Identifying Key Early Literacy and School Readiness Issues: Exploring a Strategy for Assessing Community Needs

Daniel J. Weigel & Sally S. Martin
University of Nevada, Reno

Abstract

Much effort has been expended in developing intervention programs to help improve the early literacy and school readiness skills of young children. This article presents the results of a needs assessment project aimed at identifying priorities for community intervention programs aimed at ensuring that young children enter school ready to learn. A panel of 30 carefully selected early childhood panelists completed 4 rounds of questionnaires designed to develop a prioritized list of key community needs and programs. The panelists identified 39 broad issues and prioritized these in terms of critical importance. Participants also identified key existing assets and needed community efforts to address the highest rated priorities. Several implications for educational intervention and service provision can be drawn from this project. The article may provide a blueprint for others wishing to identify key community needs related to important early childhood issues.

Introduction

Much effort has been expended in developing intervention programs to help improve the early literacy and school readiness skills of young children. These programs have been developed to reach children, parents, child care programs, and the community at large (e.g., Dickinson, 1994; Morrow, 1995). However, before designing and implementing such programs, a critical first step is to assess the specific early literacy and school readiness needs of children, families, and communities. In this way, educators and early childhood service providers will be better able to target local programs for maximum effectiveness. This article illustrates a specific strategy for identifying early literacy and school readiness needs. It is hoped that the process will provide a blueprint for educators, service providers, and policy experts wanting to conduct similar needs assessments before making decisions on implementing new intervention efforts in their communities.

The Ecology of Early Literacy and School Readiness

With the increased demand for accountability and improved student performance on a national level, the issues of school readiness and early literacy have taken on increased importance (Murphey & Burns, 2002). Although school readiness is a sensitive topic among early educators and policy makers across the country, at present, there is no agreed upon definition of school readiness (Saluja, Scott-Little, & Clifford, 2000). However, most agree that readiness includes at least five domains—health and physical development, emotional well-being and social competence, approaches to learning, communication skills, and cognition and general knowledge (National Education Goals Panel, 1992). In addition, early literacy development is one aspect of being ready for school that has garnered much attention, given research indicating that preschoolers' literacy and language abilities may predict their reading achievements in grades one through three (Walker, Greenwood, Hart, & Carta, 1994). There is also growing agreement that not only children need to be ready for schools but that schools and communities need to be ready to accommodate the diverse needs and experiences of children and their families (Murphey & Burns, 2002). Therefore, school readiness is not just a child or family issue but a community issue as well.

The foundation for literacy and school success is laid during the early years. During this time, young children develop the skills and attitudes that will help them be successful. Through their daily experiences, children encounter opportunities to develop oral language skills, gain knowledge about the forms and functions of written language, practice their emerging literacy skills, and refine their cognitive and social abilities. Children acquire these skills and knowledge

in a variety of formal and informal settings, including the home (Purcell-Gates, 1996; Strickland & Taylor, 1989), child care programs (Bryant, Burchinal, Lau, & Sparling, 1994; Dickinson & Smith, 1994), and other community settings (e.g., Kuby & Aldridge, 2004).

Young children's development does not occur in isolation; rather it takes place in a rich context of direct and indirect influences. Research linking children's developmental outcomes and the environments in which they live supports the importance of recognizing the contexts of children's experience. The ecological theory of child development advanced by Bronfenbrenner (1979) provides a conceptual basis for understanding the broad influences on children's development. Bronfenbrenner's ecological theory purports that children develop within a variety of social contexts and that it is important to investigate the interrelationships among the various contexts when studying children's development.

The ecological contexts can be seen as a series of nested spheres (Bronfenbrenner, 1979). At the center are the children themselves. Their unique personal characteristics and experiences will influence the course of their development. The next ecological sphere contains contexts outside children, but ones that have direct influences upon them. The home and family environment, as well as the child care or preschool environment, are two primary contexts that directly influence young children's development. The home context includes interactions between the child, his or her parents, and any siblings and other adults who are present in the home or family unit. The child care or preschool setting is another powerful influence in the lives of many young children, and it includes interactions between the child, his or her peers and preschool teachers, and other adults who are present in the setting. Children also are influenced by other broader contexts, including their neighborhoods and communities, in which educational interventions and services may be offered to support young children and their families. Even culture plays a factor. Children for whom English is a second language frequently start school with no or limited English, and their families may lack the resources and knowledge to help prepare them for school (Barone, 1998).

Within this perspective, identifying early literacy and school readiness needs should encompass the children, family, and community spheres. Children's issues can be seen as those that most directly impact children and, if addressed, would improve their potential success in school. Family issues constitute those issues that impact families with young children, whereby attending to these issues would help parents and families improve the educational outcomes for their children. Finally, community needs are those issues within the community as a whole, and addressing them would benefit the school success of a large number of young children in the community.

In the spirit of an ecological perspective, early literacy and school readiness approaches have taken many forms. Dickinson (1994) and Morrow (1995) have highlighted a wide variety of educational programs. Some programs have targeted children and families, such as parent workshops or home-visitor programs. Other endeavors have targeted child care and school systems as ways of strengthening the educational supports for young children. A number of federal programs, such as Head Start and Even Start, are specifically designed to increase the early literacy and school readiness skills of young, vulnerable children and their parents. Various community groups have initiated early literacy and school readiness programs, including libraries, university outreach programs, service clubs, and nonprofit organizations. Even public television has striven to address early literacy and learning through programs such as *Sesame Street*, *Between the Lions*, and *Ready To Learn*.

Assessing Community Need

Despite the variety of programs that have been developed, not all programs are available in each community. There are still young children and families who have not had access to programs that fit their needs. Before offering new or additional programs, educators and service

providers would be best served by assessing the needs of their local community. Needs assessment is the term used to describe efforts at collecting information to guide program and service delivery efforts, and it is the first step in Jacobs' (1988) comprehensive model of planning and evaluation of family service programs. Reviere, Berkowitz, Carter, and Ferguson (1996) define needs assessment as "a systematic and ongoing process of providing usable and useful information about the needs of the target population—to those who can and will utilize it to make judgments about policy and programs" (p. 6).

