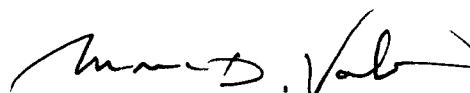MAY 2 4 2010

DepEd MEMORANDUM
No. 2 2 5 , s. 2010

RESULTS OF THE PRESCHOOL RESEARCH ENTITLED *THE VARIOUS PRESCHOOL PROGRAMS: AN ASSESSMENT ON EFFECTIVENESS*

To: Undersecretaries
Assistant Secretaries
Bureau Directors
Directors of Services, Centers and Heads of Units
Regional Directors
Schools Division/City Superintendents
Heads, Public and Private Elementary Schools

1.   The research study entitled *"The Various Preschool Programs: An Assessment on Effectiveness"* conducted by the Bureau of Elementary Education (BEE) is available in print. Interested parties may send a written request to the BEE Director, or e-mail at preschool.bee@gmail.com. Its summary of findings is found in the Enclosure.

2.   In every region, four (4) divisions were selected representing each of the four (4) income class categories, namely: highly urbanized city, 1st and 2nd, 3rd and 4th, and 5th and 6th class municipalities. In every Division, one (1) elementary school was chosen as the sample school which caters to grade one pupils coming from the different preschool programs.

3.   The Input-Process-Output (IPO) model was used in the research study to determine the effectiveness of the various programs in children's readiness for formal schooling.

4.   Dissemination of the research findings is desired and replication of the research study at the local DepEd level is encouraged.

5   Immediate dissemination of this Memorandum is desired.

MONA D. VALISNO
Secretary

Encl.: As stated
Reference: N o n e
To be indicated in the Perpetual Index under the following subjects:

PRESCHOOL EDUCATION
PROGRAMS
RESEARCH or STUDIES

Madel: Preschool Research
5-14-10

Summary of Findings

The findings of the study are summarized and presented as answers to the research questions following the outline below:

The Various Preschool Programs and inputs	• What are the various programs delivering preschool education?
	• Who are the clientele / targets of each preschool program?
	• What is the curriculum of each program?
	• What areas / domains are given focus in the different programs?
Processes in the Implementation of the Various Preschool Programs	• How does each program deliver its curriculum?
	• What are the basic requirements for each program?
	• Which of the requirements are crucial to the effectiveness of the various programs?
	• Which of the requirements are easily met / not met by the programs?
Performance Output of the Various Preschool Programs	• What is the SReA performance (by domain) of children coming from the different preschool programs?
	• What is the performance trend of pupils based on SReA results from SY 2005-06 to SY 2007-08
	• Are the SReA results predictive of student performance in the succeeding grades?
Other Factors Affecting Preschool Performance	• What are the factors that facilitate or hinder development / progress of children?
	• What factors are predictive of pupil high / low performance?

What are the various programs delivering preschool education?

Programs which deliver preschool education as covered by the study are those in public schools which are being supervised by the DepEd. These are those under the Social Reform Agenda (SRA) Divisions, the Preschool Service Contracting Scheme, those sponsored-classes by the Parents, Teachers and Community Association (PTCA), and the Local Government Units (LGU); the Private Preschools and the DayCare Centers (DCC). Table 1, shows the sample preschools involved in the study.

Table 1. Number of Sample Preschool Classes per Preschool Program by Income Class

Preschool Program	Income Class				
	HUCC	1st & 2nd	3rd & 4th	5th & 6th	TOTAL
Public	31	32	25	42	130
SRA				20	20
PSCS	1	5	3	3	12
PTCA	25	25	22	17	89
LGU	5	2		2	9
Private	14	26	20	16	76
DCC	13	26	17	38	94
TOTAL	58	84	62	96	300

A total of three hundred (300) sample preschool classes were involved in the study. One hundred thirty (130) of these are under the public preschool programs spread out in SRA Divisions(20), the Preschool Service Contracting Scheme (12), those sponsored-classes by the Parents, Teachers and Community Association (89), and the Local Government Units (9). Ninety-four (94) are under the daycare program and seventy-six (76) are under the private preschool programs.

