Escalating Academic Demand in Kindergarten: Counterproductive Policies

Lorrie A. Shepard  
University of Colorado, Boulder  

Mary Lee Smith  
Arizona State University

Abstract

Academic demands in kindergarten and first grade are considerably higher today than 20 years ago and continue to escalate. Downward shifts in what were mid-grade expectations into the earliest grades are the result of large-scale social trends, for example, the universality of kindergartens, as well as day-in-day-out pressures felt by teachers, from accountability and demands for acceleration from middle-class parents. Narrow emphasis on isolated reading and numeracy skills is detrimental even to the children who succeed and is especially harmful to children labeled as failures. Policies such as raising the entrance age, readiness screening, and kindergarten retention are intended to solve the problem of inappropriate academic demand by removing younger or unready children. Research evidence does not support the efficacy of these policies. Rather, these practices contribute to the continued escalation of curriculum as teachers adjust their teaching to an older and more able group.

The Escalating Curriculum in Kindergarten and First Grade

The academic demands of kindergarten and first grade are considerably higher today than they were 20 years ago. For example, the introduction to this special issue of the journal notes that formal reading instruction is found in a growing number of kindergartens. In a recent survey, 18% of principals reported that it is district policy to teach reading to all kindergartners; an additional 50% of schools teach reading to kindergartners who are “ready and able”; 85% of elementary principals say that academic achievement in kindergarten has medium or high priority in their schools (Educational Research Service, 1986). We refer to this phenomenon as the escalation of curricu-
lum, or the downward shift of what were next-grade expectations into lower grades. The increasing demands of kindergarten and first grade have multiple causes. Kindergarten attendance has become more nearly universal; first-grade teachers therefore have begun to assume a common set of prerequisites. Now children are deficient if they do not know letter sounds that once were taught routinely in first grade. Likewise, "Sesame Street" has raised the norms for kindergarten learning; if children already know the alphabet, then they must be taught something more, so this argument goes. Many lament that kindergartens are no longer intended for socialization and play (Martin, 1985; Roberts, 1986). Nonetheless, the purpose of kindergarten is still said to be preparation for first grade. Although this used to mean familiarizing children with the rituals of schooling, coat racks, and listening to the teacher, many kindergarten teachers now characterize their job as preparing children for the academic rigor to come (Shepard & Smith, 1985). In turn, the escalation of academic demand is felt in preschool. Olenick (1986) reports that in a study of 100 randomly selected child-care programs in Los Angeles, one-quarter could be classified as "sit down, shut up and count to 100." In addition to large-scale social trends, the transformation of the early grades curriculum is acted out at a personal level. In our interviews with 40 kindergarten teachers in a middle-class school district (Shepard & Smith, 1985), teachers made recurring references to day-to-day pressures to raise expectations. A substantial group of teachers had established kindergarten goals in excess of district guidelines because first-grade teachers required such outcomes. "If we didn't teach these things, [letter sounds, writing, and counting to 100], they [the first-grade teachers] would not be able to go on with their curriculum because they would have to teach the readiness first and then teach the curriculum." These high kindergarten exit requirements, expected of all children (what one teacher called a "solid, solid base.") were associated with the practice of holding large numbers of unready children in kindergarten for an extra year. When the relation between high, uniform expectations and kindergarten retention was raised in joint kindergarten-first-grade teacher workshops, first-grade teachers defended their demands by relating the pressures on them to produce certain student products by the end of first grade.

Based on these interviews and participatory observations (Smith & Shepard, in press), it appears that in certain schools an "accountability culture" develops. Promotional gates at third grade or sixth grade are translated downward into fixed requirements for the end of first grade. If a first-grade teacher is visited by the principal and reprimanded for any child who is below national norms on standardized tests, this teacher in turn communicates to the kindergarten teacher an unwillingness to accept children for first grade who are not ready to read. One of the most potent messages that conveys next-grade standards among teachers is to send a child back to the preceding grade. If the first-grade teacher decides after 3 weeks that a student is "not making it" and sends the child back to kindergarten, the kindergarten teacher learns, in a professionally humiliating way, to scrutinize more closely the children who are promoted. These schools have adopted what amounts to a factory model that standardizes the curriculum for each grade; every child must measure up to the fixed and higher standards or be judged inadequate or unready.