Two important concepts emerge from this definition. First, there must be a purpose for the information gathered—it must be meaningful to the lives of individuals, families, agencies, or communities. Second, the information is intended to inform decisions about what priorities should be addressed and where scarce resources should be concentrated. In the present research project, the information was being gathered on the early literacy and school readiness needs of children, families, and communities to be used to inform decisions about what types of educational interventions to design and implement.

A variety of techniques can be used to assess needs, including analyses of resources currently available in communities, social indicator analyses, analysis of use of services, surveys and telephone interviews, and structured groups (McKillip, 1987). In the present project, we used the Delphi technique, which combines both survey and structured group approaches. The Delphi technique takes a panel of carefully selected persons through a series of carefully designed questionnaires generated from feedback from preceding responses (Reviere et al., 1996). The collection of panelist opinion is typically conducted through the mail, email, or Internet strategies, and in situations where face-to-face meetings are either not practical or desirable (Andranovich, 1995). The process usually takes place in several rounds, in which panel members are separately asked to respond to specific questions. The first round asks open-ended questions to generate a list of key issues and needs. The second round has the same panel rate those issues and needs on the basis of their importance. The following rounds typically enable panelists to review, reconsider, and, if desired, change their responses to the earlier rounds, based on comparing their individual ranking with the mean group for that item. Additional rounds may include further refinement.

The technique provides insights into how a group of people view specific issues and has several strengths (Carter & Beaulieu, 1992). First, the technique allows for the sharing of information from people who are separated geographically. Second, participants are free of social pressure, personality influence, and individual dominance. Third, it allows for more-effective sharing of information among a greater number of participants than would be possible in a face-to-face setting. Fourth, a well-selected panel of respondents can provide a broad perspective on community problems and concerns. Finally, it allows participants to remain anonymous.

In this project, we modified the typical Delphi process in a few ways. In the third round, rather than having the panelists further refine the list of needs, we had them identify current programs in the community that already might be addressing the needs and then to think of additional educational interventions to address the key needs. In this way, we hoped to both identify current resources in the communities and generate additional, creative strategies for addressing the key needs identified in the first and second rounds.

In summary, this article provides an example and presents the results of a needs assessment project designed to identify priorities for community intervention programs aimed at improving the early literacy and school readiness skills of preschool-age children. The goal of the needs assessment process was to develop a prioritized list of key community needs and programs to help ensure that young children enter school ready to learn. It is hoped that this article will provide a blueprint for others wishing to identify key community needs related to important early childhood issues.

Methods

Community Panelists

When using a Delphi approach, it is recommended that the panel of participants consist of no more than 30 people (Andranovich, 1995). In this project, 30 community panelists were selected from educational, human service, and early childhood education programs in a contiguous, four-county area. These counties were located in a western state, with the largest county housing a large metropolitan area. A second county contains the state capital, while a third county was historically rural but is now one of the fastest growing counties (percentage-wise) in the country. The fourth county is rural and sparsely populated.

As a way to identify potential panelists, a grid was first constructed (see Figure 1). Five categories of professionals were identified who might have special knowledge or experience with early childhood issues in their respective communities—early childhood educators and kindergarten teachers, teachers from programs that have elements of family literacy (e.g., Head Start, Even Start, etc.), children's librarians, staff from early childhood focused agencies (e.g., early childhood specialists with the Department of Education, special services, nonprofits, etc.), and professionals from related community groups (e.g., Hispanic services, family resource centers, and children's public television). Four columns representing each county in which the assessment took place were listed along the top of the grid.

Professional Categories	County 1	County 2	County 3	County 4
Early Childhood Educators & Kindergarten Teachers				
Teachers from Programs with Family Literacy				
Children's Librarians				
Relevant Agency Personnel				
Professionals from Related Community Groups				

Figure 1. Planning grid used to identify panelists for needs assessment.

To identify potential panelists, names of people were identified to fill in as many squares on the grid as possible. Participants were project directors, agency staff, and teachers identified because of their expertise and professional involvement in the areas of early literacy and school readiness. Some squares contained more than one expert, due to the nature of the category and the size of two of the counties. On the other hand, not every square was filled because some people represented agencies and organizations that covered multiple counties. In the one county that was small and rural, it was not possible to identify people to fit every category in that county.

Once the grid was completed, the researchers then contacted the potential panelists by telephone or email to inquire as to their willingness to participate. Potential panelists were told that their participation was voluntary and that they could withdraw from the project at any time. All panelists initially identified agreed to participate in the project. However, since no names were requested on each of the questionnaires, we do not know specifically those panelists who returned their surveys for each round and those who did not.

Procedures

The needs assessment was conducted in four rounds. In each round, the panelists were mailed a cover letter, questionnaire, and a return envelope. After Round 1, questionnaires were constructed based on the results of the previous round. For example, in Round 2, we constructed the questionnaire based on the list of priorities generated in Round 1. For each round, participants were given 2 weeks to return questionnaires. Data collection occurred in the fall of 2004 and took approximately 14 weeks from the mailing of Round 1 to the return of Round 4.

Results

Round 1

In Round 1, a survey was mailed to the 30 community panelists. This survey was designed to generate a list of child, family, and community needs related to early literacy and school readiness concerns. Panelists were asked simply to identify, from their own perspectives, the most important issues for children, families, and their communities impacting children's ability to enter school ready to learn. Children's issues were defined as those that most directly impact children that, if addressed, would improve their potential success in school. Family issues were those that are shared by local families with young children that, if ameliorated, would help parents and families improve the educational outcomes for their children. Community issues were those within the community as a whole that, if focused on, would benefit the future school success of all children in the community. In some instances, children, family, and community issues could overlap, but phrasing the question in this manner encouraged panelists to think about the issues in a broad context. Panel members could list up to four issues within each of the children, family, and community categories.

