Child Assessment in Early Childhood Education and Care Settings in South Korea

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Abstract

This study investigated child-assessment practices in the context of Korean early childhood education and care settings. Interviews with educators and documents obtained from educational and care settings were analyzed. In general, the results support the rigorous implementation of child-assessment procedures since the recent implementation of kindergarten evaluation and childcare accreditation by the government. However, some settings have not implemented these procedures systematically, resulting in wide variation in the types of assessment conducted and the forms used across environments, as well as superficial goals and limited information regarding children. To enable efficient child assessment and the transfer and sharing of information about each child among providers and schools, a common framework should be provided, with common tools and recording forms, together with guidelines for child assessment and training services for educators and staff.

Keywords: Child assessment, Observation, Early childhood education, ECEC, Korea

1. Introduction

Child assessment plays an important role in early childhood education and care (ECEC) by providing baseline data on knowledge, understanding, skills, interests, and dispositions of children that can be used by educators to develop curricula that strengthen competencies and provide appropriate experiences to support the learning and development of children. In addition, information obtained from child assessment can contribute to important decisions about issues such as placing special children in intervention programs and moving students between levels as well as to communication with parents, other professionals, administrators, interested parties in the community, and legislators (Wortham, 2008; McAfee & Leong, 2007; Mindes, 2003; NAEYC & NAECS/SDE, 2003). Therefore child assessment should constitute an integral part of educational programs (NAEYC, 2005).

In Korea, child assessment has been implemented to varying degrees, ranging from poor to systematic, according to settings because this procedure has not been mandated or been perceived as important by educators surveyed in previous studies (Lee, 2004; Kim, 2001; Eom, 2000). In addition, Korean government does not emphasize the achievements of learning goals at ECEC level. However, child assessment in Korea has been becoming more systematic since the recent implementation of kindergarten evaluation and childcare accreditation procedures by the government (Seo & Hong, 2009).

1.1 ECEC and national curricula in Korea

There are two kinds of institutions for young children in Korea: kindergartens (regulated and supported by the Ministry of Education, Science and Technology, MEST) and childcare centers (regulated and supported by the Ministry for Health, Welfare and Family Affairs, MIHWAF). Kindergartens serve children aged from 3 to 6 years old, focus on education, and follow the Kindergarten Curriculum, while childcare centers serve children

from birth to 6 years old, focus on care, and follow the Child Care Curriculum. Recently, both institutions embrace education and care, so called 'educare', by providing caring service after a regular session in kindergartens and by focusing more on education in childcare centers.

The 2007 Revised Kindergarten Curriculum has been implemented since spring 2009. The Kindergarten Curriculum Guidance and the Teacher Resources Booklet for Kindergarten were also provided to teachers. The Standard Child Care Curriculum has been implemented in childcare centers since January 2007. The Child Care Program, which was developed by the Korea Institute of Child Care and Education, was provided to educators in childcare centers in 2008.

1.2 Child assessment in Korean national curricular

The Kindergarten Curriculum Guidance document describes the purposes, content, methods and recordings, uses, and considerations related to child assessment. The 2007 revised Kindergarten Curriculum Guidance document suggests a comprehensive assessment of the attitudes, skills, and knowledge of children rather than a focus on specific achievements. In addition, this document emphasizes the assessment of affective domains such as dispositions, attitudes, and interests as well as the cognitive aspects and skills related to children's achievements. It also recommends that children be assessed in the context of daily experiences, play, and educational activities utilizing a variety of systematic methods such as observation, examination of work samples, interviewing, and gathering information from various sources. The document additionally stresses the importance of observation, documentation, analysis, and interpretation of data when using the results of child assessment. The Child Care Curriculum emphasizes the importance of assessing the overall development of a child and including his or her surrounding environment in such assessments.

1.3 Government evaluation and accreditation

In Korea, government evaluation and accreditation of ECEC facilities have been recently initiated and have had great impact on the quality of education and care. Kindergartens have been evaluated since 2008 and most of the state kindergartens have been evaluated in 2010. Childcare centers have been accredited since 2005, and 59.1% of childcare centers were accredited in 2010 (MIHWAF, 2010).

