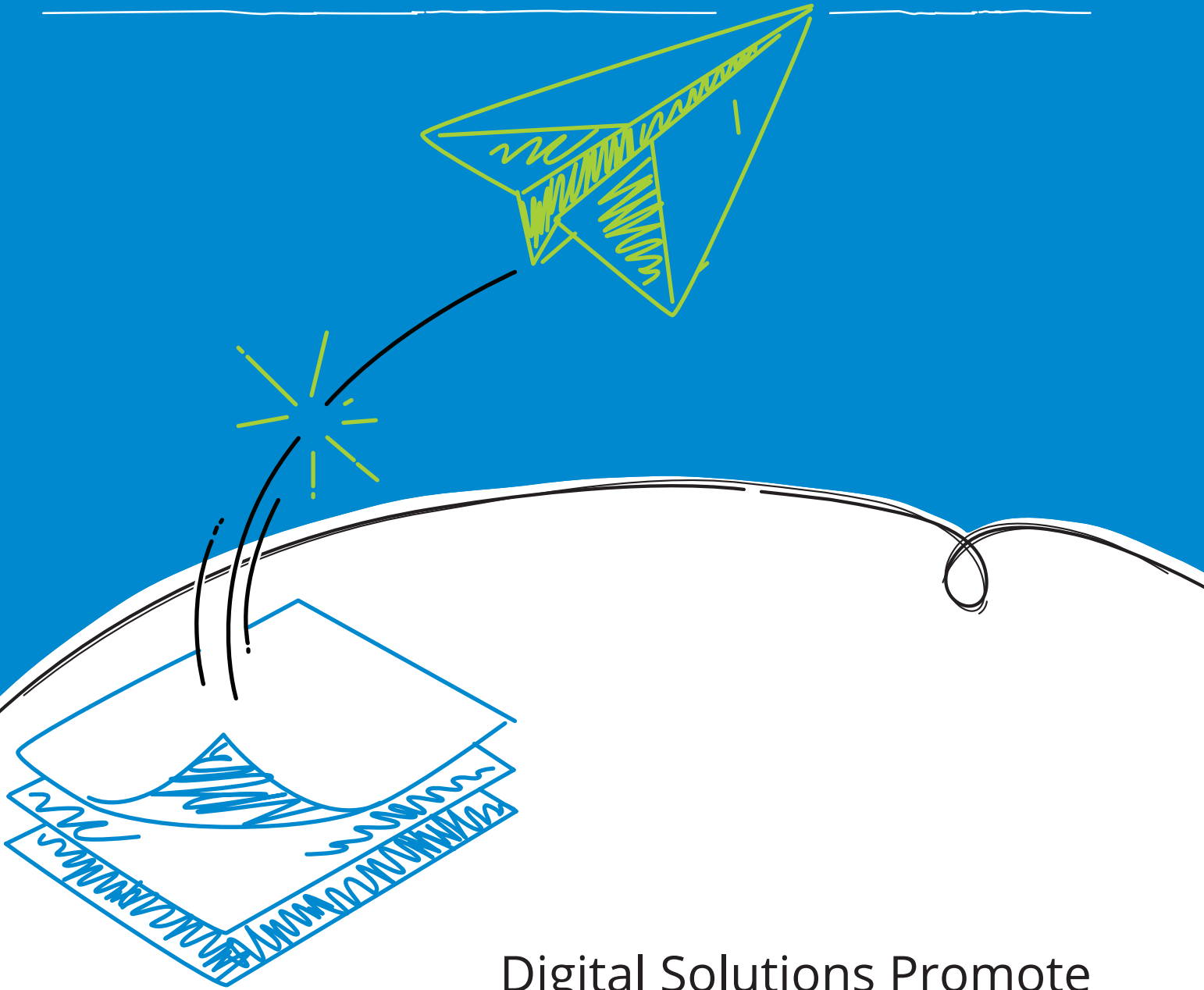
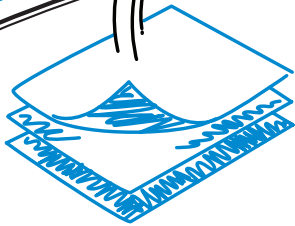

