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was founded to investigate and illuminate the strengths of those with dyslexia, while the seven-year-old Laboratory for Visual Learning, located within the Harvard-Smithsonian Center for Astrophysics, is exploring the advantages conferred by dyslexia in visually intensive branches of science. The director of the laboratory, the astrophysicist Matthew Schneps, notes that scientists in his line of work must make sense of enormous quantities of visual data and accurately detect patterns that signal the presence of entities like black holes.

A pair of experiments conducted by Mr. Schneps and his colleagues, published in the Bulletin of the American Astronomical Society in 2011, suggests that dyslexia may enhance the ability to carry out such tasks. In the first study, Mr. Schneps reported that when shown radio signatures — graphs of radio-wave

## People with a reading disability can be better at recognizing patterns and absorbing the 'visual gist.'

emissions from outer space — astrophysicists with dyslexia at times outperformed their nondyslexic colleagues in identifying the distinctive characteristics of black holes.

In the second study, Mr. Schneps deliberately blurred a set of photographs, reducing high-frequency detail in a manner that made them resemble astronomical images. He then presented these pictures to groups of dyslexic and nondyslexic undergraduates. The students with dyslexia were able to learn and make use of the information in the images, while the typical readers failed to catch on.

Given that dyslexia is universally referred to as a "learning disability," the latter experiment is especially remarkable: in some situations, it turns out, those with dyslexia are actually the superior learners.

Mr. Schneps's study is not the only one of its kind. In 2006, James Howard Jr., a professor of psychology at the Catholic University of America, described in the journal *Neuropsychologia* an experiment in which participants were asked to pick out the letter T from a sea of L's floating on a computer screen. Those with dyslexia learned to identify the letter more quickly.

Whatever special abilities dyslexia may bestow, difficulty with reading still imposes a handicap. Glib talk about appreciating dyslexia as a "gift" is unhelpful at best and patronizing at worst. But identifying the distinctive aptitudes of those with dyslexia will permit us to understand this condition more completely, and perhaps orient their education in a direction that not only remediates weaknesses, but builds on strengths.