1.4 Significance of this study

Studies on child assessments performed in Korean ECEC settings (Note 1) have produced varying results. Researchers have reported that educators assess children incidentally, irregularly, and/or independently in the absence of systematic assessment plans; that they do so casually and informally without documentation and in the absence of considered arrangements of the sequence of content; and that the data obtained from observations are neither analyzed nor interpreted (Bae, 1995; Eom, 2000; Kim, 2001; Lee, 2004). In contrast, one study of an educator considered to be highly qualified (Choi & Hong, 2003) found that this educator implemented ongoing assessments throughout the semester, used a variety of methods, assessed a wide range of child characteristics, and applied the results to enrich a dynamic teaching and learning process and to communicate with relevant persons in the service of enhancing the qualitative development of and positive changes in children.

These different findings may have resulted from biased sampling and/or restricted research methods, such as the exclusive use of questionnaires. If data were collected from samples representing diverse populations, including kindergartens and childcare centers of varying quality, and if diverse methods such as interviews with educators, observations of classrooms, and reviews of documents were used, we would expect the findings to differ from those of previous research. Additionally, we must examine the child-assessment practices that emerged after the recent government regulations on kindergarten evaluation and childcare accreditation. This study will provide information that can be used to ameliorate difficulties in child assessment and to develop an efficient assessment system in Korea.

2. Related literature

Based on reviews of the literature related to child assessment, this study offers proposals that address the following issues pertinent to child assessment: purposes and uses, planning, content, and methods.

2.1 Purposes and uses of child assessment

In related research, most Korean educators reported that they used the results of child assessments primarily in meetings with parents and in the creation of children's profiles (Kim, 2001; Lee, 2003). As a consequence, the results of these assessments were not reflected enough in curriculum planning or their teaching even though the most important role of child assessment is widely acknowledged by professionals as the provision of information about children's diverse attributes, and their progress and changes in their learning to educators so that they can

use it to plan and modify programs, activities, and strategies to maximize the effectiveness of interventions (Downs & Strand, 2006; Morrison, 2009). Although the results of child assessments should be communicated with parents to develop shared understandings and build partnerships (Darragh, 2009), it is also the case that these data were used primarily for superficial purposes rather to improve the quality of education and childcare in Korea.

2.2 Planning of child assessment

With respect to planning, NAEYC (2005) addressed the need to base assessments and evaluations on systematically collected information. Indeed, educators often lack plans for observational assessments in particular because, despite the consensus that such approaches are important, they are also informal. According to previous studies, educators in Korean ECEC settings assess children incidentally, irregularly, and/or independently in the absence of systematic assessment plans (Bae, 1995; Eom, 2000; Kim, 2001). Assessments tend to focus on activities involved in talking at circle time and on child-initiated activities informally without document recording, and in a casual and unsystematic way without considering arrangement of a sequence of content (Lee, 2004).

2.3 Content of child assessment

A related research (Lee, 2002) in Korea has reported that the socio-emotional and physical aspects of development, including physical growth, safety, and adaptation to new settings, are perceived by educators as more important than the cognitive aspects of development among younger children, especially when these children enter institutions. However, cognitive aspects, including language and exploration (e.g., mathematics and science) areas, are perceived as more important than affective aspects for older children more closely approaching school age. Yet, other investigations (Choi, Park, Sung, Youn, 2009; Choi & Hong, 2003) have reported that comprehensive child assessments that included social interactions, personality, and developmental progress in each domain were implemented in Korean kindergartens.

It is perceived as important by ECEC professionals to assess a wide range of domains that include not only the cognitive but also the socio-emotional and physical aspects of children even though recently, members of policy boards and legislators have expressed concerns about the extent to which children are prepared for later academic success and, as a consequence, the academic performance of young children has generated greater attention (Neuman & Roskos, 2005; Scott-Little, Kagan & Frelow, 2006).

2.4 Method of child assessment

The most effective evaluation of young children utilize both formal and informal assessments, including information from standardized tests, such as medical check-ups that assess physical development, personal reports, tests created by teachers, work samples, and/or observations of children during activities, which represents the most informal approach to assessment. The use of informal assessment to obtain information to inform teaching and decision making about young children has been widely accepted (Morrison, 2009), and observation has emerged as one of the most widely used methods of informal assessment (Beaty, 2006; Mindes, 2003).