White Paper



Digital Solutions Promote Pre-K Literacy Development and School Readiness



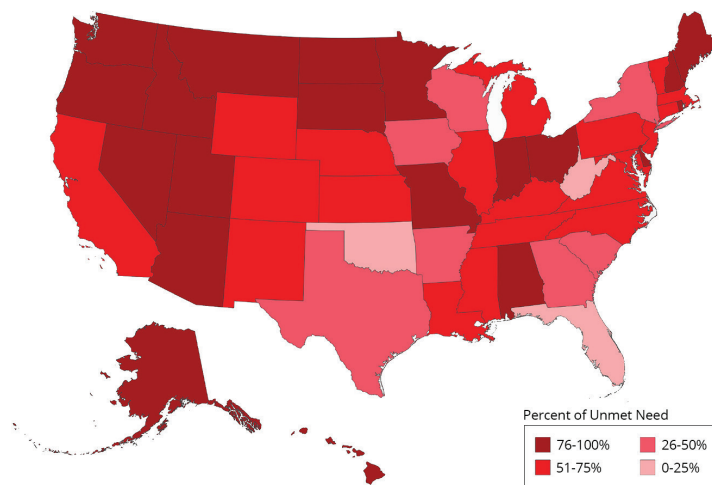
A Passion for Libraries

Gale, a part of Cengage Learning, believes the library is the heart of its community, driving meaningful and measurable outcomes for individual users and groups. Gale is a partner to libraries and businesses looking to deliver educational content, tools and services to support entrepreneurship, encourage self-directed learning, aid in research and instruction, and provide enlightening experiences. Gale has been a leading provider of research and education resources to libraries for 60 years and is committed to supporting the continued innovation and evolution of libraries and their users.

Introduction

Many research studies have shown the positive effects of quality early childhood education on future academic development, educational attainment, and earnings later in life.¹ Yet, 59% of preschool-aged children across the nation—approximately 2.5 million—are not enrolled in publicly funded preschool programs through state preschool, Head Start, and special education preschool services (Figure 1).² Although as many as 30% of three- and four-year olds are fortunate to attend private preschools and child care centers,³ hundreds of thousands of children have no access to the programs that can help them build literacy skills and prepare them for kindergarten and beyond. The U.S. Department of Education’s 2015 report, “A Matter of Equity: Preschool in America,” notes that “while both states and the federal government invest in early learning, these efforts have fallen short of what is needed to ensure that all children can access a high-quality early education that will prepare them for success.”

Figure 1. High Unmet Need for Early Learning in the U.S. Six in ten preschool-aged children in the U.S. are not enrolled in publicly funded preschool programs. Twenty states have an unmet need of 76–100% (dark red); 20 have an unmet need of 51–75% (red).



Source: National Institute for Early Education Research (2013). *The State of Preschool 2013*. *State Preschool Yearbook*.



Children who attend high-quality preschool programs are less likely to utilize special education services or be retained in their grade, and are more likely to graduate from high school, go on to college, and succeed in their careers than those who have not attended high-quality preschool programs.

These realities—the importance of early education juxtaposed with gaps in access to quality programs—underscore the value of libraries in providing resources that serve the pre-K audience. In support of public libraries' learning initiatives, Gale partnered with Miss Humblebee LLC to provide a new digital early literacy product—*Miss Humblebee's Academy*—that assists libraries' youngest learners in building foundational literacy skills. Digital resources are increasingly prevalent and in demand, and 62% of libraries report that they are the only provider of free computer and Internet access in their community.⁴

"Libraries are evolving into institutions of learning and service that have a direct impact on the lives of community members," said Paul Gazzolo, Gale senior vice president and general manager. "By offering a product like *Miss Humblebee's Academy*, libraries can play a pivotal role in helping children establish strong literacy skills and preparing them for kindergarten and beyond." *Miss Humblebee's Academy* also includes assessment tools that help libraries measure their impact on early literacy development in their communities.

Research Shows the Value of Pre-K

Advances in neuroscience and research have helped to demonstrate the benefits of quality early education for young children,⁵ and that the early years are a critical period in children's learning and development, providing the necessary foundation for more advanced skills. Various measures administered at the preschool and kindergarten levels reveal that patterns of preschool learning are closely linked with reading achievement in the primary grades.⁶ Young children who demonstrate oral language proficiency and early abilities in processing print do better in learning to read in first, second, and third grades.⁷ This means that learning achieved during these early years is likely to be sustained throughout the primary-school years and is an important basis for successful early performance in school.⁸

Research also supports the concept that the benefits of preschool programs are long-lasting. Children who attend high-quality preschool programs are less likely to utilize special education services or be retained in their grade, and are more likely to graduate from high school, go on to college, and succeed in their careers than those who have not attended high-quality preschool programs.⁹ Research also suggests that expanding early learning—including high-quality preschool—provides society with a return on investment of \$8.60 for every \$1 spent. About half of the return on investment originates from increased earnings for children when they grow up.¹⁰

Nationwide Investment in Preschool Lags

Since 2003, states have increased their investment in preschool by more than 200 percent.¹¹ In addition, early childhood education is front and center in 2015, as Congress seeks to reauthorize the Elementary and Secondary Education Act (ESEA). U.S. Secretary of Education Arne Duncan recently said, "I believe that every single child deserves the opportunity for a strong start in life through high-quality preschool, and expanding those opportunities must be part of ESEA."



