

Fordham News



Toy Story: Catching Up with Howard Wexler, Inventor of the Classic Game Connect 4

BY RYAN STELLABOTTE ON JULY 11, 2018

FEATURES, FORDHAM MAGAZINE

In the summer of 1969, Howard Wexler called a time-out. He was in his early 30s, living in a high-rise Manhattan apartment near Lincoln Center. He'd been a social worker, a teacher, and a school psychologist in New York City and on Long Island for nearly a decade. And for the past year, he'd been taking courses in a doctoral program at Fordham's Graduate School of Education. But he was dissatisfied at work and unsure of his next move.

Above: Howard Wexler's home studio features some of the 120-plus toys and games he has invented and licensed during the past five decades. (Photo by Bud Glick)

He had come a long way from his early days as a self-described "street kid" and "shop student" on the Lower East Side, where he struggled with learning difficulties and unsympathetic teachers. "I thought I was just dumb," he says. But he persevered. He made the Seward Park High School basketball team, which boosted his confidence. And he started to hang out with "a bunch of smart kids who were on their way to college. I made up my mind I wanted to stay with them, compete with them."

He did, and it was in a psychology course in a City College evening program that he first learned of the mysterious condition that made spelling and reading so difficult for him. He began to understand that his struggles had nothing to do with the quality of his mind.

“There it was in the textbook,” he says, “and I thought, jeez, if that’s the definition of dyslexia, that’s me.”

In his career as a teacher and school psychologist, he sought to give students the kind of support he wished he had received as a kid. “I loved the children,” he wrote recently in a privately published memoir, “but disliked many of the teachers and administrators. Worst of all were the politics,” which made him want to leave his job in the school system. But what to do? Where else would he find worthwhile work?

“When you feel you are worthy of love you are invincible.”

Wexler wasn’t sure where he would go next, but he felt a Ph.D. would help him get there. So he continued working on his dissertation at Fordham, a study to determine the effectiveness of “a particular method of positive reinforcement” on students at nearby Haaren High School, where he was teaching.

“My theory was that if you love them, they’re going to do better in school,” he says. “They were all delinquent-type kids—didn’t come to school, their grades were poor. I would write them what was in essence a love note every day they came to school. Maybe I wrote a joke or some words of encouragement. Would their grades improve because of this encouragement that I was giving them? It turned out very positive.”

While he was completing his dissertation for a doctorate in educational psychology, which he earned in 1971, Wexler happened to read an article about the psychology that goes into making toys.

Something clicked. “I thought, I’ve always loved toys, and as a kid, I was always inquisitive about how things work. I would come up with different ways of doing things,” he says, citing model airplane kits, for example. Instead of following the instructions, which he found difficult to read, he would use the pieces of balsa wood to build a house or boat or some other contraption that pleased him.

“So I set out during the summer to see if I could invent,” he says. He conceived and built about a dozen working toys and prototypes for games—some educational, some just fun—and licensed three of them to Pressman Toys. He felt he’d found a new calling, though it didn’t carry with it the job security he had as a school psychologist.