The context of assessment can affect the performances of young children, who can perform best when they work in familiar, comfortable, natural, and informal settings (Cazden, 2001). Thus, information used to assess young children must be gathered not only during adult-led activities, but also during free play, everyday routines, and child-initiated activities. Observation of daily activities, play, and work is more appropriate than formal tests using structured tasks in assessments of young children (Schweinhart, 1993; Hills, 1993; Pellegrini, 2001).

According to research in Korea, the observational method has been used most frequently, however, the documentation, analysis, and interpretation of data collected via observation have not proceeded appropriately (Kim, 2001; Lee, 2003; Lee, 2004; Seo & Hong, 2009; Choi, et al., 2009). That is, "oral assessments" without documentation were the main methods used in ECEC settings (Lee, 2004). Oral assessments cannot contribute to planning the curricula for the next educational step or improving learning and teaching because such assessments remain in the minds of evaluators, rendering collegial interpretation of the data impossible.

Ideally, a variety of information drawn from multiple sources would be used to assess children because the results of such assessments would be used for important decisions, and decisions based on single data points can seriously impact the lives of children (Airasian, 2007). Therefore, parents, who know their children's strengths and characteristics best, classroom staff, specialists, and other related service personnel must be involved in the assessment process (Mindes, 2003; McAfee, Leong & Bodrova, 2004; Beaty, 2006; McAfee & Leong, 2007). However, relevant research in Korea has shown that classroom educators are usually the only source of

information in assessments of children, even though some basic information is gathered from parents when children enter educational or childcare facilities (Lee, 2003; Youn, Ahn, & Kim, 2008; Choi & Hong, 2003).

3. Research Design

This study adopted a qualitative methodology involving interviews with educators and analyses of documents obtained from selected kindergartens and childcare centers in South Korea.

3.1 Targets

Maximal variation sampling was employed to use a small sample to represent ECEC settings in Korea. Six kindergartens (state sponsored, both "stand alone" and annexed to primary schools, and independent) and six childcare centers (state sponsored, independent, and social welfare) were sampled from the list of available practica at the researchers' university. One independent kindergarten and one childcare center recommended by professionals in the field of kindergarten evaluation and childcare accreditation as being of high quality were also sampled. A total of 12 settings located in Seoul or suburban areas within one hour's travel from Seoul were sampled; these are presented in Table 1.

3.2 Procedure

3.2.1 Development of interview questions and pilot study

Child-assessment portions of national curricula for kindergarten and child care center, and related literatures were analyzed by the researcher. Seventeen interview questions were developed by the researcher based on the document analysis, and elaborated and reorganized into 14 questions through pilot study and discussions with professionals. For the pilot study, two educators, one from a kindergarten and one from a childcare center, were interviewed by the researcher. Two professionals in the area of early childhood in Korea reviewed the interview questions and criteria for analysis. The 14 questions are presented in Table 2.

3.2.2 Data collection

The researcher contacted a member of the staff in each sampled setting by phone, explained the research, sent interview questions in advance, and visited each facility and interviewed the educators who had more than 3 years of experience working in the sampled settings. One educator in each setting was interviewed because child-assessment practices were consistent within each setting. Each interview was conducted between June and November 2010, took about 40 minutes, and was audio-taped by the researcher. Examples of child assessments were gathered at the time of interviews for subsequent analysis.

3.2.3 Data analysis

Data collection and analysis were simultaneous and iterative. The analyses of interviews and documents were conducted after each taped interview was transcribed, and additional information was gathered at that time via e-mail or phone as needed (Creswell, 2008). The interview data were segmented, coded into 23 concepts with meaningful labels, and re-organized into 10 categories in three more general groups: perceptions and attitudes of educators about child assessment (purposes and uses, attitudes/problems/requests); general characteristics of child assessment (impact of the government, plans, and types of assessments administered); and implementation of child assessment (targets, content, methods and recording, participants, and interpretations and recording). The data that could not be categorized were discarded during coding (Creswell, 2008). The researcher and another analyst coded the interview data independently and discussed the responses until complete agreement was achieved. The analysis of documents gathered from sampled settings was used to confirm and clarify the interview analysis.

4. Results

4.1 Perceptions and attitudes of educators

4.1.1 Purposes and uses of assessment

To identify developmental level

Analysis of the interviews with educators showed they perceived the main purpose of child assessment to be identifying the developmental levels of children. Educators also viewed assessment as helpful in clarifying the achievement of children, especially for older ones.