Panelists were given 2 weeks to return their responses; 25 people returned their surveys. A total of 251 individual issues were generated. To begin the process of grouping similar issues, we first typed each of the 251 issues onto individual slips of paper. Next we looked for similarities among the 251 issues, regardless of whether the issue had been identified by panelists in the children, family, or community categories. While collapsing the issues based on similarity, we wanted to bring some semblance of order to the issues, while at the same time being careful to retain as much uniqueness within issues by not collapsing into too broad or general categories. The issues were analyzed through a method of constant comparison (Strauss & Corbin, 1998). The 251 individual items generated by panelists were repeatedly grouped together with other similar issues until all issues were eventually placed within categories of issues mentioned by more than one panelist. Following this process, the researchers identified 39 general issues mentioned by more than one panelist (see Table 1).

Table 1
Frequency of Free-Listing of Issues in Round 1

Issue*	Number	%
Providing high-quality and affordable child care for children and families.	25	100
Having basic needs of families met (e.g., health care, nutrition, social services, etc.).	25	100
Fostering English-language acquisition for children and parents.	24	96
Providing greater access for children and families to high-quality, age-appropriate books and writing materials.	15	60
Reading books with children.	11	44
Resolving social problems (e.g., poverty, crime, unemployment, immigration, domestic violence, etc.).	10	40
Creating better parental and caregiver understanding of what is developmentally appropriate for	10	40

children.		
Increasing knowledge about the early skills children gain that lead to literacy.	7	28
Enhancing children's overall development (social, emotional, physical, and intellectual).	7	28
Fostering increased value on education from parents and communities.	5	20
Increasing exposure to literacy activities (e.g., being read to, songs, nursery rhymes, drawing opportunities, etc.).	5	20
Having parent and child liaisons in Spanish to assist with school and community issues.	5	20
Providing low-cost family-oriented activities in the community.	5	20
Developing a comprehensive training system for teachers (preschool and elementary) to learn about language and early literacy development.	5	20
Creating a positive, stable home environment that helps foster learning and literacy development.	5	20
Helping non-English-speaking parents understand and communicate effectively with children's teachers or caregivers.	5	20
Promoting appropriate developmental expectations for children's early literacy development.	5	20
Encouraging parents to model literacy behaviors for children.	4	16
Increasing access to language and literacy experiences in the community (e.g., mobile preschool, story time, mobile libraries, etc.).	4	16
Encouraging parents to value the importance of quality and accountability in their children's educations.	4	16
Increasing community support (financial and social) for families and schools.	4	16
Increasing awareness of cultural diversity, sensitivity, and strengths.	3	12
Providing culturally appropriate learning opportunities for children who do not attend preschool and who might otherwise not be exposed to literacy activities.	3	12
Providing opportunities for adult literacy education.	3	12
Having family-friendly work policies.	3	12
Increasing media literacy to help parents use media to promote high-quality learning experiences for children.	3	12
Providing opportunities for enhancing general parenting skills.	3	12
Helping parents find time and energy to spend high-quality time with their children.	3	12
Developing educational programs to help parents with infants and toddlers get started early in fostering their children's literacy and language skills.	3	12
Increasing parents' awareness of the importance of conversations with children.	3	12
Increasing parents' understanding of what is involved when their children enter kindergarten (e.g., children's skills, vaccinations, regulations, etc.).	2	8
Providing opportunities for parents to meet with other parents to develop networks of support.	2	8
Encouraging greater collaboration among agencies.	2	8
Developing methods that engage parents with their children and early educational services.	2	8
Ensuring that parents and caregivers know and understand the prekindergarten standards.	2	8
Increasing opportunities for families in which English is not the primary language to engage in literacy and school readiness activities.	2	8
Having employers that understand and support literacy.	2	8
Having a central referral source to aid families in locating services.	2	8
Developing ways to get parents to educational programs, especially parents with lower literacy skills themselves.	2	8

* The broad issues are listed in rank order across all three children, family, or community questions.

Two general issues were listed by all of the panel members (providing high-quality and affordable child care for children and families; having basic needs of families met). A third issue was listed by all but one of the panelists (fostering English-language acquisition for children and parents). Several issues dealt directly with providing literacy experiences for children (e.g., providing greater access for children and families to high-quality, age-appropriate books and writing materials; reading books with children; increasing knowledge about the early skills children gain that lead to literacy), while other issues focused on adults who work with children (e.g., creating better parental and caregiver understanding of what is developmentally appropriate for children; fostering increased value on education from parents and communities). Some of the issues dealt with community and agency actions that might help improve children's literacy and language outcomes (e.g., providing high-quality and affordable child care for children and families; having basic needs of families met; resolving social problems such as poverty, crime, unemployment, immigration, and domestic violence).

Round 2

Round 2 was undertaken to prioritize the list of issues identified in Round 1. In Round 2, the same group of 30 panelists was sent a second survey consisting of a randomized list of all of the 39 general issues generated in Round 1. On a scale from 1 (*Least Important*) to 9 (*Most Important*), panelists were asked how important each of the 39 issues was in helping ensure that children enter school ready to learn. Panelists were given 2 weeks to return the Round 2 surveys.

Twenty-five surveys were returned, and the researchers computed a prioritized list of community issues based on the mean ratings of importance. The higher the mean, the higher the item was judged to be a priority. Table 2 presents the mean ranking of all 39 issues.

