Universal Pre-Kindergarten: State of Play

By Gene I. Maeroff

The Foundation for Child Development commissioned Mr. Maeroff, as an independent journalist, to write an article that focuses on universal pre-kindergarten. The views expressed in this article are those of the author.

INTRODUCTION

The United States has historically undervalued its youngest children. Programs for those younger than five are generally weaker, facilities less adequate and financial support from government sources less sufficient. While much is said these days about leaving no child behind, not enough is done to keep more youngsters in the race for life’s blessings. The outcomes of efforts to implement universal pre-kindergarten (UPK)—one of the most important elements in this pursuit—represent a barometer of children’s status.

It is not as if the struggle for pre-kindergarten (pre-K) education has been without progress. The public increasingly recognizes that the preschool years offer once-in-a-lifetime opportunities to place an imprint on children. What occurs—and, crucially, what does not occur—before the age of six affects a student’s entire journey along the educational spectrum. UPK advocates have carved paths in their campaign to persuade the nation that not only will all children benefit from this approach, but that many will suffer without it.

Proponents of UPK find it less necessary today to justify the essentiality of their goal. Expert testimony and studies such as one by the National Research Council that praised the merits of high-quality programs in preparing youngsters to adapt to the demands of formal school programs have nudged the nation in this direction. Findings from brain research and new insights into cognition have focused further attention on developmental needs. The brain, that great plastic vessel of expanding knowledge, is a wondrous device that undergoes exponential growth in the earliest years at a rate unparalleled at any later age.
An economic analysis shows that early learning is more efficient and productive for society as a whole than, for instance, expenditures farther down the line to improve the skills of workers who have not attended college or even allocations to hold down tuitions for those who attend college.ii

It was a *cause célèbre* last year when a corporate chief executive allegedly intervened in the admissions process of a nursery school for one of his blue-chip employees. Well-to-do Americans behave as if admission to Harvard is at stake in decisions affecting their children at very young ages. New Yorkers may occupy the vanguard in this respect, however, given that 29 percent of the nation’s adults still do not understand that what happens to children before the age of five affects their brain development.iii

### NO CHILD LEFT BEHIND?

This nation, for all too long, accepted—as almost divinely ordained—the proposition that a large portion of its children would not prosper in school. Only during recent years, within the context of education reform, has the tendency to write off children by the hundreds of thousands been seen for the cruel act that it is. Each student’s failure in school represents a lamentable denial of opportunity. Potential far exceeds achievement for the overwhelming number for whom school proves a daunting experience. Many children still board the train without tickets, bereft of the stimulation before the age of six that would provide them with adequate fare for this arduous journey. They end up abandoned at way stations, unable to complete the trip.

The federal government is now applying its influence through the No Child Left Behind Act to try to make schooling rewarding for more young people, but it is much easier not to be left behind if you don’t start behind. Reviewing data from three decades of the National Assessment of Educational Progress, the ETS Policy Information Center noted as “disturbing” the large differentials in reading scores by the fourth grade that are “already there when children enter kindergarten.” The portion of children who recognize
letters of the alphabet at the start of kindergarten is 80 percent for Asian Americans, 71 percent for whites, 59 percent for blacks, and 51 percent for Hispanics.iv

It is irrefutable that some children are better prepared for school than others. No one would expect a youngster to play Chopin’s “Etudes” without first taking piano lessons. Those with more enriching experiences, who have a sense of order and sequence and understand the routines that often are crucial to learning, enjoy an advantage.

Maryland, among the minority of states that assess readiness, found that only 52 percent of those entering kindergarten in 2002 were fully ready for what awaited them.v Many of the others come from homes with fewer books and less likelihood of having a computer, and are less apt to have gone to museums and libraries. They enter kindergarten with reading scores 60 percent lower than peers from families in the top fifth of socio-economic status. Such findings characterize a landmark study of 16,000 children that documents the great disadvantages under which some labor as they begin kindergarten.vi

Socio-economic-educational levels of households go hand-in-hand with academic achievement levels. Policymakers must identify mechanisms in addition to UPK—programs dealing with health, motivation, home life, and skills development—that help trigger productive experiences for preschool children. There is a tendency in pushing for UPK to overlook the role of other forces in shaping outcomes for children, whose development is also the product of family, neighborhoods, and economic and social circumstances. Youngsters do not suddenly descend from the planets and appear in classrooms. They have been living in homes, usually in the company of at least one biological parent.

