



INDIANA INSTITUTE ON DISABILITY AND COMMUNITY
EARLY CHILDHOOD CENTER

KINDERGARTEN READINESS ASSESSMENT

Kindergarten Readiness Assessment: Recommendations and Current Practices in Indiana

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Abstract

Kindergarten readiness is being assessed and being used to make decisions about children entering school. Research in this area has highlighted both controversies and uncertainties about this type of assessment, but, with or without the guidance of the research literature, this continues to occur. Organizations and researchers have laid out recommendations on some aspects of assessing school readiness, but very little research has been conducted on other areas of school readiness, including the actual practices in schools today. A survey of Indiana teachers examined how and why schools are assessing kindergarten readiness across the state. Identified existing practices were then compared to practices recommended in the literature. While several practices reflected recommendations, other areas of current kindergarten readiness assessment did not reflect the research literature. Several hypotheses for these differences are made, and the resulting implications for practitioners, policy-makers, and researchers are presented.

Kindergarten Readiness Assessment: Recommendations and Current Practices in Indiana

A child's academic success begins before their first year of formal education. Children enter kindergarten with vastly different family backgrounds, educational experiences, and capabilities, which significantly affect their early school education. In response to these differential starting points, many schools assess children prior to or at the beginning of the kindergarten year to determine their readiness for school. While the assessments may take different forms from school to school, their collective purpose is to get a picture of children to guide decision making concerning placement, the need for additional services, special needs, and instruction. The challenge for schools is that there are divergent opinions about how to assess school readiness, and in doing so, what specifically should be assessed.

While school readiness is commonly assessed in school districts across the country, there is little consensus among experts on what it means or should entail (Kagan, 1990). Definitions of school readiness vary greatly. One definition that has been around for some time views school readiness through a medical model, where school success or failure is based upon the child's maturity and level of development (Ilg, Ames, Haines & Gillespie, 1978). Thus, if a child is not ready for school, the best thing to do is to give that child more time to mature and develop. Another common definition of school readiness looks at the competencies children should have when they enter school, including academic and cognitive skills, language and literacy abilities, and social-emotional functioning, which are vital to later school success (Mashburn & Pianta, 2006; Snow, 2006). In this model, children are ready for school if they possess the necessary competencies.

Both of these definitions of school readiness have been criticized by others for failing to consider all of the inputs and processes children go through in acquiring these skills and abilities. Pianta and La Paro (2003) advocate for an environmental definition of school readiness, focusing on the cumulative experiences children have rather than weaknesses (or lack of competencies) within children. Their review of the research data indicates that assessments which focus only on a child rather than his or her cumulative experiences account for just one-quarter of the differences between children at school entry (La Paro & Pianta, 2001; Mashburn & Pianta, 2006). Pianta and

La Paro (2003) state that school readiness might better be understood as a product of interactions and experiences children go through on the way to school. Despite the lack of convergent definitions (Kagan, 1990), there is agreement that the skills a child has when he or she enters school are highly correlated with later skills relating to school success (Snow, 2006).