Table 2
Rankings of Issues from Round 2

Rank	Issue*	Mean	SD
1.	Reading books with children.	8.36	1.08
2.	Having basic needs of families met (e.g., health care, nutrition, social services, etc.).	8.32	1.38
3.	Increasing exposure to literacy activities (e.g., being read to, songs, nursery rhymes, drawing opportunities, etc.).	7.96	1.17
4.	Enhancing children's overall development (social, emotional, physical, and intellectual).	7.92	1.38
5.	Increasing parents' awareness of the importance of conversations with children.	7.88	1.15
6.	Providing high-quality and affordable child care for children and families.	7.76	1.90
7.	Creating better parental and caregiver understanding of what is developmentally appropriate for children.	7.64	1.75
8.	Encouraging parents to model literacy behavior for children.	7.52	1.29
8.	Providing opportunities for adult literacy education.	7.52	1.39
10.	Increasing knowledge about the early skills children gain that lead to literacy.	7.48	1.71
11.	Creating a positive, stable home environment that helps foster learning and literacy development.	7.47	2.04
12.	Providing culturally appropriate learning opportunities for children who do not attend preschool and who might otherwise not be exposed to literacy activities.	7.46	1.67
13.	Helping non-English-speaking parents understand and communicate effectively with children's teachers or caregivers.	7.40	1.82

14.	Resolving social problems (e.g., poverty, crime, unemployment, immigration, domestic violence, etc.).	7.39	2.08
15.	Fostering increased value on education from parents and communities.	7.36	1.22
15.	Developing a comprehensive training system for teachers (preschool and elementary) to learn about language and early literacy development.	7.36	1.68
15.	Providing greater access for children and families to high-quality, age-appropriate books and writing materials.	7.36	1.82
18.	Promoting appropriate developmental expectations for children's early literacy development.	7.33	1.37
19.	Having a central referral source to aid families in locating services.	7.32	2.04
20.	Increasing opportunities for families in which English is not the primary language to engage in literacy and school readiness activities.	7.28	1.74
21.	Developing ways to get parents to educational programs, especially parents with lower literacy skills themselves.	7.24	1.76
21.	Increasing access to language and literacy experiences in the community (e.g., mobile preschool, story time, mobile libraries, etc.).	7.24	1.85
23.	Fostering English-language acquisition for children and parents.	7.21	1.72
24.	Encouraging parents to value the importance of quality and accountability in their children's education.	7.12	1.59
24.	Developing educational programs to help parents with infants and toddlers get started early in fostering their children's literacy and language skills.	7.12	1.74
26.	Encouraging greater collaboration among agencies.	7.04	1.99
27.	Providing opportunities for enhancing general parenting skills.	6.96	1.85
28.	Increasing community support (financial and social) for families and schools.	6.92	1.93
29.	Increasing parents' understanding of what is involved when their children enter kindergarten (e.g., children's skills, vaccinations, regulations, etc.).	6.88	1.72
30.	Having parent and child liaisons in Spanish to assist with school and community issues.	6.84	2.06
31.	Having family-friendly work policies.	6.83	1.61
32.	Developing methods that engage parents with their children and early educational services.	6.76	1.90
33.	Helping parents find time and energy to spend high-quality time with their children.	6.67	1.90
34.	Increasing awareness of cultural diversity, sensitivity, and strengths.	6.48	1.67
34.	Having employers who understand and support literacy.	6.48	1.85
36.	Ensuring that parents and caregivers know and understand the prekindergarten standards.	6.40	2.20
37.	Providing opportunities for parents to meet with other parents to develop networks of support.	5.96	1.95
38.	Increasing media literacy to help parents use media to promote high-quality learning experiences for children.	5.92	1.96
39.	Providing low-cost family-oriented activities in the community.	5.56	2.47

* Some of the items had the same ranking because they had the same means.

Overall, all of the items were ranked above the midpoint in importance (a score of 5 is the midpoint on a scale from 1 to 9). The top five issues were (1) reading books with children; (2) having basic needs of families met (e.g., health care, nutrition, social services, etc.); (3) increasing exposure to literacy activities (e.g., being read to, songs, nursery rhymes, drawing opportunities, etc.); (4) enhancing children's overall development (social, emotional, physical, and intellectual); and (5) increasing parents' awareness of the importance of conversations with

children. Although some of these issues relate specifically to literacy and language development, others cover broader developmental and social aspects. Other highly rated items concern issues related to child care quality and helping adults better understand children's developmental and literacy needs.

Rounds 3 and 4

Round 3 was undertaken based on an asset identification or "mapping" approach. Asset mapping refers to a process of inventorying the resources or assets available in a specified community or geographic area (Kretzmann & McKnight, 1993). Rather than following a deficit approach, asset mapping starts with existing assets and resources and then builds upon those to address critical issues. The mapping process can be spatial, as in identifying assets by neighborhood, or more abstract, as in identifying a network of resources. In this project, we wanted to generate a list of current or potential educational programs and efforts in the community that either already do or could address the highest rated issues. By comparing issues and assets, we hoped to identify needs for additional programming while taking advantage of existing assets.

A survey containing the top five prioritized issues was sent to the same 30 community panelists. For each issue, panelists were asked to (1) list educational efforts and programs that they were aware of in the community that were currently addressing the issue and (2) identify additional educational efforts that could address the issue. Panelists again were given approximately 2 weeks to return the survey to the researchers.

The needs assessment was originally planned for only three rounds. Although a number of existing and needed programs were identified in Round 3, only 10 people responded. Therefore, we conducted a fourth round to provide an opportunity for everyone to add ideas. All 30 panelists were sent a summary of the results of Round 3 and were asked to add to the list of (1) educational efforts and programs that they were aware of in the community that were currently addressing those issues and (2) additional educational efforts that could address those issues. Panelists were able to indicate that they were unable to think of things to add to the present lists. Again, panelists returned the Round 4 surveys to the researchers in a business reply envelope.

Twenty Round 4 surveys were returned. Ten people added to the lists of existing or needed programs generated in Round 3. In addition, 10 people indicated that they had no new suggestions to add to the Round 3 list. Round 4 not only provided an opportunity for everyone to add ideas, it appeared to help challenge people's thinking. A written comment was made by one of the panel members that having the list forced her to stretch her thinking in terms of what programs were available in the community, beyond her usual sphere of work.