Research on the acquisition of vocabulary illustrates the stakes in child-rearing. Observations of interactions, especially conversations, between parents and toddlers found tremendous variations among children by the age of three. The number of words to which a toddler was exposed during a typical year was 11.2 million in a professional family, 6.5 million in a working-class family, and 3.2 million in a poor family. One could
predict at that point the language skills that children would possess in the fourth or fifth grade. “Estimating the hours of intervention needed to equalize children’s early experience makes clear the enormity of the effort that would be required,” the researchers said. “And the longer the effort is put off, the less possible the change becomes.”

There are various ways to take socio-economic differences into consideration in funding. Denver Public Schools had at least one Early Childhood Education classroom in all but two of its elementary schools, although the state did not order it to do so. These pre-kindergartens for four-year-olds were imperiled when the Mile High City cut $11 million from its 2002–03 budget and earmarked an additional $30 million of reductions for 2003–04. Denver this fall will salvage the program by providing free slots only for children who qualify for free or reduced-price lunch. The school system has instituted a monthly sliding tuition of up to $185 for other youngsters.

QUALITY IN PROGRAM AND STAFF

Some presume that the pre-K label automatically confers merit and that establishing more pre-kindergartens and enrolling more children is enough. But pre-kindergartens differ almost as much as a ride in a Kia or a Rolls Royce. Early in the 1990s, the Committee for Economic Development (CED) lauded the expansion of access to pre-kindergarten, joining other organizations to urge the spread of UPK. By the end of the decade, though, CED complained that “too many of these programs do not provide the kinds of activities that ensure that children enter school ready to learn.”

Robert C. Pianta of the University of Virginia paints a picture very much at odds with what many might expect to view in early education. Teachers infrequently interact with children in small groups and individually. Kids spend ten times as much time listening as doing. High levels of routine activities and an emphasis on basic skills, with few extended discussions and insufficient attention to cognitive development, characterize these classrooms. This pattern raises questions about coherence and equity across classrooms and across grades. Activities too seldom build successively on each other. The learning environment of young children tends toward the passive, lacking the
engagement that child development experts value. Pianta discovered scant consensus among practitioners on the curriculum for young children or on how to deliver it.

Differences among teachers also attest to the unevenness of education at every level. And the situation may be worst for the youngest children, who as a group have the least qualified teachers. The American Federation of Teachers looked at teacher quality through the lens of salaries, which have some relevance to qualifications, and found an average salary across the country for early childhood teachers of $19,610 and $15,430 for early childhood workers. Meanwhile, the average kindergarten teacher in a public school received pay of $36,770.\textsuperscript{x} Fewer than half of Head Start teachers have bachelor’s degrees despite the fact that work at the pre-school level demands skill and talent at least equal to what teachers need in kindergarten and beyond. The National Research Council recommended that a prerequisite for pre-kindergarten teachers be the bachelor’s degree,\textsuperscript{xi} which eight states and the District of Columbia already require.

**UNIVERSALITY AS AN ISSUE**

Pre-kindergarten is not a new idea, having been around since 1903;\textsuperscript{xii} 42 states and the District of Columbia have provisions and some funding to include at least some youngsters in such programs. A problem, though, is uneven access. Families at the far ends of the economic spectrum are most likely to enroll children in early education. The poorest have federally funded Head Start, though it reaches barely half the eligible children; affluent families have the money to send their youngsters to private nursery schools. UPK’s challenge is to find places for the vast number of Americans in the economic middle and especially for the near poor, who don’t qualify for Head Start and can’t afford unsubsidized nursery schools.

Georgia, with the most extensive program of any state, serves about 70 percent of its four-year-olds. New York State deviated quickly from the initial aim of serving all children by limiting support to its poorest children. Funding shortfalls and shortages of facilities loom large as barriers to UPK.
New Jersey is approaching a kind of near-universality if one considers only children in the court-mandated pre-kindergartens for the state’s 30 neediest school systems. The program enrolls almost 40,000 three- and four-year-olds, a figure that includes more than 90 percent of the pre-school population in such districts as Asbury Park, Long Branch, and Orange. Moreover, any family, regardless of income, that resides in one of the 30 school districts may enroll children in the pre-K program, and it is clear that some affluent families do so.