Kindergarten teachers also described the demands imposed by parents. Many middle-class parents visit school and convey that their only criterion for judging a teacher's effectiveness is her success in advancing their child's reading accomplishments. They ignore other evidence of enriching experience and cognitive development. "My child was reading when he came to school. You haven't taught him a thing." What counts for many parents is the number of first-grade products (this is a progress, I press), and implicit factors for teacher Penn in this kindergarten satisfaction are more effective, more effective readiness. Or the former is, "We say he was on the floor" (Shes match bet expected of created a tempted to who could retention in terms of attempts to fail relief.

We see action on the social and co-differences and that certain increments prescribe that mand is temporary. stable and understood curriculums denote decisions. The final problem generalization may have scripts or reforms. Observations in efforts have j standards.
primers completed in kindergarten because this is a clearly quantifiable measure of progress, like an SAT score for a 5-year-old.

Pressures on teachers are often subtle and implicit; nonetheless, they have the ef-
fect of discouraging and rewarding teachers for teaching to the more able and older chil-
dren in each class. In interview transcripts, kindergarten teachers frequently expressed satisfaction and joy about dealing with the more mature and able children, and they regretted the trouble caused by the "un-
ready." One teacher seemed to identify with the former while describing one of the lat-
ter, "We sat in a circle reading our book while he was over there rolling around on the floor" (Shepard & Smith, 1983). The mis-
match between what could reasonably be expected of the fastest and slowest children created a dissonance that teachers at-
tempts to reduce by removing the children who could not keep pace. Screening and ret-
ention decisions are often couched in terms of reducing stress for the child but in-
fact relieve stress for the teacher as well.

We should emphasize that the escala-
tion of the early grades curriculum is a grad-
ual and continuous process. The dramatic dif-
f erences between today's kindergarten and that of 20 years ago are the result of incremental changes in response to pres-
ures that continue. The escalation of de-
mand is therefore still occurring; the "con-
temporary" kindergarten has not reached a stable and permanent plateau. Once it is
understood that the downward shift of cur-
iculum demands is likely to continue, then
it becomes important to examine the policy
decisions that feed the continued escalation.
The final part of this article focuses on in-
tended solutions that have compounded the
problem.

Some proponents of excellence in edu-
cation may believe that the foregoing de-
scriptions reflect the success of educational reforms. One interpretation of our obser-
vations is that schools and concerned par-
ents have joined together to insist on higher
standards. We have taken the position, howe-
ever, that the escalation of academic
demand in the earliest grades is hardly a
victory. Our concern is not with kindergar-
ten cognitive learning goals per se, but with
most educators' narrow, linear conceptions of what that learning should be, for ex-
ample, workbooks, drill and practice, stay-
ing in the lines. It is as if not knowing how
how to adapt language and number learning for the intellect of 5-year-olds, the easiest course is to rush faster along the track of first-grade and second-grade curricula. Alternative in-
structural approaches would allow chil-
dren to learn reading skills and the purpose
of reading in the context of language de-
velopment (Hiebert, 1986). For example, if teachers write down students' stories and then help children read their own work, reading materials are more meaning-
ful and are naturally adapted to each child's
language level. Mathematics learning would
engage children in sorting, counting, and graphing with objects gathered on a science field trip rather than drill on symbolic prob-
lems. Developmentally appropriate curricu-
la that avoid a regimen of accelerated and isolated skills are described in a recent po-
position statement by the National Associa-
tion for the Education of Young Children (NAEYC, 1988).

In an earlier statement on develop-
mentally appropriate practice, the NAEYC
(1986) asserted that "the trend toward early
academics is antithetical to what we know
about how young children learn" (p. 4).
As a public policy concern, the negative con-
sequence of inappropriate academic de-
mand has two distinct aspects. First, a nar-
row focus on literacy and numeracy is
detrimental to all children—even fast ad-
vantaged, and mature students who suc-
cceed at what the school demands. Highly
formalized activities that occur too early de-
prive children of time to learn from play,
substitute inappropriate symbolic learning for
manipulative learning, detach reading from
normal language development, stifle
natural exploration, and increase stress
(Elkind, 1987; International Reading Asso-
Policiers that Promote Escalation

Raising the Entrance Age

One proposed solution to the problem of too much demand has been to raise the age at which children are legally entitled to enter kindergarten. Over the past 30 years the trend has been in this direction. In 1958, most districts in the nation required kindergartners to be 5 years old by December 1 or January 1 (Educational Research Service, 1953). In our earlier review (Shepard & Smith, 1986), we traced the gradual moving forward of these dates, so that today the most common age cutoff is before October 1 (Education Commission of the States, 1985). In a recent Education Week article, Pavuk (1987) enumerated current state and district policy changes, all raising the age for school entrance.