There is less divergence in opinion about how best to assess children's school readiness; the challenge for schools may be more in their capacity to carry out the recommendations made. Researchers (Gredler, 1997; Gridley, Mucha & Hatfield, 1995; Mashburn & Henry, 2004; McLoughlin & Rausch, 1990; Pyle, 2002) and national organizations (Council of Chief State School Officers, National Association for the Education of Young Children) have made several recommendations concerning best practices in school readiness assessment. Figure 1 presents a summary of the best practice recommendations for kindergarten readiness assessment. The Early Childhood Education Assessment-State Collaborative on Assessment and Student Standards (2004), affiliated with the Council of Chief State School Officers, recognized five important considerations with the assessment of young children. First of all, assessors must acknowledge that during early childhood, children go through rapid developmental changes. Second and third, academic knowledge and skills should be considered through the context of the whole child, and information about the child should be provided about their performance in a naturalistic classroom setting. Fourth, assessments used should be reliable, valid, and fair; and fifth, they should be developmentally based, linked to the curriculum, and aligned with appropriate childhood standards. Research suggests that information about a child should be gathered from a variety of sources in order to determine readiness for school. Both preschool and kindergarten teacher ratings of student abilities are strongly correlated to measures of specific skills, such as color naming and counting. The skills found to be the most highly correlated may have been the easiest to observe in the classroom, so teachers drew more on these observations when judging children's skills and abilities (Mashburn & Henry, 2004). In addition, technical adequacy of measures has been emphasized as an important component of assessment, though few individual screening measures possess adequate levels of reliability and validity to make appropriate early identification decisions. The most accurate picture comes from ecological models, which use both multiple gates and multiple raters (Pyle, 2002). Additional recommendations concerning assessment practices include the needs for multiple gates before high stakes decisions are made,

working with families as partners, culturally sensitive and coordinated assessment practices, and multivariate decision-making (Pyle, 2002).

The research literature also addresses school readiness assessment logistics. In regards to who should be assessing kindergarten readiness, experts have recommended that school psychologists be a part of the kindergarten screening process because they have been trained in assessment and test interpretation (Gridley, Mucha & Hatfield, 1995; McLoughlin & Rausch, 1990).

Comparisons of teacher ratings with formal assessment measures revealed that while preschool teachers used more sources of information when making ratings, kindergarten teachers' ratings more accurately reflected the results of the assessments. This suggests that ratings by kindergarten teachers may contain less error than those of preschool teachers (Mashburn & Henry, 2004).

In addition, the timing for conducting school readiness assessment is a critical factor. From a developmental perspective, unpredictability in children's behavior may influence decisions regarding when assessment should take place. Young children may exhibit extreme variability in behavior, creating a dilemma for school professionals seeking to assess school readiness 6 months before school entry (Gredler, 1997). Testing that occurs months before school entry may reflect behavioral problems which are no longer present when school begins. Thus, children should go through an adjustment time of at least three months in the school building and with the new teacher before behavioral screening measures are used (Gredler, 1997).

Finally, researchers have much to say about how educators should and should not use assessment information. School professionals use the information obtained for a variety of purposes, some of them questionable. Guidelines for the appropriate use of assessments for young children state that intelligence measures should not be used for instructional planning, and assessments designed for instructional planning should not be used to make high stakes decisions about student placements (Shepard, Kagan & Wurtz, 1998). The purpose of other types of readiness tests is often explicitly stated in order to make sure results are used correctly. Salvia and Ysseldyke (1991) define the purposes of readiness tests as being able "to predict who is not ready for formal entry into academic instruction" and "to predict who will profit from either

remedial or compensatory educational programs in which readiness skills or processes are developed” (p. 471).

Guidelines have been developed by several national organizations and researchers to ensure that assessment results are not misused. Saluja, Scott-Little and Clifford (2000) summarized and outlined the policy statements of various organizations. The resulting consensus shows that readiness assessments should:

- benefit both children and the adults involved,
- be used for the purposes for which they were designed,
- have appropriate validity and reliability,
- be age appropriate,
- use naturalistic observations as children interact in “real-life” situations,
- be holistic, collecting information on all developmental domains (physical, social, emotional, and cognitive),
- be linguistically and culturally appropriate,
- collect information through a variety of processes and multiple sources (collection of children’s work, observations of children, interviews with children, parents reports, etc.),
- be used to guide instruction, and
- not be used to determine children’s placement in school.

In particular, assessments should not be used for other than their intended purposes due to their limited generalizability (Pyle, 2002). The interpretation of screening results should be carefully made so results are not overextended, potentially leading to inappropriate decision-making. Screening practices have not been demonstrably able to predict academic success, and skills often measured on readiness assessments do not reliably predict future aptitudes in students (Smith, 1999). Additionally, school experiences and relationships between students, rarely measured on commercial school readiness assessments, dramatically affect children’s academic and social development.