There is the question of whether states should first conduct a concerted campaign on behalf of four-year-olds as a more readily attainable goal and a possible model of what could follow for three-year-olds. Perhaps settling initially for half the pie might be better than reaping crumbs. Another possibility would be to offer pre-kindergarten only to the neediest three-year-olds and to strive for UPK for four-year-olds. Of course, if money were as cheap as raindrops, programs offering care and education would be available for all children beginning at birth, as they should be.

One rationale for UPK involves the wish to throw a wider net than that of Head Start, which began as a weapon in the War on Poverty and never grew into the entitlement program it was supposed to become. The inclusion of middle- and upper-income groups in pre-kindergartens is dictated by politics as much as by education. UPK breaches the ghetto walls that otherwise surround a program set apart by family income, capturing a constituency with the influence to promote and protect the program. Zell Miller recognized these advantages in the 1990s when, as governor of Georgia, he promoted UPK for four-year-olds. Pre-kindergarten for everyone, in Georgia or any other state, however, increases the price tag exponentially and—ironically—can delay the proliferation of pre-kindergarten, especially during the current fiscal maelstrom.

Passage of a constitutional amendment in November calling for Florida to begin implementing UPK for the state’s four-year-olds by 2005 indicates that a well-crafted campaign can capture public support even in a severely stressed fiscal climate. Leaders of the Florida effort crossed party lines in their pursuit of backers and expanded the amendment’s appeal by seeking pre-K for all children, not just for the 26 percent of the
state’s youngest children who live in poverty. The amendment was submitted to voters after several years during which bills to provide pre-K went nowhere, failing even to receive hearings in both legislative chambers.

**DIVERSE PROVIDERS: A BLESSING OR A CURSE?**

The United States already has the rudiments of an infrastructure for UPK. The majority of three- and four-year-olds spend time in settings outside their homes at some point during the day. These places may be as diverse as private homes, houses of worship, community centers, storefronts in strip malls, corporate offices, and even child-care spaces in retirement homes. Some arrangements are simply profit-making businesses that treat children as commodities. If anything, the prevailing non-system is too diverse and offers too many variations on a theme.

So, proponents of UPK, for the most part, try to squeeze lemonade from a mixture of ingredients, some more savory than others. Public schools might be suited to take over the entire enterprise, but this prospect would evoke deafening protests from some of those with a stake in the existing structure. Certainly a move in this direction would leave no doubt about the appropriateness of public funding. Why, after all, should public schools throw open their doors to five-year-olds and not four-year-olds?

Supporters could pursue UPK entirely through public education by expanding elementary schools to include four-year-olds, and, simultaneously, adding a child-care component. It would be a wraparound service in one locale. This happens, in part, with UPK in New York State and in the District of Columbia. New York’s legislation mandated that school systems place a minimum of 10 percent of the pre-kindergarteners in community settings, outside the schools. Actually, at least one-third of New York City’s enrollees attend classes in child-care centers, where the 2.5 hours of daily classes for which the state pays are sandwiched into a day that includes care for which other sources pay. In the District of Columbia, some public schools offer their own care programs along with pre-kindergarten, and some have contracted with the Boys & Girls
Clubs, faith groups, and community centers for care outside the hours of pre-kindergarten.

There is precedent for fashioning an infrastructure from a combination of existing private and public providers. Post-secondary education in the United States, for example, was established through a private network of colleges created mostly by religious denominations endeavoring to shape the moral character of pubescent Americans. Gradually, the public sector opened institutions of higher education, and by the late 20th century, especially with access through community colleges, eight out of 10 students were in public institutions. Today, one must also factor into that system thousands of for-profit, post-secondary schools that enroll many students. So, a panoply of providers can, eventually, a system make.

California expects to take advantage of diverse providers in pursuing its vision of UPK for three- and four-year-olds. Voters approved Proposition 10, the California Children and Families Act of 1998, leading to the creation of a statewide Children and Families Commission and local, autonomous versions of the commission in each of the 58 counties. Now, relying on hundreds of millions of dollars from a 50-cents-a-pack cigarette tax instituted by the new law, local commissions are close to establishing pre-kindergarten programs that are likely to use not only public schools but also child-care centers and maybe even some child-care homes. In California, with its emphasis on child development, there is already linkage for such relationships as child-care money flows through the State Department of Education.