Entrance-age policies have changed in response to the greater demands of schooling, irrevocably new cut-off dates are accompanied by statements about the unreadiness of the youngest children. Ironically, however, raised entrance ages have in turn contributed to escalating standards, as curricular expectations are adjusted to the newer, older students. The validity of this statement, that higher entrance ages contribute to the escalation of demand, bears close scrutiny. Those who argue for raising kindergarten entrance ages further, to August 1 or June 1, for example, have not considered that curricular expectations are not...
the school year should note that in some school districts and a few states, the entrance cutoffs are being moved back to June and July. Thus, there's no requirement that kindergartners be older and older continues. The fallacy that changing the entrance age will permanently solve the unreadiness problem is also evidenced by research on within-grade age effects, sometimes called the birthdate effect. We have reviewed the dozens of studies that document the power achievement of the youngest first graders (Shepard & Smith, 1986). We consistently found that the detriment of being youngest within a grade is slight, about 7 or 8 percentile points, and disappears by about third grade, or sooner if instruction is individualized. More important, the youngness problem is relative. The youngest children are at a disadvantage whether they enter school at 5 years of age or 6 years of age or 7 years of age with a September cutoff, at 4:9 in a district with a December entrance age, or 5:0 in a district with a September 1 cutoff. Strikingly, children who are 5:0 in September but who are not the youngest (because their school admits even younger children) have no measured risk. Thus, it is not being "just 5" itself that makes children seem unready; rather, a student's age relative to the age of classmates is more important. In reviewing the literature on birthdate effects, Greder (1975, 1980) underscores the relative nature of the youngest problem by showing the same trend in international studies. The youngest children in each norm group have fallings lamented by their teachers, but the youngest children in Sweden are the age of the oldest first graders in the United States. Teachers in Great Britain praise the accomplishments of their older pupils, who would have been the youngest and least able children in U.S. studies.

Missouri has now raised its school entrance age to July: children must be 6 by July 5 to begin kindergarten in September. Once it is understood that the apparent inabilities of the youngest children are relative rather than the result of some absolute developmental milestone, it is straightforward to predict that Missouri children with June and May birthdays will soon be found at risk.

Perhaps advocates for raising the school entrance age are satisfied that some temporary relief is achieved from unreasonable academic demand before the curriculum is adjusted to the new norm group. Rhetoric accompanying these policy changes does not admit, however, that the benefit could be short-lived. Instead, advocates speak as if the entrance age were being adjusted to correspond to an absolute developmental threshold. Furthermore, there has been no acknowledgement that raising the entrance age might contribute to the problem of increasing academic demand if teachers adjust their teaching to the capabilities of 5½- and 6-year-olds.

Raising the entrance age for kindergartners is a bad policy decision because it will not solve the problem it was intended to solve. A new youngest group will emerge and will suffer the same harm in schools with inflexible and overly demanding curricula as did the previous youngest group. Requiring that children be 6 to start school is also bad policy because it delays access to public education. The burden of this disenfranchisement falls most heavily on poor and minority children. Although moving the entrance age from October to July appears to be only a 3-month effect, it actually causes a 7-year delay for one-fourth of the population. Middle-class parents can afford to fill this year with an extra year of preschool; some poor children can attend publicly sponsored preschool and day-care programs, but these programs are by no means universal. Higher entrance ages therefore hold out of school children from low-socioeconomic backgrounds who are most in need of the opportunities of public education.

Readiness Screening
Readiness testing is an alternative practice intended to remove unready children.
with greater precision than by arbitrary age cutoffs. Although children who are 5 years 11 months old are on average more mature and academically able than children who are 5 years 0 months, at any given age there are still great individual differences. Educators have turned to tests for more specific classification information. Various measures of developmental behaviors or pre-academic skills are currently in use to identify children who are "developmentally young" and thus unready for the rigors of the school curriculum.

