical activities: playing catch, using jungle gym, using a sandbox, riding a bike, etc.	7		1	2	3	1		1	1	5	23		3	4	
6. Traditional female role behaviors: having and caring for children, how to be a girl/mother, how to act with men, cooking, sewing, other domestic arts, putting a rubber band on Barbie's hair, etc.	22		4	4	6	8		7	5	10			12	10	

Table 1 (con't.d)

8. Other: relevant, substantive responses not codable in previous categories (planting, coloring, using computers, how to pick up the dog, how to use toys, family and past history, etc.)	14	4	2	2	6		3	2	9	27		5	9

26C. What do kids learn from their fathers?

0. Doesn't know/no relevant response/does not speak of learning specifically from male relatives	43	15	12	11	5	-30	13	17	13			25	18
1. Academic skills: ABCs, reading, writing, math, help with homework, etc.	11	2	3	2	4		3	5	3			3	8
2. Manners and morals: how to be polite, how to treat people well, how to act, etc.	7	2	1	0	4		2	2	3			3	4

Table 1 (cont'd.)

5. Sports/physical activities: playing catch, using jungle gym, using a sandbox, riding a bike, etc.	12	2	3	4	3		2	3	7	20	5	7
7. Traditional male role behaviors: how to be a boy/father, fixing/assembling/constructing things, boxing, wrestling, football, working with engines, mowing the lawn, etc.	17	1	4	4	8	27	6	6	5		10	7
8. Other: relevant, substantive responses not codable in previous categories (self-care responsibility, health and safety rules, planting, coloring, using computers, how to pick up the dog, how to use toys, family and past history, etc.)	26	4	4	8	10	24	9	5	12		10	16

Table 1 (cont'd.)

27. Why do families need rules? What would happen if a family didn't have rules?

0. Doesn't know/no relevant response	12	3	5	3	1		5	6	1		9	3		-19
2. Health and safety: rules help you remain healthy, safe; keep you from getting sick, hurt, kidnapped, etc.	47	8	12	11	16	24	12	14	21	24	24	23		
3. Fairness/morality: rules guide you in treating other people fairly and appropriately, keep you from doing bad things or going to jail, protect us from meanness or bullying, etc.	29	7	4	10	8		10	9	10		10	19		20
4. Underscore responsibilities: without rules, kids might not go to school/do their homework; might dirty up the house or break windows or furniture, etc.	29	3	4	12	10	35	10	11	8		15	14		

Table 1 (cont'd.)

5. Avoid chaos: without rules things would be wild, crazy, out of control, etc.	29	1	5	8	15	46	7	11	11	16	13
6. Other: so people will know how to act; if we didn't have rules, things might be bad; parents have rules so they can boss you around; if there were no rules it would mean that your parents didn't love you, etc.	13	8	3	1	1	-35	5	4	4	4	9

28. If families have a fire, a flood, or some other emergency, who can they turn to for help?

0. Doesn't know/no relevant response	0	0	0	0	0		0	0	0	0	0
1. Relatives, neighbors, family friends	45	7	9	10	19	38	16	16	13	21	24
2. Call 9-1-1	25	6	6	9	4		9	7	9	14	11
3. Police	52	13	13	12	14		19	12	21	NL	27	25
4. Fire department	51	13	11	14	13		19	12	20	NL	27	24

Table 1 (cont'd.)

5. Hospital, ambulance, doctors, paramedics	30	7	10	7	6	12	6	12	17	13		
6. Water person, plumber, lifeguard	7	1	4	2	0	3	0	4	5	2		
7. Other: someone who would know what to do, someone who will allow you to live in their home for awhile, insurance company, Red Cross, God, etc.	19	4	5	6	4	5	8	6	9	10		
29. What can families do to help other families?												
0. Doesn't know/no relevant response concerning helping individuals or families	27	7	10	3	7	11	9	7	18	9		-21
1. Give/lend them money, clothing, other things they may need	30	8	4	10	8	9	12	9	15	15		

Table 1 (cont'd.)

2. Provide direct help with problem (help them get out if stuck in snow, guide lost children home, give needed ride to doctor's office, counsel them with problem, help them move into their home, cheer them up, etc.)	44		10	10	15	9			13	16	15			17	27		21		
3. Take them in: let homeless people live with you, share your high ground in a flood, share your tornado shelter, etc.	7		2	0	4	1			1	1	5	23		3	4				
4. Other: help the sick/ vulnerable by calling to check on them, mow lawns of neighbors when they're away, etc.	6		1	1	1	3			2	2	2			4	2				

30. What can families do to help their communities?

0. Doesn't know/no relevant response concerning helping communities	52		23	17	7	5		-61	17	22	13		NL	31	21			-21	

Table 1.(cont'd.)

2. Don't litter/pick up/ stop litter bugs	34	1	6	14	13	46	11	6	17	NL	13	21	17
4. Work alone or with neighbors on community improvement projects (get rid of a fallen tree or other hazard, drum up support for a new stop sign, etc.)	10	0	2	3	5	25	4	1	5		2	8	20
5. Other: recycle, keep up your property, obey the laws, work to change the laws, avoid pollution, etc.	17	0	2	7	8	37	4	5	8		8	9	

[1]Numbers in the frequencies columns show how many students in each group were coded for mentioning the ideas represented by the response categories described at the left side of the table. Underlining indicates that the Chi-square for the underlined distribution was statistically significant at or below the .05 level. In these instances the phi coefficients (with decimal points omitted) are given in the phi columns (where significant linear trends were indicated) or else the letters "NL" appear to indicate that the relationship was nonlinear.

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