Who are the clientele/targets of each preschool program?

In general, preschool programs provide services for children from 3 to 7 years of age. This wide range of clientele is most apparent among the day care centers. One-third (33.33%) of sample public preschools cater exclusively to 5-year olds compared to only 21.43% of private preschools and 15.25% of daycare centers. In terms of income classes, data show that there are differences in the clientele focus. Responses in HUCs and 3rd/4th class municipalities reflect the primary beneficiaries of most private preschools which are the 5-6 year-olds. This is in contrast with the clientele of the 1st/2nd class and 5th/6th class municipalities, where clientele focus are those between the ages 4-6 year-old.

What is the curriculum of each program ?

In all regions except in the NCR and in Region I where the Integrated Core Curriculum prescribed by the region is used, most public preschools in all LGU income classes use either the DepEd preschool curriculum or the curriculum was patterned after it. The DepEd preschool curriculum is described as *"interrelated/thematic to all learning areas, following the principle that no learning area is taught in isolation.."* The Integrated Core Curriculum being used in NCR and in public preschools in the highly urbanized cities in Region 1 is described to be as integrative, interactive, hands-on learning and critical thinking intensive.

Almost 20% of the private preschools across LGU income classes use the DepEd prescribed preschool curriculum. The remaining 80% use different curricula described as follows:

    a. The School of Tomorrow curriculum is a child-centered curriculum that uses self-paced progression and individualized instruction. The children set their own learning goals to be achieved.

    b. Progressivism emphasizes the use of visual aids and real objects.

    c. Integrated Core Curriculum (ICC) is one where integration and fusion is the guiding principle. ICC emphasizes the interrelationship among the different learning areas.

    d. A religion-based curriculum is a holistic and thematic curriculum augmented by religious philosophies reflecting the order or sect's mission and vision.

    e. Montessori-based curricula focus on the behavior and academic performance of the children and adhere to the philosophy that the child learns by doing.

    f. Textbook-based curricula follow strictly the competencies in the textbook prescribed by the school.

The daycare centers in most regions use either the curriculum patterned after the DepED preschool curriculum promoted through the Early Childhood Care and Development (ECCD) program or the one anchored on the Revised Manual for Day Care Workers.

What areas/domains are given focus in the different programs?

There are nine (9) identified areas/domains given focus in the different preschool programs namely; Gross Motor, Fine Motor, Receptive/Expressive Language domain, Sensory Discrimination, Concept Formation, Numeracy, Reading Readiness, Construction & Visual Motor, and Self-help/Socio-emotional domain.

The top three (3) domains given focus in most public preschools across LGU income classes are Reading Readiness (cited by 94% of the total respondents), followed by Numeracy (89%) and Gross Motor (70%). The domains least cited by the public preschools across LGU income classes are Self-help/Socio-emotional (23%), Construction and Visual Motor (38%), and Concept Formation (45%).

In private preschools, the top three (3) domains given focus are Reading Readiness (89%), Numeracy (84%), and Fine Motor (58%). The domains least cited by private preschools are Self-help/Socio-emotional (29%), Concept Formation (43%), and Construction and Visual Motor (48%).

While in most daycare centers, the top three (3) domains given focus are Reading Readiness (74%), Numeracy (69%), and Gross Motor (66%). The domains given least focus are Self-help/Socio-emotional (24%), Sensory Discrimination (33%), and Concept Formation (39%).

How does each program deliver the curriculum?

There are three (3) noted modes of delivery of the curriculum among the various preschool programs, namely; structured/formal, unstructured/informal and combination of both structured and unstructured programs. The unstructured/informal program uses blocks of time which includes meeting time, big and small group activities, story time and outdoor/indoor activities while the structured/formal program utilizes a formal class structure with focus on the different learning areas.