Screening or assessment may also be done for the purpose of instructional planning in the regular classroom or to identify handicaps requiring special services (see Meints, 1967). We do not consider those types of testing. Instead, we are concerned with tests given before kindergarten or first grade expressly to screen out unready children. Such children then face two options: they may stay out of school, in the case of unready kindergartners, or enter a 2-year program, including a pre-kindergarten grade or a developmental kindergarten.

Readiness screening devices, however, do not have sufficient reliability or validity to support special placement decisions (2-year tracks). Academically based measures such as the Metropolitan Readiness Test have respectably high correlations with later first-grade measures (r = 70-76; Nurco & McCaulley, 1976). Even so, the use of such a test to identify the one-third of age-eligible children who are unready will produce 33% false-negative decisions. That is, one-third of the children declared by the test to be unready will have been misidentified simply because the test is a fallible predictor. Tests with lower predictive validity will result in even greater rates of misidentification. We based our calculations on an unready group as large as one-third of the kindergarten population because one-third is the proportion considered to be unready by the Gesell Institute and is typical of the proportion of kindergartners assigned to transition rooms; unfortunately, if a smaller fraction were selected, the rate of misidentification would be even higher. Although this last statement seems counter-intuitive, it is a well-known statistical principle that the rate of misdiagnosis increases as the true incidence decreases (Taylor & Russell, 1939).

The Metropolitan was never intended to be used for special placement decisions. Rather, it was designed to guide instructional planning in regular classrooms, and it has acceptable validity for this purpose. In the psychometric literature, technical standards vary depending on the importance of an intended test use. Instruments with weak validity evidence may be appropriately used in exploratory research studies. Tests used for individual decisions must have greater accuracy, but tests used within the regular classroom can still tolerate a fair amount of inaccuracy. If a child is placed in the wrong reading group because of measurement error, the teacher can easily correct the mistake. When tests are used to make individual decisions of serious consequence, tests are held to the most rigorous technical standards. For example, in the context of special education placements, tests used to remove children from their regular classrooms must meet much more stringent standards for reliability and validity than diagnostic instruments designed for instructional planning (Salvia & Ysseldyke, 1981). Similarly, holding children out of school or placing them in 2-year tracks is sufficient departures from normal progress to require that tests be especially accurate.

Ironically, the Gesell tests, specifically recommended by their authors for extra-year placements, are less valid than the Metropolitan. A review of available evidence yielded predictive correlations of from .23 to .64; in the study with the most favorable data, the Gesell test still misidentified half of the children said to be at risk (Shepard & Smith, 1985). Four independent reviews of the Gesell Preschool Test (Haines, Ames, & Gillespie, 1980) and the Gesell School Readiness Test (Ilg, Ames, Hains, & Gillespie, 1964) indicated a lack of validity and a failure to differentiate children who are truly not ready from those who are merely unprepared.

In prevision of these same the wide a stratums, because it is relation we likely that if isication ac the Metropolitan adequacy of the test is more stringent than that of the special placements that none of them taken sufficiently account from within as states. Using test will also increase the public's in need of area as well as the development of skills in that area and the ability to identify a difficult and minoritization among economic states. Readiness moral or not able some substa year-olds is.
pie, 1964) in the Ninth Mental Measurements Yearbook (Bradley, 1985; Kaufman, 1985; Naglieri, 1985; Wiitem, 1985) all found that the tests lack evidence of reliability and validity and suffer from inadequate norms. We have also made the case that the Gesell tests lack discriminant validity from IQ; thus, despite the difference in names, the Gesell will produce very much the same result as screening by means of IQ tests (Shepard & Smith, 1985). The Gesell tests are used in a surprising number of school districts throughout the United States. We speculate that the Gesell is so popular because its philosophy is appealing and because educators take at face value the claim that use of the test is supported by research.