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Arne Duncan
U.S. Secretary of Education

Despite the concerns about promoting quality pre-K education, funding per child is at near-historic lows. The National Institute for Early Education Research (NIEER) 2013 State Preschool Yearbook found that in 2012–2013, only 15 states could be verified as providing enough per-child funding to meet all 10 benchmarks for quality standards. Given that finding, it seems likely that most children served by state pre-K attend programs where funding per child is inadequate to provide a quality education.

Digital Pre-K Resources Help to Fill a Void

Digital resources such as *Miss Humblebee’s Academy* can help to fill the vacuum for children who don’t have access to traditional preschool programs, who attend programs that do not offer literacy training, or who can benefit from additional educational support outside of school. Designed for children ages 3 to 6, *Miss Humblebee’s Academy* is an easy-to-use kindergarten-readiness solution, accessible online and on mobile devices. The curriculum is thematic-based and fully interactive with auditory cues to empower children to progress through the lessons and the site, driving engagement and active participation. *Miss Humblebee’s Academy* offers hundreds of lessons spanning all major academic subjects (language and literacy, math, science and social studies, art and music), which are based on learning principals and standards from leading educational organizations (Figure 2). The program emails weekly notification of curriculum progress and is the only product in its genre that provides assessments to measure proficiency and learning outcomes. It’s a silver award winner of the Mom’s Choice Awards®, a globally recognized program for establishing the benchmark of excellence in family-friendly media, products, and services.

“Miss Humblebee’s Academy provides children an opportunity to learn while having fun in a safe online classroom environment with no pop-ups, ads, or links to other websites. Miss Humblebee’s Academy is interdisciplinary in that children learn multiple subjects within each lesson. It also provides parents with tools to measure their child’s kindergarten-readiness,” says Crystal Labbe, founder and CEO of Miss Humblebee LLC.

Figure 2. Miss Humblebee’s Academy partners with Gale to offer new product to Public Libraries *Miss Humblebee’s Academy’s* lessons are based on learning principals and standards from leading educational organizations.





Several online learning programs such as *ABCmouse.com*® *Early Learning Academy*, *IXL*, and *Time4Learning* serve the pre-K audience, although they vary in their focus. *ABCmouse.com*®, which promotes its program as being for ages 2 through 7, offers progressive lessons consisting of books, puzzles, games, songs, art activities, and/or printables that relate to a specific topic. According to Ms. Labbe, *ABCmouse.com* is more game-centered than *Miss Humblebee's Academy*, which is curriculum-based. *IXL* has a comprehensive K-12 curriculum, but focuses only on mathematics at the pre-K level. *Time4Learning* promotes itself as a homeschool curriculum for pre-K to grade 12. *Miss Humblebee's Academy* focuses solely on pre-K to kindergarten.

Standards-Based Curriculum, Unique Benchmark Assessments, Progress Reports

The curriculum of *Miss Humblebee's Academy* directly aligns with the domains (e.g., language development, literacy knowledge and skills, mathematics knowledge and skills) in the Head Start Child Development and Early Learning Framework (Figure 3). The framework provides Head Start and other early childhood programs with a description of the developmental building blocks that are most important for a child's school and long-term success. Head Start children, 3 to 5 years old, are expected to progress in all the areas of child development and early learning outlined by the framework.

Miss Humblebee's Academy assesses cognitive skills at regular intervals for measurable improvement toward kindergarten-readiness. In addition, a parent observation checklist and an age-related developmental milestones guide allow parents to review and record social, emotional, and physical growth as a condition of kindergarten readiness. Weekly emails alert parents to review curriculum progress and assessment results that are available online 24/7. A portion of the curriculum is also available offline in the form of printables and worksheets.

Ms. Labbe, who has a master's degree in education and has been designing early childhood curriculum for 10 years, says, "No other product for this age group has the type of assessments and ongoing progress reports that we do. We do a cognitive skills assessment of each child before he or she begins the program to establish a benchmark that allows us to assess kindergarten-readiness compared to industry standards. This assessment also allows us to track growth and development as each child progresses through *Miss Humblebee's Academy*."