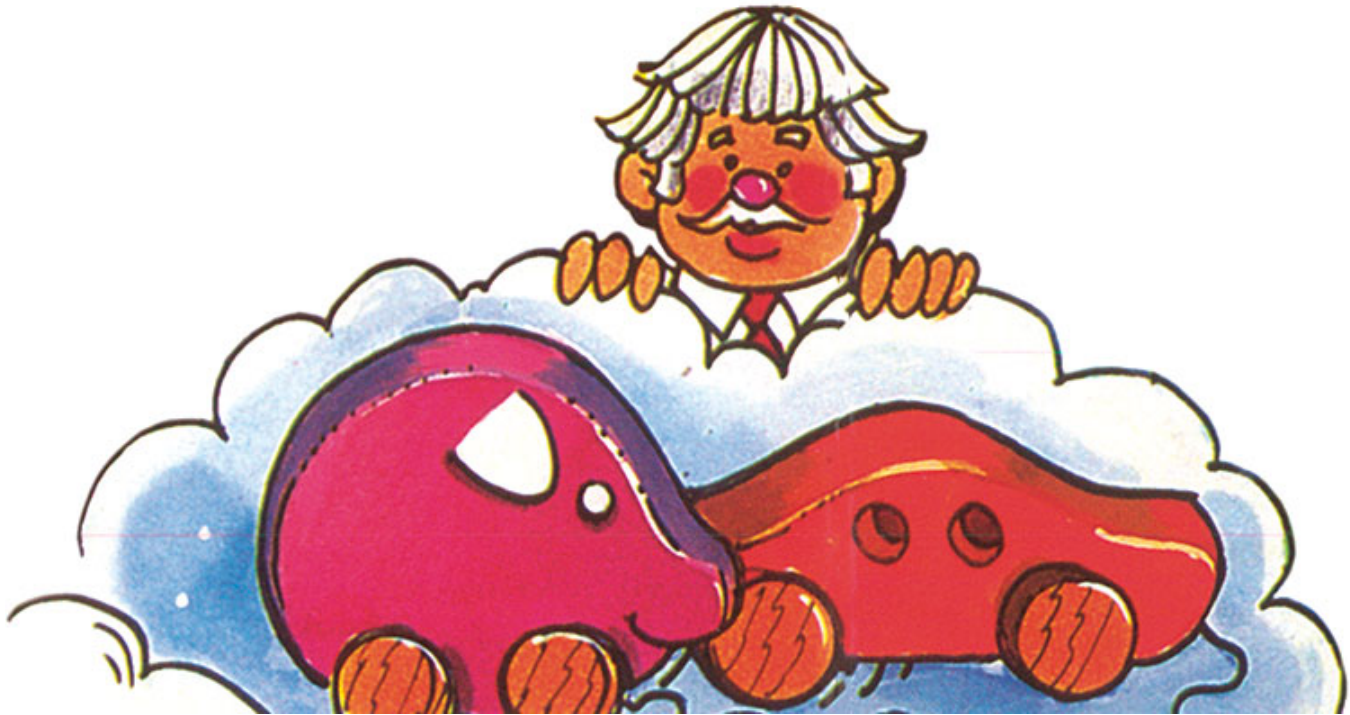
“Everybody said to me, ‘Howard, if you want to invent, why not open up an office as a psychologist and invent on the side.’ I said, ‘No. If you really want to do something, you’ve got to do it with a full heart or else you’re never going to be successful.’”

He worked at Pressman Toys for a few months, during which time he went to his first Toy Fair, the annual industry event in New York City, and realized he needed to be at a bigger company. “I was alone” on Pressman’s creative team, he says, “and I wasn’t really learning anything.” So he pitched himself to Hasbro, leveraging his Ph.D. in educational psychology to land a job as a product manager in the company’s marketing department.

“When you think about it, that’s the time to do it.”

A 1971 Hasbro newsletter touted him as “the only child psychologist in the country associated with a major toy manufacturer.” During a two-year stint with the company, he invented and helped market a line of toys endorsed by Bob Keeshan, UGE ‘51, the creator and host of the long-running CBS children’s show *Captain Kangaroo*.

“The thing that was interesting about Bob Keeshan,” Wexler says, is that “he rarely endorsed toys, because he felt it was a child’s imagination that was important. He hated automatic-running toys. I convinced him to license an old-fashioned wooden toy line I had created.”



Captain Kangaroo Wooden Toys (Illustration by Adele Schnapp courtesy of Howard Wexler)

Wexler has posted a 10-minute video on his website showing the two Fordham grads (Keeshan had attended Fordham’s Undergraduate School of Education) describing the new product line and the process of working together.

It’s clear in the video that Keeshan and Wexler were simpatico. In character as Captain Kangaroo, wearing his signature red blazer with white piping, Keeshan introduces Wexler as an educational psychologist who brings “tremendous formal background” and “a great understanding and a great compassion to his work,” adding that he “not only understands young people but he really feels very strongly about what should be given to young people to play with.”

That concern is evident in Wexler’s other major project for Hasbro at the time, the groundbreaking Your Baby Growing to Meet the World, which he describes as the first comprehensive line of developmental toys for infants, and his proudest achievement.