Public preschools generally deliver the curriculum using a combination of structured and unstructured mode across LGU income class within regions, except in Regions 5, 6, 10, 12 and NCR. In Regions 5, 10, and 12, the DepEd preschool curriculum is delivered utilizing the structured mode in all LGU income classes, but in the case of Region 6, the same DepEd preschool curriculum is delivered differently in different LGU income classes. NCR utilizes the unstructured program during the months of June to August, semi-structured from September to December and structured from January to March.

The private preschool programs are generally observed to favor the structured and combination delivery mode. While the Daycare Centers generally use the unstructured mode.

What are the basic requirements of each program?

Public preschool respondents from the PTCA, LGU, SRA considered the permanent teachers, the curriculum, and the enrolment as basic requirements in the operation of the programs. For the private preschool respondents, enrolment, ie age, funding or budget and curriculum including instructional materials are identified as basic requirements. While for daycare centers, aside from staff requirement, facilities and equipment, curriculum, enrolment and funding are identified as basic requirements by all of the respondents.

Which of the requirements are crucial to the effectiveness of the various preschool programs?

Facilities and equipment are considered crucial to the effectiveness of the program among most of the public preschools respondents (83%), while staff requirement is identified by the private preschools (76%) and day care centers (68%) respondents. Assessment is considered crucial by the least percentage of respondents among various program types.

If we are to rank the requirements considered to be crucial across preschool program types and LGU income class, research respondents nationwide considered *Staff Requirements* and *Facilities and Equipment* to be the top most crucial to the effectiveness of the preschool programs and *assessment* remains to be on the last.

Interview data reveal interesting insights on why particular requirements are considered crucial. The public and private preschool respondents identified Staff Requirements as crucial because they want to emphasize the importance of having preschool teachers with the necessary degree, training and eligibility. The respondents from the day care service on the other hand, identified the same requirement as crucial because they want to emphasize the difficulty in recruiting daycare workers with the desirable degree and eligibility primarily because of very low compensation.

Private preschool respondents cite facilities and equipment as crucial mainly because it is their edge over the public preschools and the daycare centers. Public preschool respondents cite the same requirement as crucial because in some regions the operation of preschools is subject to the availability of excess classrooms in the schools. Respondents in some regions also emphasize the need for better classrooms as it is not uncommon for public preschools to be relegated to the oldest or most-in-need-of repair classrooms in the schools.

Which of the requirements are easily met / not easily met by the programs?

The requirement that is perceived to be easily met by most respondents is the *curriculum* as indicated by public preschool (74%), private preschool (87%) and daycare (92%). While the requirement considered least easily met in all preschool program types is *funding* with public preschool (9%), private preschool (24%) and day care service (13%).

What is the SReA performance of pupils coming from the different preschool programs?

Analysis of variance points out that the various preschool programs differ from each other in terms of SReA performance. Post hoc analysis indicates however, that Private and PTCA-run preschool programs do not differ significantly in performance. The same could be said of PSCS and Private, and LGU and PSCS. The No Early Childhood Education (ECE) takers, DCC and SRA groups, on the other hand, significantly differ from one another and from all other ECE programs. If the various preschool programs were to be ranked from highest to lowest in terms of SREA performance, the following would be the sequence:

1. PTCA and Private
2. Private and PSCS
3. PSCS and LGU
4. SRA
5. DCC
6. No ECE

If we are to rank performance of the programs per region, the Private, the PTCA and the LGU groups are the three best preschool programs in terms of the number of regions in which they ranked best. The Private preschool program is in the top rank in 13 of the 17 regions. Sharing the top spot in 10 regions is the PTCA program. The LGU preschool program is also in the top rank in 9 regions. It should be noted however, that these programs also ranked last in at least one (1) region. The day care program shared the top rank in two (2) regions and occupied the lowest rank in six (6) regions. The No ECE group ranked last in 11 of the 17 regions.

What is the performance trend of pupils based on SReA results from SY 2005-06 to SY 2007-08?