The benchmark assessment evaluates three domains that are legislatively mandated for kindergarten readiness. It integrates elements from recognized cognitive tests such as the OLSAT (Otis-Lennon School Ability Test) and WPPSI (Wechsler Preschool and Primary Scale of Intelligence). *Miss Humblebee's Academy* curriculum and testing also align with industry standards from the National Association for the Education of Young Children (NAEYC), National Council of Teachers of Mathematics (NCTM), and the Common Core State Standards Initiative, and as noted earlier, with the Head Start Child Development and Early Learning Framework.

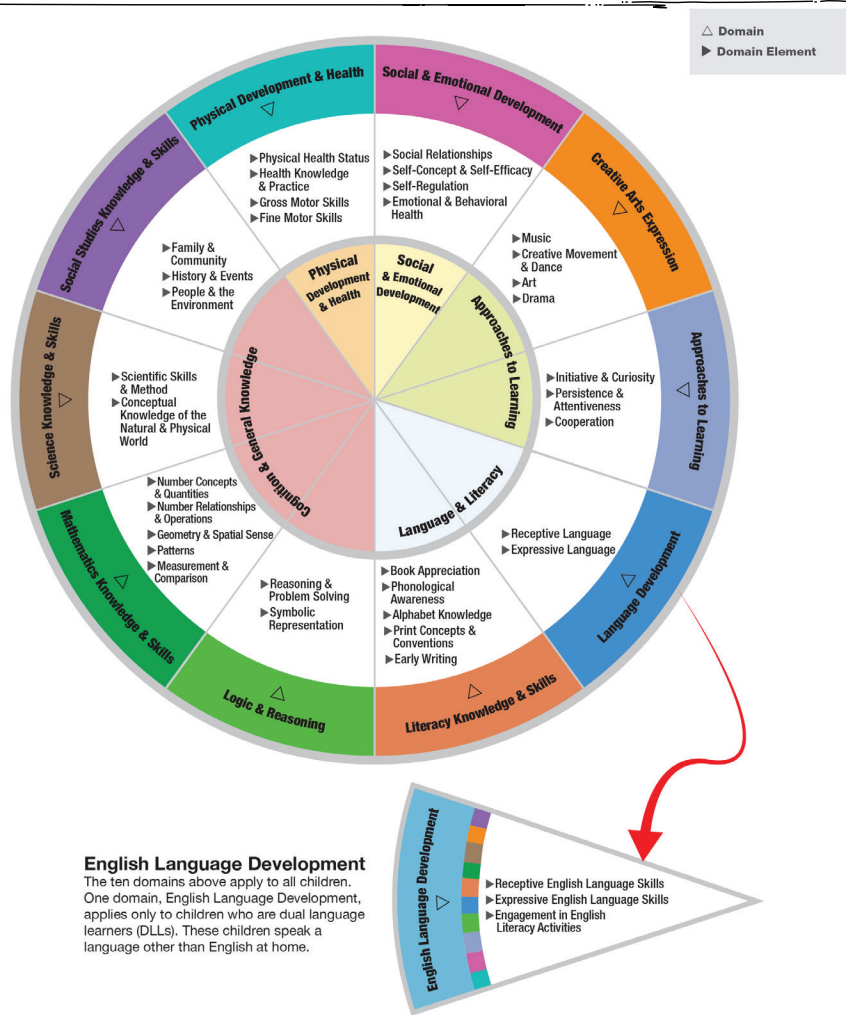
Unlike any other early learning program available, this product includes tools libraries need to measure their impact on early literacy development in their communities.

Digital resources such as *Miss Humblebee's Academy* can help to fill the vacuum for children who don't have access to traditional preschool programs, who attend programs that do not offer literacy training, or who can benefit from additional educational support outside of school.



The curriculum of *Miss Humblebee's Academy* directly aligns with the domains in the Head Start Child Development and Early Learning Framework.

Figure 3. The Head Start Early Learning Framework¹² *Miss Humblebee's Academy* aligns directly with the domains in the framework. The framework can be used to guide curriculum, implementation, and assessment to plan teaching and learning experiences that align to school readiness goals and track children's progress across developmental domains. The domains and domain elements apply to all 3 to 5 year olds in early childhood programs.



Building Children's Confidence and Empowering Them to Succeed

"*Miss Humblebee's Academy* introduces children to concepts that they may not see until kindergarten, which gives them a competitive advantage, and thus confidence to succeed, when they get to school," says Ms. Labbe. "They feel ready to tackle the academics in kindergarten after using *Miss Humblebee's Academy*, and won't feel overwhelmed when they enter the new environment of school. The curriculum is also adaptive, so kids are challenged."