Existing Assets. The panelists listed over 40 existing assets (programs, organizations, and educational services) in Rounds 3 and 4. A total of 172 responses were generated. Although the responses were idiosyncratic to the four-county area in which the project took place, for our purposes, we needed to summarize across counties. First we typed each response onto an individual slip of paper. Next, we looked for similarities among the responses, regardless of the specific priority issue for which it had been identified. The responses were analyzed through the same constant comparison (Strauss & Corbin, 1998) process described earlier. The responses included a mix of specific agencies, educational and government services, and community events and activities. Following this process, we identified nine general categories of existing assets. Figure 2 summarizes these categories of assets which include:

1. High-quality early childhood programs (e.g., high-quality community child care programs, developmental preschools in public schools, prekindergarten programs for vulnerable children, mobile "classroom on wheels" in disadvantaged neighborhoods, and university preschools).
2. Directed early literacy and school readiness services and programs (e.g., family literacy

workshops, story times at libraries and bookstores, kindergarten readiness efforts, children's programs on public TV, school-based reading enrichment programs, mobile literacy services, summer reading programs, home visitation, and a newspaper for children).

3. Comprehensive programs for families (e.g., Head Start, Early Head Start, and Even Start).
4. Community agencies (e.g., school districts, libraries, family resource centers, nonprofit organizations, Hispanic services, early childhood special education, Boys & Girls Clubs, Public TV, and the museum of art).
5. Informal community groups (e.g., Mothers of Preschoolers groups, faith-based organizations, and PAWS to Read).
6. Community events (e.g., literacy fairs, family literacy days, mommy/daddy and me events, and media literacy events).
7. Network of social and health services (e.g., child welfare, health departments, and Women, Infants, and Children [WIC] programs).
8. Business collaborations (e.g., monetary support from businesses for early literacy and school readiness efforts; family-friendly policies).
9. University and community colleges (e.g., Cooperative Extension, child development and early literacy programs, child and family research centers, and child development and intervention courses).

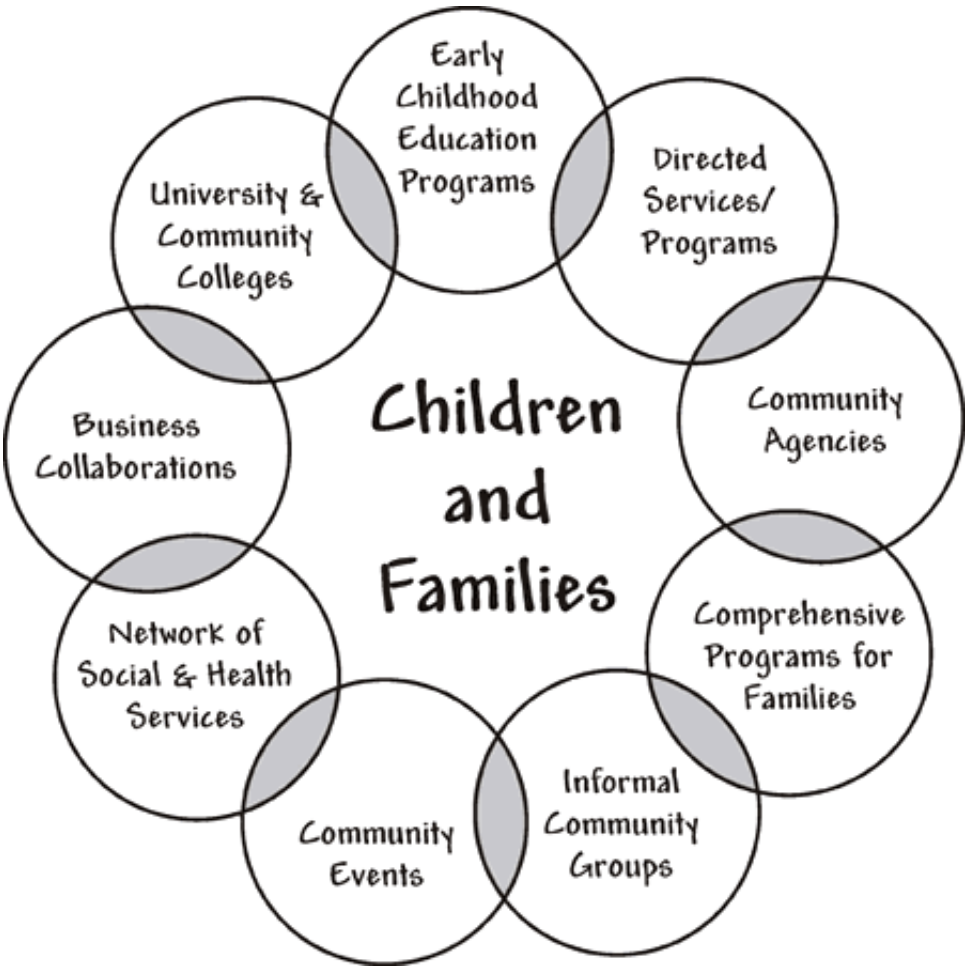

Figure 2. Mapping of perceived assets available to address early literacy and school readiness issues.

Needed Assets. A follow-up step to the identification of assets is to identify additional resources and community efforts that could build upon existing assets to improve early literacy and school

readiness outcomes for children and families. In Rounds 3 and 4, community panelists also were asked to list additional community efforts that could address the top priorities. A total of 97 ideas were generated. Although the responses varied slightly among the priority issues, once again we created a summary of the responses using the same process we used to identify the categories of existing assets. As can be seen in Table 3, seven categories of needed programs and efforts emerged. Table 3 also presents specific examples within each of these categories. The seven categories included:

1. Increasing innovative educational programs to reach families, including reaching more parents, increasing family literacy activities, expanding library services, and increasing literacy and developmentally appropriate activities in the child care setting.
2. Increasing access to high-quality, affordable early childhood programs, especially for vulnerable children and families with limited resources.
3. Focusing greater effort on reaching families with limited English skills.
4. Increasing public awareness of the importance of early literacy and school readiness issues through posters, flyers, and media.
5. Increasing workplace involvement in and support for early literacy and school readiness issues.
6. Increasing understanding of child development by parents, early childhood providers, and the community at large.
7. Strengthening institutional infrastructure through better collaboration and increased funding for early literacy and school readiness efforts.