In addition, a review of the literature shows that some practices are not acceptable uses of school readiness assessments. One example of a questionable practice is deferred kindergarten entry, commonly referred to as red-shirting or the “Gift of Time.” This practice has been correlated with increased behavioral problems (Graue & DiPerna, 2000), decreased likelihood of completing school (Angrist & Krueger, 1991), and heightened expectations in the typical kindergarten classroom (May & Kundert, 1997; Shepard, 1997). In contrast, the literature has identified positive practices, including placement of children into full-day kindergarten (Nelson, 2000; Plucker, Eaton, Rapp, Lim, Nowak, Hansen, et al, 2004), referral for special education services (Litty & Hatch, 2006), and the development of learning groups within the classroom (McCoach, O’Connell, & Levitt, 2006; Tieso, 2003). Additionally, flexible peer groupings, multiage and un-graded structures, and cooperative learning are some alternatives that can foster learning and self-esteem by valuing the gifts and talents of all children (National Association of Early Childhood Specialists in State Departments of Education, 2000).

Current Practice

Current research indicates that states take different approaches to kindergarten readiness assessment, some of which stems from the research literature. Saluja, Scott-Little and Clifford (2000) found that no state has a formal, statewide definition other than an age of eligibility requirement. Nationally, five states allow local districts to have formal definitions of school readiness, five states have developed frameworks or benchmarks around school readiness, and six states reported that they emphasize schools being ready for all children. When states lack solid recommendations, interpretations may vary widely. Typically, local school districts choose assessment methods and decide how obtained scores will be used. When the interpretation of vague state policy is left up to the discretion of local schools and school systems, resulting criteria for kindergarten entry may differ from the state requirements (Wesley & Buysse, 2003). It is possible that current practices stem from a history of questionable decisions, derived from the responsibility to show accountability within programs (Mashburn & Henry, 2004).

While research suggests that the representation of all five domains of school readiness is important, standards in many states do not follow from this (Scott-Little, Kagan & Frelow,

2006), and focus on skills that are aligned with later academic requirements. This contrasts with what kindergarten teachers report as critical skills. A national survey of kindergarten teachers found that nearly half of teachers were most concerned with children being able to follow directions in the classroom (Rimm-Kaufman, Pianta, & Cox, 2000). In another study, less than 10% of teachers reported that the ability to count to 20 or more and identify letters of the alphabet was necessary and important to have when entering kindergarten (Heaviside & Farris, 1993). Lin, Lawrence and Gorrell (2003) surveyed kindergarten teachers and found that their main concerns about children's readiness focused on social behavior rather than academic skills. A survey of kindergarten teachers revealed that they recognized a division between their views of what was appropriate for children and what would be expected of children at the beginning of kindergarten due to recent changes in the kindergarten culture (Wesley & Buysse, 2003).

An additional finding is that opinions on school readiness may vary from school to school, and even within teachers at one school, making the concept of school readiness and the decisions made from this label challenging. Systematic differences between teachers exist when rating school readiness in children. Older teachers, having been trained years before and having gained classroom experience, tend to have lower expectations about academic skills children possess upon kindergarten entry, and they were less likely to say that these academic skills were crucial when compared to younger teachers (Lin, Lawrence & Gorrell, 2003).

Another challenge concerns access to valid and reliable assessment instruments. A recent focus on curriculum-based measures has led to the development and use of these types of readiness screenings in this area. While measures like this are in use, there is very little research on the technical adequacy of these assessments (VanDerHeyden, Witt, Naquin & Noell, 2001). In addition, a number of readiness assessments used have no reliable prediction of children's school success (Ellwein, Walsh, Eads & Miller, 1991). Compounding this problem, while collecting information from multiple sources is recommended as best practice, many school districts make high stakes placement decisions based almost entirely on the results of one brief assessment measure (Gredler, 1997).