In previous reviews we have discussed these same two tests as representatives of the wide array of available readiness instruments. We selected the Metropolitan because it had the highest predictive correlation we could find; it is therefore unlikely that one could improve on the classification accuracy that we computed for the Metropolitan. We reviewed the technical adequacy of the Gesell because it is promoted as an entrance test for kindergarten and first grade. Once one understands the more stringent standards required for special placement decisions, it becomes clear that none of the available instruments is sufficiently accurate to warrant removing children from their peer group. The tests could not withstand legal challenge, for example. Using tests to hold children out of school will exacerbate the problem of denying access to public education for those who are most in need of it. Whether the readiness tests are designed to measure preacademic skills or developmental maturity, they will identify a disproportionate number of poor and minority children as unready because these measures are correlated with socioeconomic status.

Readiness placements pose an additional moral dilemma. The judgment that some substantial proportion of normal 5-year-olds is unready for school implies that
d, the rate of en higher. Alt-rems counter-
tistical prin-

er intended to nt decisions. guide instruc-
torooms, and this purpose, tre, technical n the impor-
 Instruments may be appro-
 research stud-
ditions must is used within tolerate a fair ld is placed in ause of mean-
an easily cor-
 i are used to seri-
most rigorous mple, in the i placements, m from their m much mor-
ity and valid-
s designed for

Yseldyke, children out of ear tracks are rmal progress ally accurate, s, specifically for extra-year in the Metro-
 evidence s of from 28 ust favoroubale dentified half risk (Shepard ideent reviews

faines, Ames, Gesell School ins, & Gilles-

ACADEMIC DEMAND
instructed, and the separate classroom merely formalized tailored instruction for an entire group. Such reasoning is reflected in Secretary William Bennett’s First Lessons (1986, pp. 59–60): “By whatever path her charges arrive at the schoolroom door, a first grade teacher should expect to receive in September a class of boys and girls ready to be intimately acquainted with the 3 R’s. But we may be better off building in a ‘pre-first’ grade transition year for some younger, and sending them to first grade when they are 7, rather than assuming that every child’s greatest need is for organization, cognitive learning as 5.” The secretary cited no research support for this policy conclusion, although other topics in his report are buttressed by over 50 authoritative references. In fact, empirical evidence does not corrobore the logic of kindergarten retention or pre-firsts (Gedde, 1984).

Special placements require evidence of effectiveness. This is a painful lesson learned from the experience of special education placements and tracking. Although self-contained classrooms and slow tracks are intended logically to provide a better match between instruction and student ability, good intentions are not sufficient. These practices are indefensible if the special treatments are not proven effective or have unforeseen negative side effects (see, e.g., the report of the National Research Council: Heller, Holtzman, & Messick, 1982; Slavin, 1986).

Gedde (1984) reviewed research on transition rooms and found that “transition room children either do not perform as well or at most are equal in achievement levels to transition room–eligible children placed in regular classrooms” (p. 469). More recently, Jones (1986) compared transition-room children with children recommended for transition who had chosen not to attend and found essentially no differences in subsequent achievement between the two groups. In a study conducted in Colorado (Shepard & Smith, 1987), we compared 40 extra-year children with 40 control children matched on age, sex, and readiness test scores. The control children came from schools that did not practice kindergarten retention. When both groups had completed first grade, the extra-year children showed a 1-month advantage on CTBS reading scores; on the math test and teacher ratings of academics, maturity, learner self-concept, and attention, there were no differences between the two groups. This evidence indicates that kindergarten retention does not boost achievement by giving children an extra year to grow.

There is less evidence about the emotional effects of kindergarten retention because most comparative studies report only academic outcomes. Sell (1972) found that self-concept scores of children in a readiness room declined during the year, while at-risk children in the regular classroom gained. In our study, teachers’ ratings of learner self-concept showed no difference between control and retained children. However, parents reported that extra-year children had poorer attitudes toward school (Shepard & Smith, 1987). In retrospective interviews, parents recounted both the positive and negative aspects of retention, such as better preparation for first grade, not having to struggle so much, pre–falling subsequent retention, being teased by peers, feeling like a failure, being bored (Shepard & Smith, 1985). Retained children were aware that they were not making the same progress as their age-mates even when their special classes were called by a different name. One little girl believed that she would always be expected to be in extra, in-between classes, a pre-second before second grade, a pre-third grade, and so on. Teachers consistently exaggerated benefits and denied harm of retention.