Table 3
Summary of Needed Educational Efforts

Needed Programs		Examples
Increasing Innovative Educational Programs to Reach Families	Reaching more parents	• Expansion of home-visiting programs • Hospital packets for new parents • More prenatal education programs • Community workshops and parenting fairs • Discussion groups connected to TV parenting series
	Family literacy activities	• More family literacy workshops • Book clubs for parents and preschoolers • Distribution of books during well-baby checks • Book redistribution programs • Televised story times for children
	Expanded library services	• Family literacy programs at bookmobile sites • Library kits for new parents • Literacy games for parents to check out • Lapsit programs • More visits to libraries from well-known characters such as Arthur and Clifford

	Increasing early childhood literacy efforts	• Initiatives to increase reading more to children in child care settings • Incorporate programs like Read to Succeed and Early Reading First into child care programming • Create greater parent participation in preschool programs • Encourage more home visit and parent training programs through child care programs • Parent education materials and workshops that providers could use with parents
Increasing access to high-quality, affordable early childhood programs		• Full-day kindergarten • Universal preschool for 4-year-olds • Implementing prekindergarten standards in child care centers • More coop child care centers • More mobile preschools • Increase early education opportunities for vulnerable children (e.g., homeless, limited resource, second language, special needs, etc.) • Neighborhood play groups • Transportation for neediest children
Focusing efforts on families with limited English skills		• Liaison between Hispanic community and school districts • Spanish translators for families needing services • Spanish-language PSAs on radio, TV, and billboards • Increased library services for the Hispanic population • Incorporating family literacy activities into ESL programs • Increased access to tutoring programs
Increasing public awareness		• Literacy poster campaigns • Literacy tips stuffed in bills • Television commercials promoting family literacy and healthy child development
Increasing workplace involvement		• Recruit workplaces that will allow educational classes from community agencies • Promote family-friendly policies • Providing more on-site child care or structured activities for children while parents work
Increasing understanding of child development		• Creating better parental and caregiver understanding of what is developmentally appropriate for children

	• Increasing knowledge about the early skills children gain that lead to literacy • Developing a comprehensive training system for teachers (preschool and elementary) to learn about language and early literacy development
Strengthening institutional infrastructure	• Greater interagency coordination • Cross-walk of services available in order to meet needs in services • Increased funding for high-quality services for parents and young children • Increased health and social services

Discussion and Implications

A number of children continue to enter school without the literacy and language skills needed to help them succeed in school. Professionals and communities have expended much effort and money to develop intervention programs to help improve the early literacy and school readiness skills of young children. We argue, however, that before designing and implementing such programs, a critical first step is to assess the specific early literacy and school readiness needs of children, families, and communities. The purpose of this article was to illustrate a needs assessment process aimed at identifying priorities for community intervention to better target community efforts for maximum effectiveness. It is hoped that the process will provide a blueprint for educators, service providers, and policy experts wanting to conduct similar needs assessments before making decisions on implementing new intervention efforts in their communities.

Discussion of Findings

Issues identified in Rounds 1 and 2 included items specific to literacy and language development, as well as items focusing on broader developmental and social concerns. Other highly rated items related to providing high-quality child care and helping adults better understand children's literacy and developmental needs. Such issues coincide with critical factors identified in the literature. For instance, early literacy experiences have been linked with later school success, whereby children who are not exposed to enriching literacy environments at home or child care tend to struggle in school (Snow, Burns, & Griffin, 1998). Likewise, the scarcity of affordable, high-quality child care places a whole segment of young children at risk (Essa & Burnham, 2001). Also, children living in families struggling to meet basic needs are less likely to be ready for school than children living in nonpoor families (Resnick et al., 1999). Thus, the priority needs identified by the community panelists corresponded to a number of critical issues identified by other scholars.

The panelists in this project also identified a number of community assets and needed efforts that have been shown to be important in previous research. For example, panelists stressed the need for directed early literacy and school readiness services and programs, and such efforts have been found to be successful (Snow et al., 1998). Similarly, panelists emphasized the need for high-quality early childhood programs, and efforts aimed at improving the skills of child care providers have been shown to address this need (Lobman, Ryan, & McLaughlin, 2005). Further, panelists' emphasis on offering comprehensive programs for families raises the need for community efforts designed at establishing collaborative partnerships among homes, schools,

and service providers. Such efforts have been shown to be an effective way to tackle priority community issues (Brown, Amwake, Speth, & Scott-Little, 2002). To truly make an impact in communities, there is a need for even greater creative community programming designed to help children and families develop the skills that will help them be successful, as well as to strengthen the network of assets and services.

The needs of Hispanic families and their young children emerged as an especially critical concern. In Round 1, all but one panelist identified the need to foster English-language acquisition for children and parents, while Rounds 3 and 4 generated a number of ideas targeted directly to these families. Along these lines, Collins and Ribeiro (2004) conducted a thorough review of the current state of early care and education for Hispanic children, the fastest growing racial/ethnic minority in the United States. Collins and Ribeiro point out that these children and their families face a number of educational challenges. Young Hispanic children whose families speak Spanish at home tend to have less well-developed English-language skills and to have fewer early literacy experiences before they start school, which can result in future grade retention, school discipline problems, and dropping out of school. Further, Hispanic children and their families tend to be underserved by early childhood programs. Collins and Ribeiro recommend that professionals and communities take greater strides to recruit Hispanic families into existing early childhood efforts, to reach out to Hispanic families in their native language, and to strengthen the training and skills of professionals working with Hispanic families.