"The purpose of child assessment is to identify the initial developmental status of children in order to know 'how was the developmental level of the child when he or she entered kindergarten? And how much was he or she progressed while he or she was attending the kindergarten?" (K2)

"The second purpose (of assessment) is in the part of achievement... cause what parents want to know is how much their children have achieved. We send home portfolios each semester and show them how much their children have progressed cognitively and in learning, e.g., the results of assessment. That is what we consider to be important as well." (K4)

Used for parents meeting and a child' profile

According to the interviews, assessments are most frequently used to inform parents about their children. All the educators noted that they used the results of child assessments in parent meetings. Educators in state kindergartens perceived the comprehensive profiles as important, and they mentioned that they used the assessment results in these profiles at the end of the semester or academic year.

"I also use that for parent meetings and information for a child's profile. ... I have parent meetings twice a year. I record children's profiles, and I use the information for these. This information is not yet sufficiently reflected in the planning of activities..." (K3)

Used for preparing activities at an appropriate level, for a group of children

They next mentioned that they used assessment data to prepare activities or to interact with children at an appropriate level. In this regard, most educators responded that they prepared activities according to their appropriateness for a group of children rather than for individual children.

"If I know children's developmental level, when I interact with them, I do it at their level.... When we talk at circle time as a whole-group activity, we have to do it at an appropriate level ... if I know the level of children, we have to plan activities appropriate to the level of children." (C4)

4.1.2 Attitudes, problems, and requests

Necessity for appropriate education and care

Despite the extra work involved in evaluations, educators perceived child assessment as necessary for identifying the developmental levels, characteristics, and learning progress of children.

"I think child assessment is necessary because educators pay attention to behaviors of each child, recognize the developmental level of children through observation.... It is helpful to know the relationships among children, characteristics of an entire group of children, and compare differences in children." (C1)

High ratio of children to adults and lack of assistance and time

All interviewees reported problems affecting the implementation of child assessment related to the high ratio of children to adults and the lack of assistance and time.

"It's very hard to have time for assessment because I am the only one in charge of my class and have to lead the activity. ... Children have to do their own activities by themselves in learning areas when I do assessments. ... It takes too much time to observe and record them, and collect, analyze, and summarize all the records. There is an urgent need for additional personnel for proper assessment." (K2)

Need for guidelines, tools, and common frameworks for sharing

Several educators suggested the need for specific guidelines, tools, and objective criteria for assessment. Additionally, one educator with a long history of experience in childcare mentioned the need for a common framework so that assessments can be transferred to subsequent educators or other institutions. Comprehensive profiles are completed at the end of the academic year devoted to kindergarten. However, these remain at the kindergarten level and are not transferred to primary schools or reported to local authorities.

"Children don't attend just one institution; they go to kindergarten (from child care centers) and to schools as they grow, and it doesn't work well in terms of connection. We don't have a common frame for assessment to be used in both kindergartens and child care centers. ... That's a problem. When they go to another class next year, when they go to another institution, [information about each child] is not transferred. We need a common frame of assessment for connection." (C4)

4.2 General characteristics

4.2.1 Impact of the government

More systematic since government evaluation and accreditation

Child assessment in Korean ECEC settings has become mandatory actually due to the kindergarten evaluation and childcare accreditation processes whereby evaluators check whether child assessment is implemented appropriately. The interviews conducted for this study showed that since the advent of kindergarten evaluation and child care accreditation, educators have tried to perform more systematic child assessments that include appropriate planning, implementation, and documentation, although educators in high-quality settings maintain that they had met these standards previously.

"We try to do it more systematically, try to follow the frame ... we educators seem to do it better with plans (since the initiation of child care accreditation)." (C4)

4.2.2 Plans for assessment

From planned to incidental assessment

Analysis of the interviews revealed that educators from state and independent kindergartens and high-quality independent childcare centers included child assessments in their annual plans and attempted to implement the assessments in accordance with these plans. However, educators in many independent childcare centers did not specifically arrange for child assessments in their annual curricula, but observed children incidentally and completed developmental rating scales in the absence of systematic organization. In most cases, more observations were conducted in response to children exhibiting behavioral problems or particular behaviors in addition to scheduled observation.