Findings from research on kindergarten retention closely parallel the conclusions from research on tracking (see Slavin, 1986): intended academic benefits are disproved, and special placement may carry a negative stigma and harm self-esteem, though the latter finding is less consistent. Especially when tests from lower overrepresent slower tra Howerton, that transition atomic inst regula “watered-d” Although immature a moved from grade, their remain. Air still be her cision it (the torn), it will able. Teach: expectation: non reading

Conclusio

Raising the ness screen are ineffect problem of in kinderga gross to public aga that alone. Epub of child that of lack of m ample, a kind access to m the needs o be planned children an ring to add mental level.

November 1988
When tests are used in selection, children from lower socioeconomic backgrounds are overrepresented in extra-year programs and slower tracks (see Abidin, Colladay, & Howerton, 1971). Gooden (1984) also found that transition room children receive less academic instruction than at-risk children in the regular classroom, consistent with "watered-down" curricula in lower tracks. Although 2-year programs do not help immature and at-risk children who are removed from the regular kindergarten or first grade, their removal may affect those who remain. Although the remaining class may still be heterogeneous (because of imprecision in the selection rules and other factors), it will be on average older and more able. Teachers will adjust their teaching and expectations so that this group defines normal readiness.

**Conclusion**

Raising the entrance age for school, readiness screening, and kindergarten retention are ineffective proposals for solving the problem of inappropriate academic demand in kindergarten and first grade. Each is a gross intervention, too unreliable at the individual student level to accomplish a good match between individual needs and instruction. Yet, on average, each proposed solution contributes to the further escalation of curriculum. Thus, these policies do harm rather than good.

The National Association for the Education of Young Children's (1986, p. 16) position statement on developmentally appropriate practice for educating children through age 8 concludes as follows: "No public school program should deny access to children of legal entry age on the basis of lack of maturational "readiness." For example, a kindergarten program that denies access to many 5-year-olds is not meeting the needs of its clients. Curriculum should be planned for the developmental levels of children and emphasize individual planning to address a wide range of developmental levels in a single classroom. It is the responsibility of the educational system to adjust to the developmental needs and levels of the children it serves; children should not be expected to adapt to an inappropriate system."

Educators who are strongly committed to raising the entrance age, screening, or kindergarten retention have said to us that they have no choice. They have no power to resist the pressures for academic escalation. They see policies to remove children as the only way to protect children who would be the victims of inappropriate curriculum. Theirs is one view, but their assessment of what is possible is contradicted by practices in other schools. We have observed preschools and schools who are resisting the trend to impose academic gates at the end of kindergarten or, rather, whose philosophies and practices are so different that they have not found it necessary to sort children into ready and unready groups.

When we compared instructional practices in schools that rarely retained children in kindergarten, we found that the two types of schools could not be reliably distinguished by curricular content or testing methods. All of the 26 schools studied had primarily academic kindergartens and used a variety of instructional methods such as phonics and language experience. What did distinguish the two types of schools was the organizational treatment of individual differences. High-retaining schools were characterized by more segregation of children expected to perform poorly; low-retaining schools had more fluid organizations (Smith & Shepard, in press). Schools that screened pupils and retained them in kindergarten tended to have rigid proficiency standards at the end of each grade, part of the accountability culture described earlier. Low-retaining schools had more cooperative arrangements between teachers of different grades. "Our school's philosophy is that you take children where you find them and move them to the extent of their abilities." Teachers in low-retaining schools seemed to have a shared understanding that the next-grade
teacher would pick up instruction with each child where the previous teacher had left off, even if this meant working on prereq-
quisite skills whose absence in another school would be considered a deficiency. These dif-
ferences in outlook were corroborated in in-
terviews with the parents of poten-
tially at-risk children in low-retaining schools. Al-
though their children would very likely have been asked to repeat kindergarten had they
attended a high-retaining school, they had
never been told that their children were un-
ready or that they were not making normal
progress. Most of these parents had never
even considered kindergarten retention for
their children and responded to our ques-
tions as if the idea were outside their realm of
experience (Shepard & Smith, 1985).

Our observations indicated that schools that
accommodated individual differences in
regular classrooms were neither richer nor
poorer than those with fixed grade-level ex-
pectations. They did not serve less diverse
populations, nor did they have appreciably
different average achievement test scores at
the end of third grade. Thus, there does seem
to be an advantage to labeling unready-chil-

inferences to a wider range of
individual differences.