The results also highlight the need for continued and increased collaboration among agencies and programs. Clearly, the scope of the issues associated with early literacy and school readiness requires broad-based, community-wide efforts. Issues identified with early literacy and school readiness touch areas of education, government, business, and media. Brown et al. (2002) point out that community collaborative efforts often face challenges such as time constraints, communication gaps, differences in professional training, and funding limitations. However, successful collaborations—ones that can overcome these difficulties—have the potential to make tremendous impacts on priority community issues. Such collaborations will strengthen the fabric underlying early literacy and school readiness efforts in communities.

Finally, panelists in this needs assessment suggest that a comprehensive view is needed to address the issue of early literacy and school readiness. Although the desire is to help children enter school ready to learn, community programs should be designed to strengthen the entire context in which young children live. Bronfenbrenner's (1979) ecological theory shows that children's development is influenced by a number of contexts, including family and community. Thus, efforts should not only be directed at children, but they should also include the adults who care for them, as well as the neighborhoods, agencies, and organizations that touch children's lives. As mentioned previously, school readiness is not just a child or family issue—schools and communities need to be ready to accommodate the diverse needs and experiences of children and their families (Murphey & Burns, 2002). A comprehensive approach will allow communities to address critical issues in a concerted effort, rather than piecemeal.

Implications for Professionals

Several conclusions can be drawn about the modified Delphi technique used in this project:

1. The technique allowed us to target and involve a wide variety of professionals involved in early childhood issues from a broad geographic area, many of whom would not have been able to travel to a central location on a regular basis.
2. The panelists could participate when it was convenient for them, rather than having to attend a series of meetings that would intrude upon their already busy schedules.
3. The process ensured that everyone's voice and ideas were heard. The process was not dominated by a handful of people, which often happens in group meetings. The promise of anonymity also meant that the panelists were free to share opinions without the fear of

reprisals by others in the group or by members of the research team.

4. The technique provided vital information to those designing and delivering educational intervention programs. Such a technique allows for the potential to better target programs than otherwise might have occurred had programs been implemented without such information.

There are drawbacks, however, to this type of needs assessment. First, it can be labor intensive to the researchers, who must analyze responses and then create and mail new questionnaires following each round. Second, the procedure takes time. The four rounds involved in this project took over 3 months to complete. Rather than mailing out the questionnaires, it is possible to administer them in conjunction with other meetings, such as regularly scheduled task force meetings, advisory board meetings, PTA meetings, and so forth (Andranovich, 1995). Finally, the quality of responses depends on a motivated panel. Panel members must be willing to participate throughout the process, and there is a time commitment for the panel members, as well. In the present project, full participation was not obtained in any of the rounds.

It is important to remember that we did not strictly define early literacy and school readiness for panelists. This was a conscious decision because we did not want to bias and limit the thinking and suggestions of our panelists. Yet this decision means that the results encompass a broad range of concerns, making it more difficult to tease out specific issues associated with specific aspects of early literacy and school readiness. Also, school readiness is a complex issue (cf., Murphey & Burns, 2002; Saluja, Scott-Little, & Clifford, 2000), and its complexity may not be fully captured in the process of identifying needs and assets. Responses of panelists, however, did not put the sole burden of readiness on children and families. Several suggestions were made that would help make schools and educational programs more ready for children.

Despite the limitations, we believe that the needs assessment strategy outlined in this article holds promise for other early childhood professionals contemplating early literacy and school readiness efforts. However, conducting such assessments is only the first step in developing interventions. It also is important to gain input from the families who will most likely be the recipients of the community efforts. Although a similar Delphi approach could be used with these families, it is likely that low literacy levels or language barriers might make it difficult for them to respond to the questionnaires. In such cases, professionals could use other strategies to gather input, such as focus groups or personal interviews. Data from both the professionals and families could then be used as a basis for community meetings to identify specific strategies for families and children. In this way, early childhood and other community professionals can better develop and target community programs to improve the chances that young children enter school ready to learn**.**

Acknowledgments

We want to acknowledge the valuable time, energy, and insight of the community panelists who participated in this project. Also, we would like to thank Steve Lewis and JoAnne Skelly, University of Nevada Cooperative Extension, for their suggestions on participants for the panel of community professionals.

References

Andranovich, Greg. (1995, March). *Developing community participation and consensus: The Delphi technique*(WREP #131). Pullman: Washington State University, Western Regional Extension. Retrieved June 7, 2005, fromhttp://cru.cahe.wsu.edu/CEPublications/wrep0131/wrep0131.html

Barone, Diane. (1998). How do we teach literacy to children who are learning English as a second language? In Susan B. Newman & Kathleen A. Roskos (Eds.), *Children achieving: Best practices in early literacy* (pp. 56-76). Newark, DE: International Reading Association.

Bronfenbrenner, Urie. (1979). *The ecology of human development: Experiments by nature and*

design. Cambridge, MA: Harvard University Press.

Brown, E. Glyn; Amwake, Carolynn; Speth, Tim; & Scott-Little, Catherine. (2002). The continuity framework: A tool for building home, school, and community partnerships. *Early Childhood Research & Practice*, *4*(2), Retrieved February 6, 2006, from http://ecrp.illinois.edu/v4n2/brown.html

Bryant, Donna M.; Burchinal, Margaret; Lau, Lisa B.; & Sparling, Joseph J. (1994). Family and classroom correlates of Head Start children's developmental outcomes*. Early Childhood Research Quarterly, 9*(3-4), 289-309.

Carter, Keith A., & Beaulieu, Lionel J. (1992). *Conducting a community needs assessment: Primary data collection techniques*. Gainesville: University of Florida, IFAS Extension. Retrieved June 7, 2005, fromhttp://edis.ifas.ufl.edu/pdffiles/HE/HE06000.pdf

Collins, Ray, & Ribeiro, Rose. (2004). Toward an early care and education agenda for Hispanic children. *Early Childhood Research & Practice*, *6*(2), Retrieved February 6, 2006, from http://ecrp.illinois.edu/v6n2/collins.html

Dickinson, David K. (Ed.). (1994). *Bridges to literacy: Children, families, and schools*. Cambridge, MA: Blackwell.