There is one study that investigated one state's school readiness assessment practices. Costenbader, Rohrer and Difonzo (2000) surveyed kindergarten readiness assessment practices in New York State and found that about 30% of the districts classify their screening measures as locally constructed, while 55% of the respondents used one of three published measures. Although experts have recommended that school psychologists be a part of the kindergarten screening process because they have been trained in assessment and test interpretation (Gridley, Mucha & Hatfield, 1995; McLoughlin & Rausch, 1990), less than half of the respondents reported using these professionals in the school readiness assessment context. More than 75% of school districts spent more than 20 minutes with each individual child. Most alarmingly about this study, despite the poor technical adequacy of the kindergarten screening measures being used, respondents reported high levels of satisfaction from the assessment process (Costenbader, Rohrer & DiFonzo, 2000).

Overall, the research that has been conducted on school readiness assessment is overshadowed by what is unknown about this existing practice. From what is available in the literature, it appears that the actual current practices in this area do not always follow from suggestions from the research. Unfortunately, more often than not, research of current kindergarten readiness assessment appears to highlight poor practices. While nationwide research on the similarities and differences between state policies on school readiness has been conducted, only one in-depth analysis within a state exists in the research literature. For this reason, we decided to investigate the school readiness assessment practices in a Midwestern state. By examining the existing practices and comparing them to recommendations made in the research literature, we hope to evaluate these practices in light of what is considered best practice for school readiness assessment.

Methods

A survey study was conducted to examine the current school readiness assessment practices in Indiana. In addition to uncovering existing practices, we wanted to analyze these practices in regards to the current literature for two purposes. First, we wanted to determine the nature and extent of any discrepancies between recommended and actual practices. Second, we wanted to

identify current practices for which there is little or no research guidance. By identifying areas in which research is lacking but school practices are prevalent, we hope to serve as a call for research in these areas.

An online survey was created on Survey Monkey. In this survey, we asked about whether the respondents were assessing school readiness, when they were doing it, how they were doing it, who was involved, which tools they were using, what was done with the information, and how well the assessments worked for different types of children. Figure 2 presents the major questions asked on the online survey.

Paper invitations with directions to the online survey website were sent out to all public preschool and kindergarten teachers and all private kindergarten teachers in the state's Department of Education's database. In addition, follow-up messages were sent to school principals several weeks later asking them to remind the teachers in their schools to fill out the survey. Results were compiled and analyzed using Survey Monkey and SPSS.

For the literature review of school readiness assessment, a search was conducted over the last ten years in EBSCO Host and PsychINFO using the following key words: kindergarten, assessment, school readiness, kindergarten transition, and tests. Relevant articles were compiled and analyzed in terms of their recommendations and findings on school readiness assessment. Results from this literature review were then compared to the direct results obtained from our survey in order to see if existing practices reflected the recommendations and findings in the research.

Results

A total of 343 individuals responded to the survey, including 278 kindergarten teachers (82.2%), 48 preschool teachers (14.2%), 8 elementary school principals (2.4%) and 4 childcare providers (1.2%). Survey participants came from 164 of the 292 (56%) school districts in Indiana, along with 14 private schools. Of the respondents, 264 (77%) reported that they assess children's readiness for entry to kindergarten and school.

Assessment Methodologies

Types of assessments and the focus of these readiness assessments differed across respondents. In terms of assessment methodologies, teacher observation and judgment was used by 94% of respondents, with 78% of respondents using parent reports and checklists. Checklists created by teachers were reported 66% of the time, while checklists created by schools were used 52% of the time. 59% of respondents reported using commercial assessment tools (see Figure 3 for commonly reported commercial assessment tools), and 39% of them used preschool or childcare reports. Respondents indicated that they used, on average, 4 different assessment methodologies ($M=3.87$). Additionally, 65% of respondents reported that these assessment procedures represented district-wide policies and procedures. The methodologies and content of the assessments presently in use provide a mixed reflection of the research literature in this area. The high prevalence of informal teacher and parent measures may indicate the lack of technical adequacy of measures being used, the teachers' knowledge of appropriate assessment tools, or they may indicate assessment of the child in their natural settings. However, the average number of assessments being used may reflect the multiple gate, multiple rater system suggested by Pyle (2002).