An analysis of the SReA results for three years showed that the mean pre-test scores of all takers in every domain was above 50%. However, differences in performance per domain is noted. Table 3 below presents the general SReA performance per domain. Domain 1 is **Gross Motor**, domain 2 is **Fine Motor**, domain 3 is **Receptive/Expressive Language**, domain 4 is **Sensory Discrimination**, domain 5 is **Concept Formation**, domain 6 is **Numeracy**, domain 7 is **Reading Readiness**, domain 8 is **Construction** and **Visual Motor Integration** and domain 9 is **Self-help/Socio-Emotional**.

Performance Trend by Domain

The performance of pupils in the **gross motor domain** shows significant increase from the first school year to the second and stayed at the same level in the third. It is also the only domain which showed and maintained its improvement over the three years. On the contrary, performance in the **reading readiness domain** decreased significantly over the last three school years. Performance in the **receptive and expressive language domain** also decreased – slightly in the second school year and significantly in the third.

Performance in the other domains increased in the second year and decreased in the third. The lines representing the **self-help and socio-emotional domain** performance showed a great increase in the second year but also a great decrease in the third. The line that represents the **fine motor domain** on the other hand shows a small increase and decrease in the same pattern.

Figures 1 and 2 show the SReA performance of the pupils coming from the various preschool programs for the three school years under study.

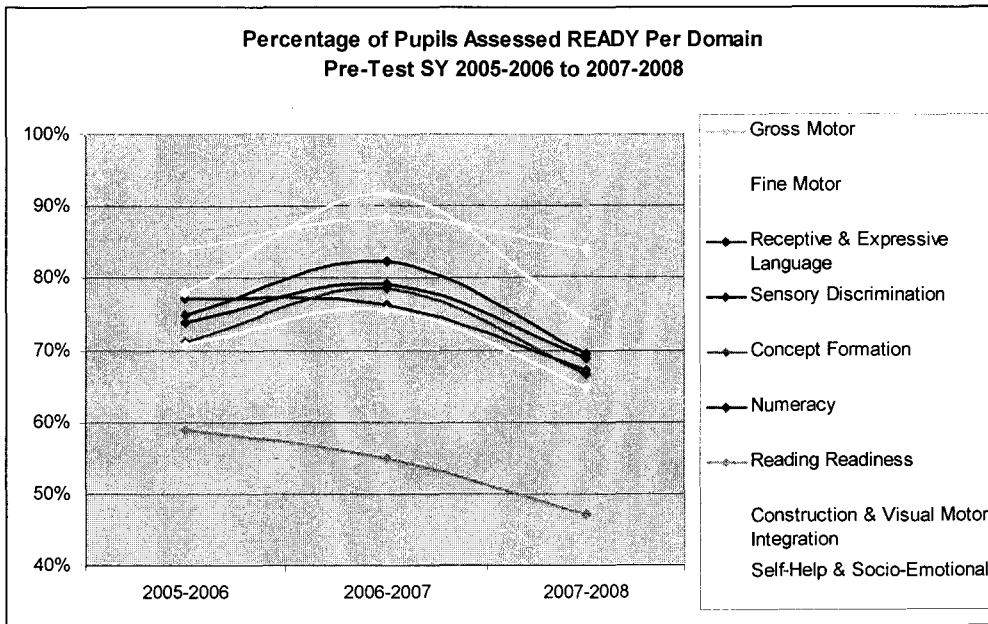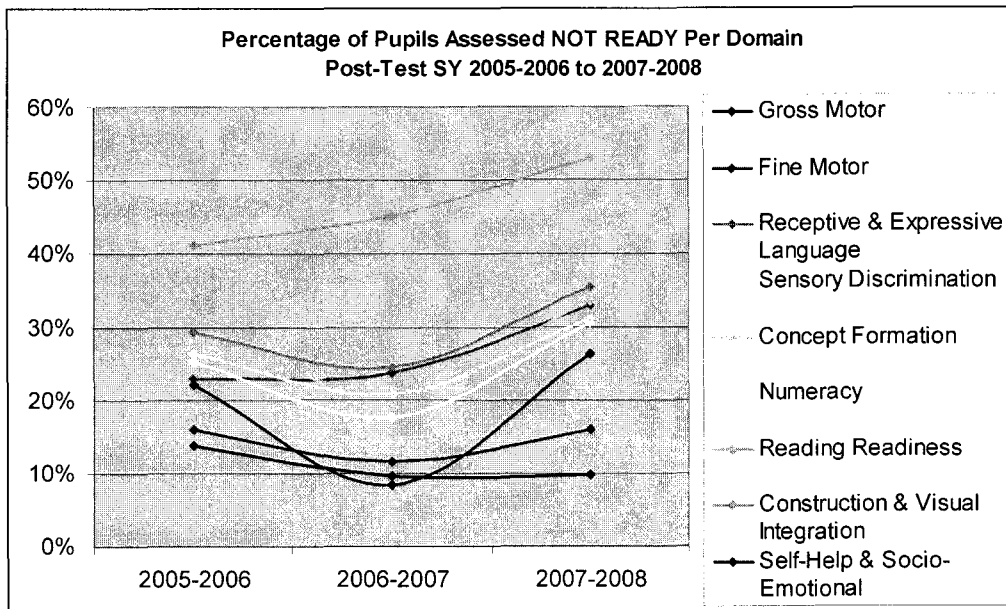**Figure 1. Trend of Percentage of Pupils Assessed READY in the SReA Pre-Test**