“I had the idea to take two years of a baby’s life and divide it. The first three months, there were certain skills that the baby had, so I would invent toys based on the most current research findings to enhance those skills. Then, for the next three-month stage, I would invent toys, and so on,” he says. “I wrote a pamphlet that went inside each toy and that told about the stage of the baby’s development and how to use the toy.”

Congress had recently passed the Child Protection and Toy Safety Act, and Wexler was a stickler for safety in the construction of the toys. “I got the manufacturing team completely nuts at Hasbro because I was so safety conscious,” he says, citing Terry Teddy as an example. “Up until that time, teddy bears had little pieces of foam

inside. I was concerned that if they ripped open, the baby would swallow one of those pieces," he says. "This bear has one complete block of foam inside."



Terry Teddy (center) was one of a series of developmental toys for infants that Wexler created for Hasbro during the early 1970s. (Illustration by Adele Schnapp courtesy of Howard Wexler)

While creating the Your Baby line, he had an insight that in a way prefigured how he'd eventually come to invent one of the world's most enduringly popular games. It had to do with perspective.

"If you went into a nursery in 1970, you'd see a mobile above the baby's crib—a flat picture of Dumbo or Pinocchio or whoever you want—and everybody says, 'Oh, what a lovely mobile.' But the baby looks up and sees the edge of a piece of cardboard," he says. "I changed that [by designing three-dimensional mobiles]. To me it was just common sense."

"Thinking can be fun ... and it's good for you."

After two years at Hasbro, Wexler wanted to focus more on the process of inventing, so he struck out on his own, initially focusing on games. "Lots of people who become independent inventors come from a background of either drafting or engineering. I didn't have any of that," he says. But he had plenty of ideas—and moxie.

"I made up my mind that I wanted to invent the best strategy game ever. Weeks went by, nothing happened," he says, explaining that the process of inventing is not about the proverbial light bulb going off but about hard work, trial and error. "Then one day I thought, all games play on a horizontal plane. What if I invented a game that played on a vertical plane? As soon as I made that connection, Connect 4 was born."

He used a series of transparent tubes and two sets of ping pong balls to develop the idea, and eventually settled on what he calls "the magic number," a seven-by-six grid, with each player taking turns in an attempt to connect four checkers in a row—either vertically, horizontally, or diagonally—while preventing their opponent from doing so.



The original packaging for Connect Four, the “vertical checkers game,” signed by the game’s inventor, Howard Wexler. The name of the game was later changed to Connect 4. (Courtesy of Howard Wexler)

“The thing that intrigues me to this day, not being a mathematician, is that you would think a grid that has 42 spaces would stalemate often, but it doesn’t,” he says. “And that was my greatest fear. If it stalemated, I didn’t have a game, because you won’t want to play something and then say, ‘Oh, jeez, there’s no winner.’ How are you going to play a game that has no winner?”

He invented the game in 1973, and it hit the market the following year but didn’t take off until 1978 or so, he says. And initially it was a bit of a tough sell.

“I showed it to Dick Harris from Milton Bradley, and he passed,” Wexler recalls. “At least nine other companies passed on Connect 4. Dick Harris came by again, and I said, ‘Here’s Connect 4,’ and he says, ‘Howard, you showed me the damn thing before.’ I said, ‘You’re missing out on something here. It’s a good game.’ And he goes, ‘You know, you’re annoying me so much that since we make checkers, I’m going to take it and see if they’ll make it.’”

“They put it in the back of their catalog as a ‘vertical checkers game,’” Wexler says, and “somehow, by word of mouth, people started to play the game and liked it. When [Milton Bradley] started advertising it on television, it really took off.”

“To be successful you have to be ready for success.”

Indeed, the late 1970s TV commercial helped make the game a pop-cultural icon. In it, a girl drops the winning piece and declares victory. “Where?” asks her brother. “Here, diagonally,” she shows him. Deflated, he concedes, “Pret-ty sneaky, sis,” then the checkers crash to the table.