Dickinson, David K., & Smith, Miriam W. (1994). Long-term effects of preschool teachers' book readings on low-income children's vocabulary and story comprehension. *Reading Research Quarterly, 29*(2), 104-122.

Essa, Eva L., & Burnham, Melissa M. (2001). Child care quality: A model for examining relevant variables. In Stuart Reifel & Mac H. Brown (Eds.), *Advances in early education and day care: Vol. 11. Early education and care, and reconceptualizing play* (pp. 59-113). Oxford: Elsevier Science.

Jacobs, Francine H. (1988). The five-tiered approach to evaluation: Context and implementation. In Heather B. Weiss & Francine H. Jacobs (Eds.), *Evaluating family programs* (pp. 37-68). Hawthorne, NY: A. de Gruyter.

Kretzmann, John P., & McKnight, John L. (1993). *Building communities from the inside out: A path toward finding and mobilizing a community's assets*. Evanston, IL: Center for Urban Affairs and Policy Research, Neighborhood Innovations Network, Northwestern University.

Kuby, Patricia, & Aldridge, Jerry. (2004). The impact of environmental print instruction on early reading ability.*Journal of Instructional Psychology, 31*(2), 106-114.

Lobman, Carrie; Ryan, Sharon; & McLaughlin, Jill. (2005). Reconstructing teacher education to prepare qualified preschool teachers: Lessons from New Jersey. *Early Childhood Research & Practice*, *7*(2). Retrieved February 6, 2006, from http://ecrp.illinois.edu/v7n2/lobman.html

McKillip, Jack. (1987). *Need analysis: Tools for the human services and education*. Newbury Park, CA: Sage.

Morrow, Leslie Mandel. (1995). *Family literacy: Connections in schools and communities*. Newark, DE: International Reading Association.

Murphey, David A., & Burns, Catherine E. (2002). Development of a comprehensive community assessment of school readiness. *Early Childhood Research & Practice*, *4*(2), Retrieved February 6, 2006, fromhttp://ecrp.illinois.edu/v4n2/murphey.html

National Education Goals Panel. (1992). *Resolutions of the National Education Goals Panel: Assessing progress: Goal 1*. Washington, DC: Author.

Purcell-Gates, Victoria. (1996). Stories, coupons, and the "TV Guide": Relationships between home literacy experiences and emergent literacy knowledge. *Reading Research Quarterly, 31*(4), 406-428.

Reviere, Rebecca; Berkowitz, Susan; Carter, Carolyn C.; & Ferguson, Carolyn G. (1996). *Needs assessment: A creative and practical guide for social scientists*. Washington, DC: Taylor & Francis.

Resnick, Michael B.; Gueorguieva, Ralitza V.; Carter, Randy L.; Ariet, Mario; Sun, Yuanshan; Roth, Jeffrey; Bucciarelli, Richard L.; Curran John S.; & Mahan, Charles S. (1999). The impact of low birth weight, perinatal conditions, and sociodemographic factors on educational outcome in kindergarten. *Pediatrics, 104*(6), 74-84.

Saluja, Gitanjali; Scott-Little, Catherine; & Clifford, Richard M. (2000). Readiness for school: A survey of state policies and definitions. *Early Childhood Research & Practice, 2*(2). Retrieved February 6, 2006, fromhttp://ecrp.illinois.edu/v2n2/saluja.html

Snow, Catherine E.; Burns, M. Susan; & Griffin, Peg (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press. Retrieved June 29, 2006, fromhttp://www.nap.edu/readingroom/books/prdyc/

Strauss, Anselm, & Corbin, Juliet. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Strickland, Dorothy S., & Taylor, Denny. (1989). Family storybook reading: Implications for children, families, and curriculum. In Dorothy S. Strickland & Lesley Mandel Morrow (Eds.), *Emerging literacy: Young children learn to read and write* (pp. 147-159). Newark, DE: International Reading Association.

Walker, Dale; Greenwood, Charles; Hart, Betty; & Carta, Judith. (1994). Prediction of school outcomes based on early language production and socioeconomic factors. *Child Development, 65*(2), 606-621.

Author Information

Daniel J. Weigel is a professor and human development specialist in Cooperative Extension and Human Development and Family Studies at the University of Nevada, Reno, where he conducts community-based family literacy, early literacy, and parent education programs. He began his professional career as a preschool teacher and continues to train early childhood educators on providing high-quality child care. His current research interests include family and child care influences upon early literacy development, infant and toddler foundations of literacy, and program impacts of community-based literacy programs. He has published in the areas of early literacy development, child development, and parenting. Recent publications appear in *Early Childhood Research Quarterly*, *Reading Research Quarterly,* and *Early Care and Development*.

Daniel J. Weigel
University of Nevada Cooperative Extension
P.O. Box 11130
Reno, NV 89520
Telephone: 775-784-4848
Fax: 775-784-4881
Email: dweigel@unr.nevada.edu

Sally S. Martin is a professor and state extension specialist in the Department of Human Development and Family Studies at the University of Nevada, Reno. She began her professional career as a preschool teacher and continues to train early childhood teachers and parents around child care quality issues. She works with outreach education, conducting community and statewide needs assessments, designing curricula for vulnerable children and families, evaluating programs, and helping to formulate public policy. Her current research interests include literacy development in very young children, helping parents choose child care, identifying and understanding risk and protective factors, and cultural issues. Recent publications appear in *Early Childhood Research Quarterly*, *Reading Research Quarterly, Early Care and Development,* and *Child Care Center Connections.*

Sally S. Martin
Human Development and Family Studies, Mail Stop 140
University of Nevada, Reno
Reno, NV 89557
Telephone: 775-784-6490
Fax: 775-784-6493
Email: smartin@unr.nevada.edu