Percentage of Pupils Assessed READY Per Domain
Pre-Test SY 2005-2006 to 2007-2008

Legend:
- Gross Motor
- Fine Motor
- Receptive & Expressive Language
- Sensory Discrimination
- Concept Formation
- Numeracy
- Reading Readiness
- Construction & Visual Motor Integration
- Self-Help & Socio-Emotional

Figure 2. Trend of Percentage of Pupils Assessed NOT READY in the SReA Post-Test

Percentage of Pupils Assessed NOT READY Per Domain
Post-Test SY 2005-2006 to 2007-2008

Legend:
- Gross Motor
- Fine Motor
- Receptive & Expressive Language
- Sensory Discrimination
- Concept Formation
- Numeracy
- Reading Readiness
- Construction & Visual Integration
- Self-Help & Socio-Emotional

Overall Performance Trend

Table 4 below presents the Mean Pre-Test and Mean Post-Test Scores over the last three school years.

Table 4. Mean Pre-Test and Mean Post-Test Scores

from SY 2005-2006 to SY 2007-08
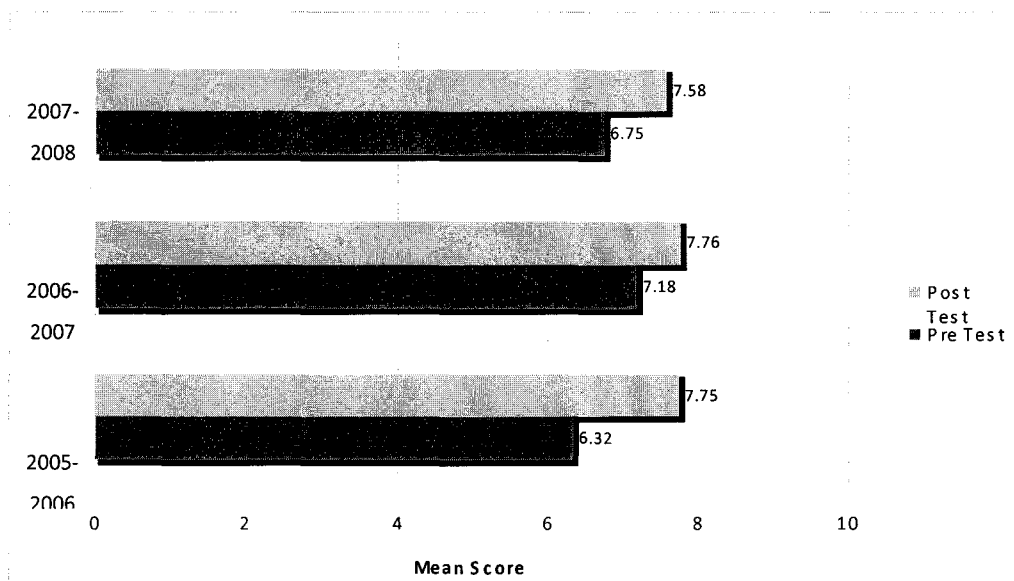
The Mean Pre-Test Scores reveal that the performance of pupils increased from first to second year but decreased again in the third year of the study. The same trend was observed in the Mean Post-Test Scores. The Mean Post-Test Scores showed a slight increase from the first and second year, but decreased very slightly in the third year of the study.