In Los Angeles County, with more than 80 school systems, the local commission is apt to fund pre-kindergarten programs first in the districts that have the greatest portions of needy children. Presumably, though, there will be no needs tests for families residing in the funded districts, which could establish one of the nation’s largest UPK programs in Los Angeles Unified Public Schools. Furthermore, pre-kindergarten will be but one venture the various county commissions support with the cigarette tax money as they bolster child health care and a range of family services. Reaching all of California’s three- and four-year-olds so as to make pre-kindergarten universal will ultimately depend
on additional funds from regular state allocations. Lawmakers in Sacramento introduced a bill with the hope of rolling out a pre-kindergarten program over 10 years that would build upon the classes offered in diverse settings beginning with children in the neediest districts.

**THE CHILD CARE RIDDLE**

Some advocates of UPK steadfastly seek to separate conversations about pre-kindergarten from discussions of child care. They fear that mixing the two issues will undermine the campaign for pre-kindergarten, an attitude born of the findings of surveys showing that the public considers child care a family responsibility. Meanwhile, Americans tend to see pre-kindergarten as a downward extension of formal education and more readily support it from public coffers. This view persists despite the provision of child care in combination with education in many parts of the industrialized world.

The strategy of separation does not resolve the problem of what to do with children when they are not in school. Even the fulfillment of UPK would leave many pre-kindergarteners in need of care during the hours before and after classes. As progressive as UPK efforts may be in Georgia, for instance, the state-sponsored program operates only for 6.5 hours a day and for 180 days a year, paralleling the school day and the school year.

With three-quarters of mothers of children up to the age of five in the country’s labor force, working parents usually settle for any child-care provisions that give them peace of mind. Furthermore, the line separating pre-K and child care can look exceedingly fuzzy. Some pre-kindergartens are less than educational and some child-care facilities are more than custodial.

Some districts offer models for combining education and child care. Plano, Grapevine-Colleyville, McKinney, and other districts serving the Dallas suburbs have added after-school care programs—in the buildings where pupils attend regular classes—that in some instances include homework help as well as recreation and supervision. The motivation of the schools goes beyond altruism. They charge fees and have made the
after-school hours a source of income at a time when other revenue sources are shaky. Plano, for instance, nets about a million dollars annually from its program, which it extended to 36 of the district’s 40 elementary schools this fall.

In the long run, families need both pre-kindergarten and child care. As history would have it, early education and child care have an intertwined past, two vines planted in different soils that sometimes symbiotically wrap around each other and sometimes break away to grow separately, all the while competing for space and sustenance. A prototype of the national story can be read in the dusty archives of New York City, going back to the importation of infant schools from Great Britain in 1826, the kindergartens that German immigrants brought with them in the 1840s, and the first day nursery in the United States in 1854. Political, ideological, and professional tensions beset both traditions as they periodically overlapped and were severed from each other.xiii

PART OF A LARGER MOVEMENT?

It would be beneficial to regard pre-kindergarten as part of an educational experience that begins at age three and carries through to age eight, a so-called P-3 continuum. This approach, in effect, bundles pre-kindergarten and full-day kindergarten into a progression that culminates with the conclusion of third grade. It is not too early to kick off such a dialogue even as UPK and full-day kindergarten remain dots on a distant horizon.

Neither pre-kindergarten nor full-day kindergarten, for all they offer, represents a full response to the call for a better educational start for all children. America ought to examine the whole spectrum of early education, and address the years leading to fourth grade as a unitary experience. The Education Commission of the States (ECS) offered a P-16 vision as an assemblage of building blocks from pre-kindergarten through the end of college. Within that continuum, ECS’s Kristie Kauerz called for aligning the years from pre-K through third grade, initially to assure readiness for the first grade, and, then, to produce children who can read by the end of the third grade.xiv

It takes time to build a firm foundation, to shore it up, and to ensure that it can bear the weight of learning that will be heaped upon it. Early gains should not be allowed
to dissipate, as research has shown can happen to children after Head Start. A more comprehensive approach to education can help students retain the advances they make at each level. A master plan for education in California includes 19 pages of proposals for school readiness, starting from birth and continuing through the earliest grades, so that by third grade youngsters will gain reading skills to carry them into the rest of their education.