When asked if the assessments being used addressed skills across multiple domains, respondents indicated whether the domains measured and their perception of whether it was assessed adequately (see Table 1). Respondents indicated that they assessed children's skills in the domains of physical health and well-being (97%) and language and literacy (95%) most often and also the most adequately (86% and 84%, respectively). Cognitive and general knowledge was assessed by 94% of respondents, with 76% believing the measures to be adequate; and, motor development was assessed by 88% of respondents, with 62% believing the measures to be adequate. Social-emotional development and approaches to learning were assessed the least often, with 75% and 74% reporting assessment in these areas, but only 54% and 48% believing these measures to be adequate, respectively. The content of reported assessments shows that components of school readiness are differentially assessed. Motor development, social-emotional development, and approaches to learning are under-represented in many of the assessments being used (National Education Goals Panel, 1995; 1997).

Assessment Team Composition

Teachers were overwhelmingly the individuals reported as assessing children for school readiness (96%). Speech and language therapists (62%), school nurses and other health care professionals (57%), other school personnel, such as paraprofessionals (55%), school psychologists (16%) and parent volunteers (13%) were also reported as assisting with school readiness assessments. The low rate of participation of professionals in testing specific components of children (speech and language therapists, health care professionals, school psychologists) contrasts the recommendation that these individuals be included (Gridley et al, 1995; McLoughlin & Rausch, 1990). However, depending on the types of assessments being used, it may have been appropriate for teachers and other individuals in the school to assist with kindergarten readiness assessment.

Assessment Time

In regards to when kindergarten readiness assessment occurs, the majority of respondents appear to assess children in a spring event prior to kindergarten (59%). Forty-six percent of the respondents report assessing children at the beginning of kindergarten. Another 23% of respondents said that children are assessed for school readiness while they are in preschool or childcare setting, and 15% reported assessments during summer events prior to kindergarten. This information indicates that some schools may be following recommendations in terms of testing logistics, while others are not. Participants had the option to choose more than one time in which they were assessing school readiness. The unpredictability of young children's behavior makes testing children before school entry risky (Gredler, 1997), but less than half of the respondents reported assessing school readiness after school entry. The high numbers of schools assessing school readiness in the spring do not appear to be taking the rapid developmental changes possible for children this young into account, unless they are assessing children in the spring and again once children enter school in the fall.

Use of Assessment Results

Results from school readiness tests are used to make different sorts of decisions and recommendations for children. High stakes decisions were made from these assessment results by 54% of the respondents, including recommendations to parents that children delay kindergarten entry (34%), or children enter a developmental or transitional kindergarten (19%) or special education classroom (16%). Thirty-eight percent of respondents said they used kindergarten readiness assessment scores to determine which children should participate in full and half-day programs. Finally, 28% of respondents said that these scores have no influence over placement for children.

Assessment results also influenced classroom work for students. A majority of the respondents reported using assessment information to inform families about what they can do at home (79%) and to plan their curriculum and instruction (76%). Test results were also used to monitor children's progress (76%), identify the needs for additional resources, such as special education, health services, and social services (74%), determine learning groups (56%) and inform families about placement and educational recommendations (54%).

Disparate recommendations for use of various assessments make it difficult to discern whether decisions based on results follow from the research literature. While many of the decisions have been supported by researchers, others are more questionable. Along with the types of decisions being made, there is no indication whether decisions are appropriately following from test results.