"... but I do simple observations of individual children throughout the year. I observe remarkable behaviors and make brief notes. ... Children who are problematic or prominent are observed and recorded more often than ordinary and middle-level children." (K2)

Unsystematic arrangement for observation

Analysis of yearly plans revealed that educators prepared overall schedules for the administration of child assessments throughout the academic year, but not specific schedules for the observation of individual children, even in settings with regular assessment plans. As a result, educators observed many children simultaneously at end of the academic term or at the end of the designated period. In some cases, certain children were observed and recorded more often than others, and some children were not observed evenly in every curriculum area because plans did not systematically arrange for the observation of each child in each area.

"We usually plan child assessment schedules; we observe each child every month and keep records. For example, I usually plan to observe four children every day. However, at the end of the month, we have many children left (to be observed)." (C6)

4.2.3 Types of Assessment

The wide range of assessment types across settings

The analysis of documents gathered revealed that a wide variety of assessment types is used in Korean ECEC settings. Most kindergartens include various types of assessments, such as those involving children's profiles, ratings scales or checklists, family or personal reports, readiness tests, performance tests, and observations in five curriculum areas (Note 2). Most childcare centers employed similar types of assessments, but omitted readiness tests and, in some cases where the childcare accreditation has not been instituted, employed checklists or rating scales instead of children's profiles. Assessments of the behavioral habits and characteristics exhibited during daily routines and rudimentary screenings for developmental or behavioral problems were also performed in some settings.

The wide range of schedules across settings

We found a wide range of schedules for assessment. The rating scales for five curriculum areas were administered twice each year or twice each semester (i.e., at the beginning of the semester or academic year and at the end of the semester or academic year) to monitor development and progress during school. According to the annual plans and interviews with educators, observations of each child were performed at intervals ranging from once per week to once per semester.

Varied frameworks and tools

The frameworks and tools used for assessment also varied depending on the settings, although educators at the same facility used the same framework and tools. The types of child-assessment employed (i.e., child profiles, reports for parents, rating scales, readiness tests, and observations), the organization of targeted content areas of assessment, and the items to be assessed within each area were structured differently in different settings. The

tools used in childcare settings differed from those used in kindergartens, including, in some cases, different measures of daily behavioral habits, social skills, and language development. Assessment tools were typically obtained from the local educational authority or a website and then modified by each facility.

4.3 Implementation

4.3.1 Targets

Individual children as targets, no group dynamics

Individual children were the targets of assessment in all settings; even when interactions among small groups of children were observed, the evaluation was focused on an individual child. Although brief evaluations of activities involving an entire group were conducted after an adult-led activity, these usually focused on the quality of the activities or the program, not on the children.

"I assess the individual child primarily. Sometimes I observe and record anecdotes about two or three children interacting together, but I separate the records and evaluate each child individually." (K3)

4.3.2 Content

Development in the curriculum areas and daily behavioral habits

The content typically assessed in both kindergartens and childcare centers concerned development and progress in the curriculum areas. Educators in all settings noted that they also assessed daily behavioral habits. In kindergartens, these behavioral habits were assessed separately from the five curriculum areas, even though they are embedded in the social domain of the national curriculum. The specific items to be assessed in the five curriculum areas in kindergartens were derived from the substantive standards in the national curriculum. In childcare centers, however, educators constructed assessment tools consisting of diverse items drawn from books, websites, and workshops, and, more recently, they have started using the assessment tools provided by the childcare accreditation organization.

"I usually observe the development of each child in five curriculum areas in order to identify his or her level. We don't focus on achievement because children are very young (1-2 years old); I also observe mainly basic behavioral habits in daily routines, such as social relationships among children, tidying up, washing hands repeatedly." (C2)

Unsystematic reviews of achievements

Educators in ECEC settings noted that they sometimes informally reviewed the achievements of children at the end of activities by asking children, the results of projects, or the knowledge attained at circle time or at plenary gathering.

"When we talked about 'frog's growth,' I didn't know whether children knew about it after this circle time. I developed a worksheet and checked whether children knew the process of a frog's growth." (K5)

Cognitive aspects for older children and affective aspects for younger children

The analysis of interview data showed that educators assessed not only the cognitive, but also the affective aspects of development and progress, such as behavioral habits during daily routines, social relationships, interests, and attitudes. They considered affective aspects to be more important than cognitive aspects for younger children and structured their assessments accordingly. However, some educators focused on cognitive aspects more than on affective aspects because they considered cognitive development to be more important in preparing children for school.