Many obstacles, not least among them issues of turf, stand in the way of P-3. The inflexibility of school organization militates against meaningful reconfiguration. The national experience in trying to create middle schools in a system that featured junior highs offers some lessons. Even today, several decades after the onset of the movement, many buildings are middle schools in name only, failing to adjust programs to reflect the interdisciplinary approach and personalization of a true middle school.

Six states still do not even require local school districts to offer kindergarten, and, even when states mandate that districts have kindergartens, pupils must attend in only 15 states. The compulsory age for starting school remains seven years old in 18 states. The parallels between the development of kindergarten and attempts to promote pre-kindergarten are intriguing. Kindergarten began in the United States a century and a half ago in two forms—publicly funded charity kindergartens for poor children and privately operated kindergartens for children whose parents could afford the expense. Sound familiar?

If P-3 became a discrete unit, educators could also look to lengthening the school year so as to use summers to greater advantage along this continuum. Sandra Feldman, president of the American Federation of Teachers, proposed “Kindergarten-Plus,” a summer program encompassing the months leading up to kindergarten. This could be an extension of UPK. Moreover, summer programs could continue throughout the P-3 years. Summer remains a lost opportunity in the school calendar, a period during which some pupils actually regress, making it necessary to take several months each fall to get them back to the level they had reached by June.
A self-contained P-3 continuum could also offer a non-graded, inter-age program, letting pupils progress at their own pace, with less concern about grade-to-grade promotion and more emphasis on reaching a certain threshold of learning by the end of third grade. A non-graded P-3 would erect a more flexible learning ladder for children to climb at rates suited to their development. One hopes, as well, that disabled students and English-language–learners could get closer attention in a more personalized P-3 set-up.

**OBSTACLES FACING UPK**

Life is nothing but timing. The difference of a few minutes or even seconds can mean life or death, having an automobile accident or avoiding it, serendipitously encountering or not encountering a future mate. Timing has been a matter of bad luck for UPK. The sun emerged from behind the clouds in the early 2000s, just as the economy tumbled into a dark hole. By the time that UPK was invited to the dinner table, the cupboards were bare. States and cities throughout America, like Oliver in Dickensian England, are begging for “more.” But there are no second helpings these days. The largest revenue shortfalls in decades plague the states.

The mounting interest in and commitment to UPK during the 1990s culminated in the fiscal cataclysm of the early 2000s. New York State optimistically enacted its UPK statute in 1997, proposing to phase in the program with gradually increasing allocations that were to reach $500 million in 2001. Instead, funding stalled for several years at about $200 million and that amount was retained in 2003 only after a battle with a governor who proposed to eliminate UPK altogether. Nonetheless, the program now reaches about 60,000 children, more than two-thirds of them in New York City.

Look to Washington? Forget about it. More than 40 million Americans lack health care coverage. Senior citizens clamor for prescription coverage and bridle at proposals that would reduce Social Security increases. The federal government came late to funding elementary and secondary education and has never provided more than about seven to eight percent of the revenues. The country has no federal ministry of education equivalent to those elsewhere in the world. Most major changes in education must creep
across this vast land, state-by-state, requiring action 50 times over before they are truly national, and, even then, change is uneven.

The federal government, though, flexes its muscles when it wants to, as occurred in 1975 with the passage of the Education for All Handicapped Children Act and, again, with No Child Left Behind. But a massive expansion of Head Start or aid to UPK by Washington any time soon appears highly unlikely. Yet, one can discern glimmers of promise at the state level. The governor of Illinois spoke in the spring of his wish for UPK, offering only an additional $30 million, but saying, wistfully, that it could be phased in, “even though we face a $5 billion budget deficit.”xviii In Pennsylvania and Michigan, the governors offered bold plans to fund pre-kindergarten despite the fiscal pressures.

UPK’s challenge today is not unlike that facing the country during the depths of the Great Depression. When Harry Hopkins, the savvy advisor to President Franklin Delano Roosevelt, spoke to a group of farmers in his native Iowa one summer day in 1935, he described his burgeoning vision of government-sponsored jobs and social services to rescue the beleaguered country. His skeptical audience asked him how the United States could possibly put forth such a lavish plan. “This is America, the richest country in the world,” declared Hopkins. “We can afford to pay for anything we want.”xix