Note

Submitted for publication August 1987.

References

Abdlin, R. R., Golladay, W. M., & Howerton, A.
unjustifiable, discriminatory and noxious edu-
cational policy. Journal of School Psychology,
9, 410-417.

Bell, M. (1972). A study of the readiness room pro-
gram in a small school district in suburban De-
troit, Michigan. Unpublished doctoral disser-
tation, Wayne State University.

Bennett, W. J. (1986). First lessons: A report on
elementary education in America. Washington,
DC: U.S. Department of Education.

Readiness Test. In J. V. Mitchell, Jr. (Ed.),
Ninth mental measurements yearbook (Vol. 1, pp.
609-610). Lincoln, NE: Buros Institute of
Mental Measurements.

Dowling, J. (1973). Comparative reading: Cross-
national studies of behavior and processes in
reading and writing. New York: Macmillan.

Education Commission of the States. (1985, No-
ember). State characteristics: Kindergartens. Den-
erom: Education Commission of the States.

Educational Research Service. (1958). Adminis-
tration policies for kindergartens and first grade,
circular no. 3. Arlington, VA: Educational Re-
search Service.

policy and exceptions, circular no. 3. Ar-

policy, circular no. 5. Arlington, VA: Educa-
tional Research Service.

Educational Research Service. (1986). Kinderg-
arten programs and practices in public schools.
Principal, 65, 22-23.

risk. New York: Knopf.

Greedler, G. R. (1975). Ethical and legal dilemmas
in the assessment of readiness of children for
school. In G. R. Greedler (Ed.), Ethical and
legal factors in the practice of school psychology (pp.
196-221). Herrnong, PA: State De-
partment of Education.

or artifact? Journal of Learning Disabilities, 13,
239-242.

alternative for the preschool child? Psychology in
the Schools, 21, 163-175.

Gesell Preschool Test. Fremling, NJ: Pro-
grams for Education.

Heftler, K. A., Heitzman, W. H., & Messick, S.
(Eds.). (1982). Placing children in special edu-
cation: A strategy for equity. Washington, DC:
National Academy Press.

Herbert, E. P. (1988). The role of literacy expe-
riences in early childhood programs. Ele-
mentary School Journal, 89, 161-177.

Ilg, F. L., Ames, L. B., Haines, J., & Gillespie, C.
(1964). Gesell School Readiness Test. Flem-
ington, NJ: Programs for Education.

International Reading Association. (1986). Lit-
eracy development and pre-first grade: A joint
statement of concerns about present practices

in pre-

omen

Jones, R. S

an o

in teral o

tain, C.

oward de

Kauffman, school

mental

607-66

Mental

Martin, A.

Harper

Metelli, S.

opmen testing

Naglieri, J.

Test, or

meton Lincoln

suwere

National A

Children on dev-

early c.

from 0-

4(6), 4

Nations a.

Chil-

on dev-

year-

Nis, J.

repot

Part II.

New Y

Olenick, M.

ward P

1986.
in pre-first grade reading instruction and rec-

eommendations for improvement. Childhood

Education, 63, 110-111.

Jones, R. R. (1985). The effect of a transition pro-
grame on low achieving kindergarten students when entering first grade. Unpublished doc-
toral dissertation, Northern Arizona Univer-
sity.


Kaufman, N. L. (1985). Review of Gestell Pre-
school Test. In J. V. Mitchell, Jr. (Ed.), Ninth


Metsols, S. J. (1987). Uses and abuses of develop-
mental screening and school readiness testing. Young Children, 42, 6-8, 68-73.


Norton, J. R., & McCusker, M. E. (1976). Met-

Olenick, M. (1986). Quoted in an article by Ed-


ton: Houghton Mifflin.


garten retention. Educational Leadership, 44, 79-86.


Slavin, R. (1986). Ability grouping and student achievement in elementary schools: A best ev-
idence synthesis. Baltimore: Center for Re-
search on Elementary and Middle Schools, Johns Hopkins University.

Smith, M. L., & Shepard, L. A. (in press). Kinder-
garten readiness and retention: A quali-

Taylor, H. C., & Russell, J. T. (1939). The rela-
tionship of validity coefficients to the prac-
tical effectiveness of tests in selection: Dis-