Appropriateness of Assessments for All Children

When asked about how inclusive their kindergarten readiness assessment procedures were of diverse groups of students, respondents reported that diverse groups of students were included 93% of the time. The groups of children included ranged from children with no prior early education experience (98%), children who come from families that place them at risk (96%), children with significant developmental delays or disabilities (80%) (See Table 2). In terms of

how well these assessments worked for all children, 78% of the respondents indicated that these assessments worked fairly well or very well in helping make decisions for these children. These perceptions ranged across groups of children, from a high of 90% positive perceptions for children with no prior early education experience to a low of 66% for children whose parents do not speak or read English proficiently. This last statistic most likely indicates the respondents' concerns about the linguistic or cultural appropriateness of the assessment results for some students, and that is why their perceived efficacy is low. Besides this, the absence of research literature in this area does not provide a good backdrop for comparison.

Discussion

Results of the statewide survey of kindergarten readiness assessment practices highlight a number of comparisons between current practices in Indiana and current research and recommendations in the literature. Together, they present a mixed picture in describing the status of kindergarten readiness assessment practices. Some practices closely reflect what researchers and experts in the field have recommended. Other practices appear to deviate from best practices.

Through the survey, we found several practices that reflect best practices. For example, many respondents used multiple assessment measures. Additionally, these assessments often covered all of the developmental domains associated with school readiness. Nearly half of the respondents reported measuring students at the beginning of kindergarten, thus taking into account the nature of child development. From the assessment results, many respondents made appropriate decisions, such as making recommendations for parents, determining resources that will be necessary, and informing the class curriculum.

Along with finding instances of assessment practices that reflected best practice, we also found a number of practices that clearly do not reflect recommendations in the field. Despite what we know about the quickly-changing nature of young children's development, the majority of schools assess children in the spring, months before school entry. Also, school psychologists, whose education and experience make them prime candidates for this process (Gridley, Mucha & Hatfield, 1995; McLoughlin & Rausch, 1990), are underrepresented in kindergarten readiness

assessment. Teacher or district-developed checklists and parent report tools, which may lack in technical adequacy, were frequently used in carrying out the assessment process.

Finally, we surveyed assessment practices for which there is little guidance in the literature. Decisions being made based on assessment results have been evaluated in terms of which decisions are beneficial to children, but the process of using data to make decisions has been largely looked over. Commercial assessment tools often have explicitly stated purposes which informal checklists and observations lack. Though the express purpose for commercial measures can be found in test manuals, practitioners often fail to limit the interpretation of test results to these purposes and instead inappropriately make high-stakes decisions. Other topics which have been underrepresented in the research literature are whether specific groups of children are consistently excluded from the assessment process, and whether the assessment results are perceived as less helpful with certain children. Although we were not able to compare to previous research, we found that most children were always included in kindergarten readiness assessment, although the perceived usefulness of testing results were fairly low for some groups of children, particularly when the children or parents did not speak or read English proficiently. When the perceived usefulness of readiness assessment differs systematically between groups of children, the linguistic and cultural sensitivity of the assessment measures might need to be examined further.

There are a number of reasons why current kindergarten readiness assessment practices may differ from what is recommended in the literature. While the current survey did not explore why the respondents do what they do, we can make some hypotheses. Possible factors include costs, logistical factors, knowledge of best practices and appropriate assessment methodologies, and increasing pressures concerning accountability. Identifying and examining these possibly influences on school policy and practices can help us to bridge research to practice in the future.

Cost considerations may significantly affect or limit what schools can do. For example, purchasing appropriate commercial assessment instruments may not be possible; nor is it possible to fully staff the assessment process with all of the appropriate personnel (e.g., school psychologists). Logistical factors also may dictate many aspects of kindergarten readiness

assessment. For example, pairing assessment/screening in the spring as part of a kindergarten roundup event enables schools to have greater access to children and to satisfy multiple needs at one time. Conducting readiness assessment during the first months of school may be difficult to do because it competes with all of the other teacher responsibilities. Another factor that influences current practice is the educator's knowledge of current research and best practice recommendations in the field. This factor reflects three possible problems: poor professional development where educators fail to keep abreast of the field; research to practice gaps where researchers have failed to make current research findings easily accessible to the field, and a lack of research and recommendations in the area.