Foundations can act as levers, using money and influence to pry open doors that need an extra shove. Some foundations have pursued this mission avidly, helping to make UPK part of the nation’s conversation about early education. Carnegie Corporation of New York and other foundations have played a proud and seminal role, going back to the High/Scope Perry Preschool Project. Pew Charitable Trusts and the David and Lucille Packard Foundation have each committed significant portions of their education funding to UPK projects. The largesse of foundations, however, is but a trickling stream where a mighty river should surge. The kind of money required to establish UPK as a national endeavor will not gush forth until the states climb to higher financial ground.
Only a Cassandra can believe that the economy will never regain its vigor. Yet, even when happy days return—and that could take years—competition for public support will be more intense than during the last 10 or 15 years. A nation that has the date September 11 branded into its collective psyche faces perhaps a generation-long battle against terrorism that will consume increasing sums for security and defense. Thus, proponents of UPK must use bold and creative methods to maintain momentum. Some recent developments bear consideration in this respect, though almost all have downsides:

- The amendment to Florida’s constitution calling for UPK is an approach that voters in other states could pursue. Almost exactly half the states, 24, provide for initiatives and referendums, according to the Initiative & Referendum Institute of Leesburg, Virginia. Mandates authorizing action are not always funded, however.

- The Early Education for All Campaign in Massachusetts cultivated a grass-roots network in behalf of legislation for UPK and full-day kindergarten, illustrating a strategy that proponents might follow elsewhere. Business, religion, the child-care community—no sector was overlooked in 26 regional forums and presentations at 60 public meetings. Yet, a budgetary battle between the governor and the legislature, having little to do with early education, created complications.

- UPK supporters can resort to the courts, following the example in New Jersey, where it took three successive Supreme Court decisions to shape a school reform program that includes UPK and full-day kindergarten. Implementation of court decisions can take years, however.

- Denver provides a model for a funding formula that allows more advantaged families to bear a share of the cost while lower-income families get subsidies. But disagreements over definitions of need can erode support.

- Governors can lead efforts to spread pre-kindergarten in their states, as Edward Rendell in Pennsylvania, Jennifer M. Granholm in Michigan, and Rod Blagojevich in Illinois proposed this year. Such plans require additional tax revenues, and legislatures may be loath to raise taxes given today’s economic conditions.

The dark clouds of fiscal exigency fill America’s skies. Yet, never before in the nation’s history has it been so clear that targeted expenditures, aimed in this case at
young children, could do so much to brighten their future. The United States should look
to the experience of the Blair government, which since its advent in 1997, has devoted an
extra one percent of the United Kingdom’s gross domestic product to reducing child
poverty. That amount in this country would translate into $100 billion a year in additional
spending, xx an amount about equal to the recent tax cut, when fully phased in, for the
wealthiest five percent of Americans. To paraphrase Harry Hopkins, the United States
has the wealth to pay for almost any program it really desires.

___


v Mike Bowler, “52 Percent of Kindergarteners in Maryland Judged ‘Fully Ready.’” Baltimore Sun, March

vi Valerie E. Lee and David T. Burkam. “Inequality at the Starting Gate: Social Differences in Achievement

vii Betty Hart and Todd D. Risley. “The Early Catastrophe: The 30 Million Word Gap by Age 3.” American
Educator, Spring 2003.

viii “Preschool for All: Investing In a Productive and Just Society.” Committee for Economic Development,
2002, viii.

17, 2002.

x “At the Starting Line.” AFT. Bureau of Labor Statistics, Education Week

xi National Research Council.

xii Anne W. Mitchell. Working Paper Series: “Education for All Young Children: The Role of States and
the Federal Government in Promoting Prekindergarten and Kindergarten.” Foundation for Child

xiii Shirley Gatesio. “A Historical Overview of Early Childhood Education and Care in New York City.”

xiv FCD October 2002 gathering.


xvi Michelle Galley. “State Policies on Kindergarten Are All Over the Map.” Education Week, Jan. 10,
2002, p. 45


xx Isabel V. Sawhill, ed. “One Percent for the Kids: New Policies, Brighter Futures for America’s

Mr. Maeroff is a senior fellow at the Hechinger Institute on Education and the Media at Teachers College –
Columbia University. The founding director of the Institute, he was a senior fellow at the Carnegie
Foundation for the Advancement of Teaching and a national education correspondent at the New York
Times. He has written and co-written several education-related books. The most recent is “A Classroom of
One: How Online Learning Is Changing Our Schools and Colleges,” published in 2003 by Palgrave
Macmillan.