"I observe social life primarily In my case, I consider the affective aspect more (important).... When they interact with other children, how do they cope with issues? (It is more important) because they just started social life. (K4)

4.3.3 Methods and recording

Observation, even though unsystematic

All educators in both kindergartens and childcare centers reported that they assessed children through observation. Teachers mentioned that they conducted both planned and spontaneous observations, although planned observations did not systematically include all areas of curriculum and did not focus on all children equally. In addition, respondents noted that they frequently relied on spontaneous observations.

"We don't specify the areas of observation. We just observe children in various developmental areas. Anyway, all children can be observed because we try to observe three children a day." (C1)

Observation in the context of child-initiated activities

Educators primarily observed children in the context of child-initiated activities with respect to the five curriculum areas and also conducted observations during free play. However, most educators could not observe adult-led activities because no other staff member was available in most settings. Educators in settings in which assistants or two educators worked together observed not only free play, daily routines, and child-initiated activities, but also adult-led activities. Educators also used work samples or portfolios, educator-created tests of readiness for kindergarten, and personal or parental reports.

"We usually observe children during child-initiated activities in 5 curriculum areas mainly, and I observe children during the session of 'circle time' and take notes later." (K2)

Informal assessments

Informal assessments relying on observations were employed most frequently in all settings. The most common formal assessments were check-ups to evaluate physical development, personal or family reports, and teacher-created readiness or performance tests.

"We assess children through observation; all behaviors of children could be the objects of observation. We naturally do informal assessments during daily routines." (C6)

Diversity in recording methods

According to analyses of documents and interviews with educators, the most frequently used forms for recording assessment data consisted of anecdotal records of observations, rating scales or checklists on development and progress in each curriculum area, and brief notes on incidental observations. In some settings, photographs, video recordings, or portfolios were produced, although these photographs and portfolios were used as information for parents.

4.3.4 Participants

Lead educators as main participants

Child assessments in Korea were performed most frequently by the lead educator in the classroom. The second most frequent assessors were parents because information about children (e.g., strengths and weaknesses, habits, and behavioral characteristics) is gathered from parents as children enter kindergartens or childcare centers. According to the interviews, assistants in the classroom, other staff members, and student teachers were involved in child assessment in some instances.

"About 90% of the participants are probably lead teachers. If student teachers are practicing in my class, they observe children and talk about them with me; some of their observations would be the same as my observations, some of them would be what I missed, or they might see them differently from me." (K4)

4.3.5 Interpretations and recommendations

Recommendations directed at parents

The analysis of documents revealed columns for the interpretations and recommendations based on the observations contained in anecdotal records. Observed behaviors were interpreted, and brief recommendations for subsequent education and care were offered. However, most of the ratings of the five curriculum areas did not include columns for interpretations and recommendations. In addition, most educators reported that the recommendations were directed at parents, even though they included suggestions for teaching partially.

"When we consult with parents, we do [recommend], even though we don't do it [interpret and make recommendations based on our assessment] on a regular basis. What is his or her developmental level? How does he or she present his or her ideas? How is his or her relationship with friends? We do make recommendations about these to parents. We partially reflect some of this in our teaching." (K4)

Integration of assessments

Educators working in high-quality settings noted that they integrated all observational records in their evaluations of the learning and progress of each child. However, most other educators completed the summary evaluations without integrating observational records.

"Because I always watch children with the check lists in my mind, I tick off items on the check lists based mainly on my understanding of the children in everyday situations. (Do you complete the checklists referring to anecdotal observations?) No, I don't do it because the items in the checklists and the anecdotal records are not in accordance with each other... not connected to check lists, they are not helpful." (C2)

5. Discussion

The following four major issues concerning child assessment in Korean ECEC settings were extracted from the results of data analyses: the superficiality of assessments, the use of observation as the major method of assessment, the diversity of implementation procedures across settings, and the limited amount of information available about children.

5.1 The superficiality of assessments

According to the relevant literature, the most important uses of observations and other types of assessment involve providing information to educators that can be used to guide teaching and learning (Shepard, Kagan, Lynn & Wurtz, 1998; Kagan, 2003; NAEYC & NAECS/SDE, 2003; McAfee & Leong, 2007). The present study indicated that the data obtained from child assessments in Korean ECEC settings were used primarily to inform parents about their children and only partially to guide teaching and learning. This finding confirms those of previous studies (Kim, 2001; Lee, 2003) showing that the results of child assessment contributed to parent meetings and children's comprehensive profiles. Thus, assessments of children in Korean ECEC settings seem to serve superficial purposes in pursuit of superficial goals rather to contribute to the improvement of teaching and learning and to the development and implementation of curricula.