Compounding the challenges of knowing about and implementing best practices, schools are also facing increasing pressures in response to accountability measures and the downward extension of expectations for children. Several indisputable realities influence practices in schools today, and these influence and are a result of educational decisions. The focus of kindergarten has become increasingly educational and aligned with the learning standards and curriculum of later grades. Schools and kindergarten teachers are realizing pressures for children to acquire the important academic skills that can make the difference between success and failure in later years, which is impacting kindergarten content. In the face of these demands placed on schools, decisions made for individual children may be difficult to separate from decisions made to help the school meet expectations.

Implications

A number of implications arise for individuals who influence school readiness assessment practices for young children, including practitioners, policy-makers, and researchers (See Figure 4). As the implementers of kindergarten readiness assessment, practitioners (teachers, principals, etc.) are ultimately responsible for implementing best practices. Therefore, it is important that practitioners be aware of the literature in this area. Research is being conducted about many of the aspects of school readiness and how it should be assessed, and this knowledge should be used practically. In the absence of literature, practitioners should make common-sense decisions. Rather than simply choosing a method or tool because others have done so, practitioners should make choices based on their needs and purposes for assessment.

There are also implications for policy-makers regarding the current state of kindergarten readiness assessment. Given the widespread influence of their decisions, policy-makers must be informed when making large-scale decisions. Just like practitioners, when research exists, policy-makers should follow this research, and in the absence of high-quality research, use common sense in decision-making. Recognizing the potential implications for large numbers of children, policy-makers should defer to the experts for important decisions when they lack the information to make informed decisions. In addition to making research-based decisions, policy-makers should regard child readiness as one part of the puzzle, and continue to strengthen families, community resources, and educational programs (Scott-Little, Kagan & Frelow, 2006). If leaving decisions to local administrators and practitioners, policy-makers should make it easier for practitioners to access research information, and thus make informed decisions. Networks of research literature or statewide policy statements could help inform practitioners without giving explicit recommendations practitioners must follow. In addition, professional accountability, with particular attention to the preparation and hiring of individuals in decision-making positions, even at the local level, may positively influence school readiness assessment decisions and practices (Darling-Hammond, 1990).

Implications for researchers stem from the lack of research in many areas relating to school readiness assessment. If practitioners are to have a research base from which to draw from, there must be a strong base of knowledge. The existing literature should be increased so that high-quality research exists in this area. Numerous articles and studies have highlighted the differences in definitions of school readiness and how current testing practices are inadequate, but this does not positively influence what is actually occurring in schools today. When practitioners have research to draw from, they are more likely to choose appropriate practices which will benefit children. Thus, by bolstering the research in this area, practices will improve for children.

Conclusion

An investigation into the status of research literature about kindergarten readiness assessment and the current practices of Indiana has uncovered both similarities and differences between recommendations and practice. While recommendations and research studies have addressed aspects of assessment, schools and practitioners follow these recommendations to various

degrees. Logistical complexities and lacking recommendations in the research may be responsible for the discrepancies between recommended and actual practice. Schools have finite resources and decisions are often made based on necessities rather than best practice. When conducted appropriately, kindergarten readiness assessment can be highly beneficial to both students and practitioners in informing instruction and structure. Assessing school readiness should not be viewed as a hindrance, but rather as a tool to improve early education for students. Thus, increased research and closer adherence to research recommendations may result in better outcomes for students and schools.

