On a recent Thursday, 5-year-old Estefani Lovo Rivera took charge of a make-believe hair salon in her preschool classroom at Oakridge Elementary in Arlington County. Wielding a plastic fork as a hairbrush, dispatching customer after customer with a certain cool efficiency, she looked around the room for more classmates to entice.

"You have to come today," warned the budding stylist, a front tooth missing. "Tomorrow we're closed!"

To the untrained eye, such play appears to be nothing more than a distraction from the real letters-and-numbers work of school. But research shows that it may play an essential part in determining these children's social and emotional makeup as adults.

As Estefani and the children buzzing around her — one taking hair appointments over a telephone, another pretending to curl a client's hair with an eggbeater — spun their scenario, they were developing the roots of empathy and the capacity to take turns, negotiate with peers and understand how their behavior affects other people.

"Play is problem-solving," said Judy Apostolico-Buck, Arlington's early childhood education coordinator. "It's really critical life skills."

The debate among early childhood educators over whether precious school hours should be spent on play has simmered for years. But now it is intensifying as preschool for three- and four-year-olds, once the province of child care centers, is increasingly embraced by public school systems as a way to teach students the skills they need to be successful in kindergarten. That is especially true for poor and minority children, and those who speak English as a second language. "If we are to prevent the achievement gap and develop a cradle-to-career educational pipeline, early learning programs are going to have to be better integrated with the K–12 system," Secretary of Education Arne Duncan said Wednesday at a convention of the nation's largest early childhood organization, the National Association for the Education of Young Children.

Locally and across the nation, time for play has been increasingly squeezed out of kindergarten and first grade as schools — bent on boosting student achievement, especially among poor and minority students — have focused on literacy and math skills for children at ever-younger ages. The federal No Child Left Behind act requires schools to ensure that all children are proficient in math, reading and writing by 2014. That proficiency is measured on standardized tests, but the far-reaching effects of play don't show up in answers to multiple-choice questions. They show up in life. Research has
shown that by age 23, people who attended play-based preschools as children were eight times less likely to need treatment for emotional disturbances than those who went to preschools where direct instruction prevailed. Graduates of the play-based preschools were three times less likely to be arrested for committing a felony. "It's not that direct instruction caused delinquency," said Larry Schweinhart, director of the High/Scope Research Foundation in Ypsilanti, Mich., which conducted the study and developed the play-based curriculum that Arlington uses in all 31 of its preschool classes for low-income children. "But it wasn't preventing it. It wasn't giving kids an opportunity to develop socially."

A more recent study showed that certain kinds of fantasy play, in which students plan the roles they're going to fill, have a measurable impact on children's ability to control their impulses. That skill is more closely correlated to academic success in kindergarten than intelligence is. Nevertheless, in kindergarten, children are now playing for less than 30 minutes a day, according to a study of full-day kindergartens in New York City and Los Angeles published last spring by the Alliance for Childhood, a College Park, Md.-based nonprofit. They spend four to six times more time on literacy, math and test-taking than they do on play. More than 1.1 million children were enrolled in 38 state-funded preschool programs last year, according to the National Institute for Early Education Research, and that number continues to climb. Alaska and Rhode Island introduced pilot preschool programs this year, and despite the recession, state funding for pre-kindergarten classes rose this year by 1 percent nationwide, according to an October report by the Pew Center on the States. Virginia, Maryland and the District's public schools all put more money into preschool this fiscal year. Play advocates welcome the dollars but worry that politicians eager for tangible returns on taxpayers' investment in early education — and school officials eager for better test scores — will push for more direct instruction, an efficient way to get short-term gains in literacy and math.

"Teaching numbers, teaching letters, teaching facts through direct instruction will get you better test scores," said Steven Barnett, the director of the National Institute for Early Education Research at Rutgers University. "There's no question about it, because you're basically teaching the items on the test."

There's no such incentive, advocates argue, to give kids time to build with blocks or play dress-up. The choice between measurably boosting math and language skills and making time for play is particularly an issue in jurisdictions that offer half-day preschool, said Barbara Bowman, who has advised Duncan on early education issues and is a founder of the Erikson Institute in Chicago, a graduate school in child development.

"Ending the achievement gap is one of the high priorities and that means giving low-income kids the same skills and knowledge that middle-class kids have," said Bowman. "In a short school day, sometimes direct instruction is a better device."

In Arlington, where preschool classes are full-day, an hour or more of play is balanced by 45 minutes of teaching literacy skills directly. Playtime doubles as a time to build vocabulary.

At the Oakridge Elementary hair salon, teacher Kate Durbin, who had been watching, introduced two new words when she asked one student whether he was "curling" his classmate's hair and another if she could make an "appointment" for later in the day.

Children need to both play and learn the alphabet at school, Durbin said, because they might not learn their letters anywhere else. "The benefit of a full-day program is that we can do all those things," she said.

The hybrid model appears to be working—at least as far as tests can detect. Through fifth grade, low-income county students who attended preschool consistently scored higher on state SOL tests than low-income students who didn't attend preschool, according to an analysis commissioned by the school system in 2008.
Highlights: Erikson Institute