In all but the high-quality settings, observational assessments were conducted, but were not integrated into summary evaluations. This approach to implementation is not consistent with the recommendations proposed by McAfee and Leong (2007), who asserted that educators need to integrate ongoing daily observations and assessments in summary evaluations at the end of the semester or academic year.

According to the results of the present study, recommendations were offered on the basis of interpretations of data obtained from observations, which represents an improvement over the child-assessment process used in Korean ECEC settings described in previous studies (Lee & Kim, 1999; Bang, 1999) that reported that children's work samples and the outcomes of children's activities were filed without educators' comments or interpretations. However, in most settings, the recommendations were directed primarily at parents, although the conclusions and recommendations emerging from the data obtained in the assessments should have been interpreted and used to improve the education and care of children.

5.2 Observation

According to the present study, the assessment method most widely used in Korean ECEC settings was observation, which has been recommended by professionals as the most appropriate way to know and understand young children because this population cannot demonstrate knowledge and understanding by performing structured tasks or formal assessments due to their limited language ability (Wortham, 2008; Irwin & Bushnell, 1980). The results of this study support this prevailing notion and confirm previous reports that early childhood educators use informal assessment techniques (Brown & Rolfe, 2005).

However, the assessment plans were not specifically or systematically organized in terms of arranging for the observation of each child in each curriculum or learning area; as a consequence, not all children were observed equally in each area. According to the results of this study, the practices used for child assessment in Korean ECEC settings have improved over the unplanned, incidental, and casual assessments reported by previous studies (Bae, 1995; Eom, 2000; Kim, 2001; Lee, 2004). However, even more specific and systematic plans for child assessment are necessary for the efficient and useful evaluation of children because if observation is performed only casually and is limited to unsystematic viewing, the significance and importance of critical behaviors may remain undetected (Morrison, 2009).

The present study revealed that educators in most settings performed spontaneous observations and assessments when children exhibited behavioral problems and particular behaviors, irrespective of assessment schedules. This result is in accordance with the recommendation of McAfee and Leong (2007), who asserted that educators need to observe children carefully, regardless of schedule, when children exhibit behavioral problems or particular behaviors.

5.3 Diversity of implementation across settings

A wide variety of assessment types, frameworks, and tools were used in Korean ECEC environments. The differences between kindergartens and childcare centers can be attributed to the dual administration system for education and care. The methods for child assessment also varied across facilities within each type of setting. Educators in some settings performed observations frequently and supplemented these with detailed anecdotal recordings, photographs, or video recordings; educators in other settings performed observations only rarely. These differences derive from two aspects of ECEC policy in Korea: the autonomy accorded to individual settings and local authorities, and the absence of guidelines and training services for child assessment. As noted by an educator interviewed in this study, a unified framework and uniform assessment forms need to be provided to all ECEC settings, including kindergartens and childcare centers, so that information on each child can be transferred to and shared with other settings.

5.4 Limited information about children

Due to insufficient numbers of staff members, lack of knowledge about child assessment, and the absence of specific guidelines issued by governmental or local authorities, the information gathered in child assessments was limited. Children were primarily observed when they were playing freely or engaged in child-initiated activities without adult involvement, and observations of performances during adult-led activities were excluded due to the lack of assistants in most Korean ECEC settings. Information about children may be limited because educators relied on memory to record their observations after activities even when they assessed children during activities that they led themselves. Assistants are needed to observe children in various contexts, even though observing children in familiar and natural contexts while performing daily routines and playing freely is most suitable for young children (Schweinhart, 1993; Hills, 1993; Pellegrini, 2001; Cazden, 2001).

Consistent with other studies, the primary targets of assessments in Korean ECEC settings were individual children (Bowers, 2008), and no information about group dynamics was provided. Assessments of interactions within small groups and entire classes are necessary to contribute to the improvement of learning and teaching in group settings. Additionally, the lead educator in each classroom tended to serve as the main assessor in this study, even though information from multiple sources including parents, other staff members, and other service personnel should be included in assessments of young children, especially for the purpose of making critical decisions such as placement in intervention programs or transfer of a child to the next step or grade (Mindes, 2003; McAfee, et al., 2004; Beaty, 2006; McAfee & Leong, 2007).