In developing *Miss Humblebee's Academy*, Ms. Labbe drew upon her own experience as a Head Start student and her observations of her students throughout the years. "Children who start out behind other students are often insecure about their weaknesses. I have learned that if we can help children as much as possible before they enter school, their academic experience can be exciting and welcoming



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Crystal Labbe

Founder and CEO,
Miss Humblebee's Academy

instead of intimidating.” Ms. Labbe notes that *Miss Humblebee's Academy* users include children who are autistic. She attributes this to the program's relatively simple presentation style, which she says offers fewer distractions than other programs and consequently makes it easier for students to focus as they learn.

She continues, “Our progress reports are kid-friendly, and allow children to see that they are achieving and completing lessons. They receive rewards that show their accomplishments. They have to earn their way into the ‘reward rooms,’ which provides ongoing incentive and encouragement.”

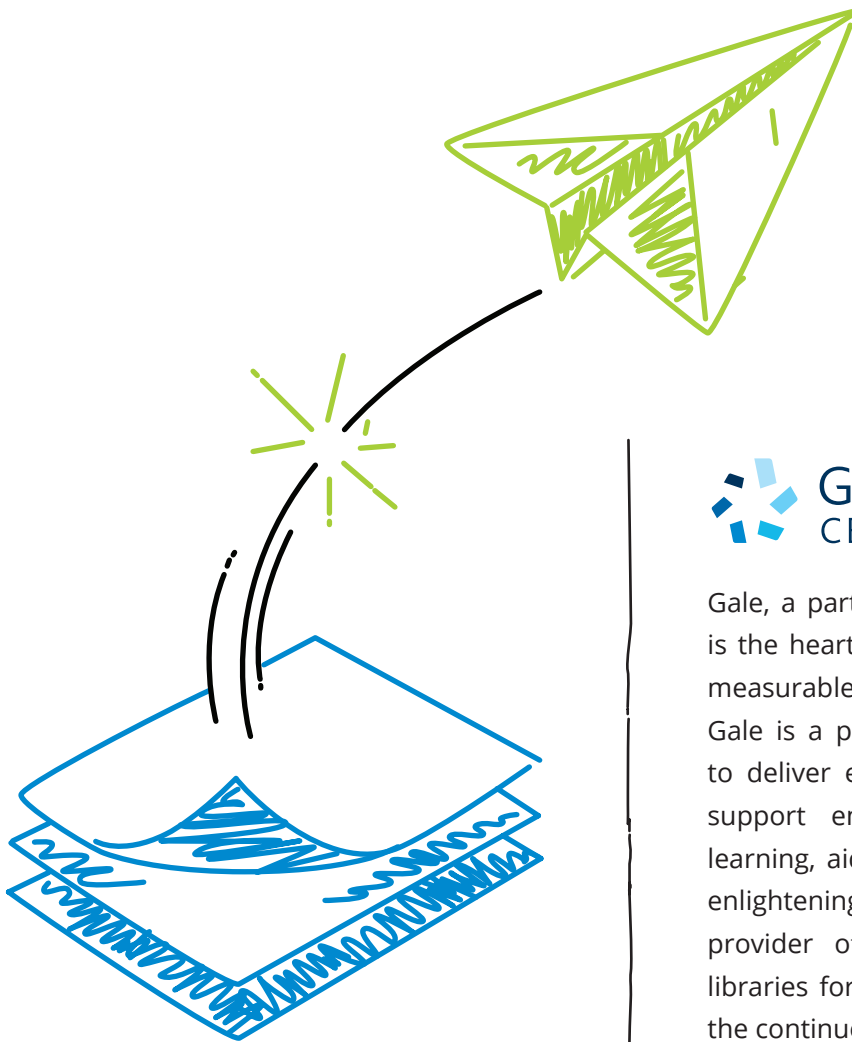
A Look Ahead

Miss Humblebee's Academy continues to evolve with new activities to promote learning. “I want *Miss Humblebee's Academy* to be known not only as a kindergarten-readiness tool, but also as a tool that prepares children for lifetime academic success,” says Ms. Labbe.

“I fell in love with learning in my Head Start class, and I believe that if it weren't for the educators in my life, I would have turned out differently. In developing *Miss Humblebee's Academy*, I wanted to provide pre-K children with a program that would encourage learning and give them a level playing field from the beginning, regardless of their exposure to learning at home. I want them to have the confidence to raise their hand when they aren't sure of the answer. I want them to be proud to share what they have to say or what they created.

To learn more about Miss Humblebee's Academy
or request a 2 week trial, visit: www.gale.com/mha.

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