Connect 4 continues to sell millions of units each year for Hasbro, which acquired Milton Bradley in 1984. Some things have changed—the color of the discs and grid, for example, and the spelling of the name (it was originally Connect Four). The game has also been produced in various sizes and formats, including electronic versions, but Wexler’s favorite remains the original.

“When I invented it, I did it for ages 7 and up,” he says. But he came to realize that the release mechanism appeals to younger kids, most of whom don’t think much about strategy. “They just enjoy putting down the checkers. It sounds nice and it pops a little, and at the end, they release all these checkers. In education, we would call that ‘fill and spill,’ the way little babies play, building up blocks and knocking them down. They love that.”

And it’s not just for kids, of course. In the late 1990s, Connect 4 was popular in the New York Yankees clubhouse, with both Tino Martinez and Scott Brosius each claiming to be the best at it. “You think this is a kids’ game?” Brosius told Yankees announcer Michael Kay, FCRH ’82. “Maybe for kids, but for us, this is the real thing.”

Wexler says people have told him stories about doctors advising elderly patients to play the game to stay sharp. “Now I have a game that begins at 3 years old and ends at 90-plus,” he says. “It’s an inventor’s dream.”

Wexler turned 80 last fall. He’s essentially retired after inventing and licensing more than 120 toys and games during the past five decades. He occasionally speaks to young people, sharing the story of his struggles with dyslexia and how he overcomes them. And his partner, Nancee Hwa, helped him build a website documenting his career and also designed his two self-published books, *Welcome to My Life*, a memoir, and *Welcome to My Mind*, a collection of his poetry, drawings, and epigrams (including the ones used as subheadings in this story). He’s also been working with his sons—Jonathan, an actor, and David, a filmmaker.

“He’s an endlessly creative person to this day,” David says. “We refocused him at 80 to get back in business because he has such a wealth of knowledge, and it’s really fun to be in the studio with him.”

Working with a Brooklyn-based company named Dovetail, David has brought six of his father’s earliest strategy games—including Switch, 3-Up, and Advance—back on the market. They were released last fall in coffee-table editions, with high-quality game pieces.

“Where you are is where life is.”

For 45 years now, Wexler has been extolling the virtues of his most popular invention, but perhaps the one virtue he values above all is the game’s ability to bring people together.

“We lose something when we don’t allow kids to socialize,” he once told an interviewer. “When they played these board games, they really looked right across at their opponent and they had a personal feeling about them.”



Howard Wexler in his home studio, March 2018 (Photo by Bud Glick)

Three years ago, he and Hwa came across a story in *The New York Times* about a young man named Thomas C. Knox who had been trying to bring some of that spirit to his fellow New Yorkers. He put a small table on a busy subway platform, set a flower in an empty Coca-Cola bottle on top of the table, and invited strangers to join him in conversation while playing a game of Connect 4. He called it “Date While You Wait.”

“You would think that it’s a date that he’s after. It’s not,” Wexler says. “It just means, let’s talk about you, whatever’s on your mind. And let’s play Connect 4, but we could talk while we’re playing.” After reading the article, Wexler joined Knox for a game and conversation in the 34th Street subway station. “It was great,” Knox told the Huffington Post, “because if it wasn’t for him [and Connect 4], I don’t think ‘Date While You Wait’ would be as cool.”

Bonnie Ballif-Spanvill, Ph.D., who was Wexler’s mentor and dissertation adviser at Fordham nearly 50 years ago, says “the core of Howard was always so concerned about people caring for each other.” She remains impressed by his doctoral work.

“He really understood that just a little note from a teacher might make a huge difference in a student’s life, especially students who had come from backgrounds where they weren’t particularly valued or appreciated,” says Ballif-Spanvill, who taught at Fordham for more than 25 years and is now professor emerita of psychology at Brigham Young University. “And not only those students, but I think every student in America right now is in need of more appreciation and concern.”

Looking back on his career, Wexler says that as much as he enjoyed working with children as an educator and a school psychologist, he chose the right profession—and he’ll always remain a child at heart. “I don’t think you can invent toys and games without that spirit,” he says.