Educators placed more emphasis on the affective than on the cognitive domain for younger children (0–4 years of age), and the reverse was true for older children (5–6 years of age). This finding supports the results of previous studies (Lee, 2002; Nah, 2010) showing that socio–emotional aspects such as physical development, safety, and adaptation to institutions were perceived as more important by educators of younger children, whereas cognitive aspects such as language and exploration (mathematics and science) were perceived as more important by educators of older children. However, educators in independent settings were under pressure from parents to focus on the cognitive development of children, even though in state-sponsored settings, which are devoid of significant parental input, educators focused on the whole child by adopting developmentally appropriate practices. Broader aspects of children's behaviors including performance outcomes, personal and social skills, attitudes, interests, and characteristics should be assessed in independent settings in the service of improving education and care.

In conclusion, child assessment in ECEC settings in South Korea has improved since kindergarten evaluations and childcare accreditation procedures were instituted by the government. In most settings, informal assessments consisting of observations of child-initiated activities in familiar and natural contexts have been implemented, together with overall planning and recording of observations and interpretation and recommendations based thereon. However, several problems remain; observations of each child are not planned systematically, observations of children in diverse contexts with multiple participants are lacking, and the results of observations are not integrated into summary evaluations in many cases but, instead, are used as information for parents rather than to guide learning and teaching.

The following recommendations for policymakers, administrators, and professionals in ECEC to improve education and care are based on the present study. First, unified frameworks, tools, recording forms, and guidelines for child assessment need to be provided. Second, governmental or local educational authorities need to provide training services for educators with respect to the systematic organization of, methods for, and meaningful uses of child assessments. Third, additional staff assistance is needed to facilitate more efficient child assessment.

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Notes

Note 1. The term "ECEC settings" refers to Korean settings for children before grade 1 of elementary school and includes both kindergartens for children 3–6 years of age and childcare centers for children from birth to 6 years of age.

Note 2. The five curriculum areas are health, social, art, language, and exploration (math and science), as designated in the national kindergarten curriculum.

Kindergarten				Childcare center				
Symbols	Age served		Type of setting	Symbols	Age served		Types of setting	
K1	4-6 old	yrs	State/annexed	C1	1-4 old	yrs	State	
К2	3-6 old	yrs	State/stand alone	C2	1-4 old	yrs	State	
K3	3-6 old	yrs	State/annexed	C3	1-4 old	yrs	State	
K4	3-6 old	yrs	Independent	C4	1-4 old	yrs	Social welfare	
K5	3-6 old	yrs	Independent	C5	1-5 old	yrs	Independent	
K6	3-6 old	yrs	Independent (high quality)	C6	1-6 old	yrs	Independent (high quality)	

Table 1. Samples

Table 2. Interview questions

Parts	Questions	Detailed information			
Perceptions &	Purposes	Reflected on planning and improving teaching, used for			
attitudes	and uses	meeting with parents, and developing child profiles.			
	Attitudes	Positive or negative attitudes of educators toward assessment.			
	Problems &	Problems in assessments and requests from teachers for			
	requests	improving assessment.			
General	Planning	The way of planning. Frequency and time of administration			
characteristics	Impact of	Mandatory. Changes since the implementation of kindergarten			
	government	evaluation and childcare accreditation			
	Types of	Diagnostic, readiness, formative, summative, screening.			
	assessment	Relationships between summative and formative assessment			
Implementation	Targets	Individual child, small groups of children, entire classes,			
		individuals with SED			
	Content	Development, progress, achievement, inappropriate			
		behaviours, cognitive/affective			
	Specific	Observations of children in activities, work samples, personal			
	method	reports, standardised tests, teacher-created tests.			
	Context	Free play, daily routines, child-initiated activities,			
		adult-initiated activities, separate times for assessment.			
	Formality	Formal or informal methods.			
	Recording	Anecdotal recordings, rating scales, checklists, videotape,			
		notes. Forms for records.			
	Participants	Educators, family members, child, and others.			
	Interpretati	Analyzing data, drawing conclusions, and making			
	on	recommendations.			