It is important to note that several aspects of the research may limit the generalizability of results to other states. The study only looked at practices in one state; and, while the survey respondents covered a majority of the counties within Indiana, results of some questions may have been different if the number of respondents was larger. Additionally, due to the varied nature of kindergarten readiness assessment between states, an analysis of assessment in one state may look very different in another state.

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Table 1

Assessment of School Readiness by Domain

<i>School Readiness Domain</i>	<i>Measuring domain</i>	<i>Perceived adequacy</i>
Physical health and well-being	97%	86%
Language and literacy	95%	84%
Cognitive and general knowledge	94%	76%
Motor	88%	62%
Social-emotional	75%	54%
Approaches to learning	74%	48%

Table 2

Inclusion of Certain At Risk Groups in Readiness Assessment

<i>Populations of Children</i>	<i>Included</i>	<i>Fairly/Very Well</i>
Children with no previous early education experience	98%	90%
Children with mild developmental delays or learning disabilities	95%	85%
Children with significant development delays or disabilities	80%	84%
Children with language or communication disabilities	96%	82%
Children who may be gifted	96%	83%
Children who come from families that place them at risk	96%	75%
Children with physical or sensory disabilities	92%	72%
Children whose first language is not English	90%	68%
Children whose parents do not speak or read English proficiently	93%	66%
AVERAGE	93%	78%

Figure 1
Best Practices in School Readiness Assessment

1. The assessment tools are reliable and valid (technically adequate) and age appropriate.
2. Assessment should look at the whole child, including cognitive/academic skills, physical development, language and communication, social and emotional, and the child's approaches to learning.
3. Assessment should focus on the child's performance in naturalistic settings.
4. Assessment information should be collected from multiple sources using multiple methods.
5. Formal assessments should be administered by well-trained professionals (e.g., school psychologists).
6. Careful consideration is given as to when the assessment occurs in relation to the child's entrance into kindergarten.
7. Assessments should be used for their intended purposes
8. Decisions to delay children's entry into kindergarten or place children in *developmental* or *transitional* kindergartens should be avoided whenever possible.

Figure 2

Survey Questions

1. Do you assess children's preparation or readiness for entering your kindergarten and school?
2. To what extent does your school assess children's skills in each of the following areas:
Health and Physical Well-being, Motor Development, Social and Emotional Development,
Language Development and Literacy, Cognition and General Knowledge, and Approaches to
Learning?
3. For each area, how do you assess children?
4. If you use a commercially published assessment, what is it?
5. Who is involved in assessing children's school readiness?
6. When does school readiness assessment occur?
7. Where is school readiness assessment conducted?
8. Are school readiness assessment procedures the same for all children in your school and
district?
9. To what extent are various groups of children (e.g., children with disabilities, non-English
speaking children/families, children living in poverty) included in your general school
readiness assessment?
10. What class placement decisions or recommendations are based upon the assessment results?
11. How do the assessment results influence classroom work?
12. How well do the assessment results help you in your decision making?

Figure 3

Commonly reported commercial assessment tools

- Brigance K & 1 Screen
- Dynamic Indicators of Basic Early Literacy Skills (DIBELS)
- Peabody Picture Vocabulary Test (PPVT)
- Galileo
- Gesell Developmental Assessment
- Creative Curriculum
- Developmental Indicators for the Assessment of Learning- 3 and Revised (DIAL-3/
DIAL-R)
- Early Prevention of School Failure (EPSF)
- Northwest Evaluation Association (NWEA) measures

Figure 4

Implications for Professionals

Practitioners

1. Be aware of research literature
 2. When research is unavailable, make thoughtful, common-sense decisions
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Policy-makers

1. Be informed and follow research when making decisions
 2. When research is unavailable, make thoughtful, common-sense decisions and know when to defer to experts
 3. Strengthen families, community resources, and educational programs to support children
 4. Help practitioners stay informed of current research
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Researchers

1. Increase research in this area
2. Focus research on actual practices and their implications for children
3. Actively disseminate information to school professionals to bridge the research to practice gap