In general, the Mean Post-Test scores were higher than the Mean Pre-Test Scores, implying improvement in each year. The greatest gain was in SY 2007-2008 – almost twice as much as that of SY 2005-2006, and almost three times as much as that of SY 2006-2007. It should be noted, however, that the Pre-Test Mean Scores in SY 2007-2008 was lowest among the three school years. It has therefore much more to improve on (or gain) compared with the first two school years.

In terms of Mean Scores, the performance of the Grade One pupils in SY 2006-2007 was better than their counterparts in the other two years in both the pre-test and post-test.

Looking at the performance of pupils based on "ready" or "not ready," pre-test performance indicates that the highest percentage of pupils who were not ready (were assessed to be not ready) were those in the third school year of the study. The percentage of pupils who were not ready significantly decreased in the second school year but increased again in the third school year.

In the first school year, the 64.39% of pupils who were not ready was reduced to 45.72%, indicating an 18.67% improvement. The 60.52% of pupils who were not ready in the second school year was reduced to 38.53%, indicating a 21.99% improvement. The Post-Test performance indicates that the 74.40% of pupils who were not ready was reduced to 53.19%, returning an improvement of 21.21% in the third school year.

Are the SReA results predictive of student performance in the succeeding grades?

Analysis of the Pearson Correlation results showed that SReA results are to some extent predictive of pupils' performance in the succeeding grades. The more ready the pupils are, as assessed by the SReA, the more likely they are to perform better in Grades 1 and 2.

Correlations between SReA Post-Test Scores and grades in Mathematics 1 and 2 showed a weak but significant positive correlation, hence, SReA results predict performance in Mathematics. The higher the SReA post-test score, the higher is the Mathematics grade.

Correlations between SReA Post-test Scores and grades in English 1 and 2 showed a weak positive correlation but not significant at the 0.01 level, hence, it can still be said that SReA results predict performance in English. The higher the SReA post-test score, the higher the grade in English..

These findings hold true in all types of preschools across regions except in some municipalities in Region VI and XII.

What are the factors that facilitate/hinder the development/progress of children?

Most of the factors given by the respondents were found to be both facilitating and/or hindering in the development/progress of preschool children. The top five common factors that may facilitate or hinder were (1) socio-economic status, (2) educational attainment of parents, (3) health and nutrition status (4) support of family and (5) effective/competent school staff.

Of the top five common factors that may facilitate or hinder the progress/development of preschool children, only one was related to the teacher or school while the rest pertained to the child, his/her home and family.

What factors are predictive of high and low SReA performance?

1. Educational attainment of both parents generally implies that the higher the educational attainment of the parents, the higher the pre-test performance of the child.

2. Children with above average or normal health status have significantly higher pre-test scores than those with below normal or malnourished health status.

3. The t-test results showed that the females performed better than the males with a mean score difference of 0.3.

4. HUCCs registered the highest pre-test scores followed by 5th-6th class municipalities, 3rd-4th class municipalities, and 1st-2nd class municipalities.

Further analysis using a regression model revealed that of the variables discussed, the mothers' educational attainment has the most significant effect on the SReA performance of the child, followed by the father's educational attainment, health status, gender and lastly, the LGU income class.