ATOS Frequently Asked Questions

Following are some questions commonly asked about the ATOS Readability Formula for Books.

Why did you change readability formulas?

We wanted to provide educators with an easier-to-use and more accurate tool for guiding students to appropriate books. We devoted two years of research to creating the ATOS readability formula. ATOS is more accurate than other formulas because:

- It's based on actual student book reading (we analyzed the reading of almost 1,000,000 books by more than 30,000 students).

- It takes book length into account.

- It employs the three statistics that researchers have found to be most predictive of reading difficulty: the number of words per sentence, the number of characters per word, and the average grade level of the words in the book.

What does an ATOS book level number reflect?

An ATOS level on a book indicates how difficult the text is to read. Thus it helps you match books to a student's reading level. But ATOS measures only the text. It does not—nor does any other readability formula—take into account literary merit, sophistication of ideas, developmental appropriateness, or maturity of theme or language. This is why it's important to know and use three measurements: Readability or Book Level (the difficulty of a book's text), Reading Level (a student's tested level), and Interest Level (the content level of a book).

Just how accurate is ATOS?

ATOS correlates well with other standard readability formulas and does a better job than other formulas with problematic types of books, such as high-low, emergent-reader, and nonfiction books. But it's important to remember that all readability formulas produce only an estimate of a book's readability based on selected variables in the text. Different formulas applied to the same book will generally give estimates that differ by a grade level or so. Also keep in mind, as stated above, that readability formulas do not measure the maturity level of the content. That's why we also indicate each book's Interest Level to help you guide students to appropriate content. In addition, an educator's knowledge of books is always an important factor when matching books to students.

What does Interest Level mean?

The ATOS Book Level and the Interest Level represent the two dimensions of reading: text and content. ATOS levels measure readability, or textual difficulty. Interest Levels refer to the sophistication of a book's content, ideas, and theme, and are based on publisher recommendations. A simple rule: use the ATOS level to determine whether a student can read the book and Interest Level to help determine whether a student should read it. You can see the Interest Levels for books that have an Accelerated Reader (AR) quiz by looking through the title listings in the software, searching for the quiz on our Web site, or searching in AR BookGuide or AR BookFinder.

Why did so many book levels change with ATOS? Does it mean all the old levels were wrong?

Different standard readability formulas always give slightly different estimates. This is due to statistical variations among the different samples of text used and because different formulas estimate readability in different ways. ATOS uses whole-text scans to eliminate sampling error; that is, it calculates the readability of an entire book, not just a few samples of text within it. This, along with other differences among formulas, results in somewhat different levels being calculated for most books. The average change to the level of the books on the Accelerated Reader list is very small, but the level of many individual books changed by as much as a grade. The level of some books changed even more; in those cases, the new levels are much more accurate than the old.

Why do I see some book levels set to Pre-ATOS in Renaissance Place?

Any quizzes owned in the Accelerated Reader Desktop program retain their settings upon import into Renaissance Place. Pre-ATOS is one of those settings. Renaissance Learning, Inc. does this to avoid overriding a selection made by our customers.

What does ATOS mean for me in my Accelerated Reader classroom?

Your AR classroom will run much the same as before. Status of the Class is just as important as ever. But now you'll have a much more accurate guide to which books are accessible to readers at various levels. For example, *Fahrenheit 451* was formerly 9.8; now it's 5.2, so you know you can give it to high-school students reading at that level. Remember, however, that readability measures only a single dimension of a book: text difficulty. You and your students should also pay attention to Interest Level, which helps indicate the level of the book's content. AR version 6.0 and higher will print the Interest Levels on book labels for easier reference when choosing books. Interest Levels are also shown in AR BookGuide, AR BookFinder, and on our Web site.

The Color Purple has an ATOS level of 4.0. Are you saying it's OK for fourth-graders to read it? That can't be right!

This is a good example of the need to distinguish between Readability or Book Level, Reading Level, and Interest Level. "Readability" refers strictly to the textual difficulty of a book. "Reading Level" is the level of text a student can comprehend, based on recent achievement tests or average levels from Accelerated Reader records. "Interest Levels" are based on publisher recommendations about content. The text of *The Color Purple* can be understood by a student reading at a 4.0 level, but its themes are probably not suitable for a fourth-grader. That's why it has an interest level of UG (Upper Grade). Using the two measurements together, you can see that the book may not be the best choice for less mature students, but upper-grade students who read below their grade level can probably comprehend it.

My higher-level readers don't want to read below their ZPDs, but there are a lot of good books with lower ATOS levels that I want them to read!

Encourage them to do so! Beyond the sixth-grade level or so, the key to advancement of reading ability is the development of broader reading and critical-thinking skills, making inferences, drawing conclusions, and so on. Our guideline for advanced readers has always been to encourage them to read widely rather than continuing to raise book-level goals. (This is why ZPD ranges get wider as a student's reading level gets higher.) Advanced readers will continue to advance as they continue to practice, even if they occasionally dip below their ZPD.

My students are finding it harder to achieve Classic Reader certification because the readability of many high-level books has come down with ATOS. How do I handle this?

Classic Reader certification has become more "classic." The fact is, when measured on pure readability, relatively few books have ever been at a 6.0 level or above. And of these, most are older classics—books by Dickens, Eliot, and so on. We're making a special effort to add more of these titles to our quiz list, but not every student will be interested in them. We suggest you encourage students to achieve Honors Reader certification, and develop your own list of qualifying titles. You could even create multiple lists of high-quality books to reflect different interests. Remember that readability level, by itself, is not an indicator of merit or of the benefit a student will gain by reading the book.

Why did so many high-level books come down in readability level? What do I do to challenge my high-level readers?

Some of the books came down because their previous level was partially based on a subjective assessment. (This subjective assessment is now Interest Level.) Other books came down because our research showed that the textual factors that had resulted in their previous high level were not so important. The fact is, when you look at pure readability, relatively few books have ever been at a 6.0 level or above. Your advanced readers will benefit from additional reading over a wide range of levels. Remember that once students are reading at a sixth-grade level or so, the way to accelerate their reading ability is to encourage them to read broadly and think critically. If they continue to read a lot and remain motivated, their reading ability will advance, even if they occasionally dip below their ZPD. Consider adding personalized goals for reading in different genres and from lists of specific books (e.g., Classic and Honors Reader certification).

So when all is said and done, is it worth it to change to ATOS? It seems like a lot of work!

Feedback from educators who've made the switch indicates the answer is yes; especially if you are working with a lot of nonfiction, emergent-reader, or high-low material, ATOS will better help you help students pick books with difficulty levels they can benefit from. But the old levels weren't "wrong," and it won't do any harm to wait a while before switching to ATOS. You might be most inclined to wait if you label your AR books, since re-labeling requires help. We suggest you wait until there's a break in the school calendar that will enable you to recruit volunteers, print new AR book labels, and apply the new labels. (If you're planning to upgrade to AR 6.x or higher, you should wait to make the change to ATOS until you have it installed; it will provide Interest Levels on your labels.) Throwing the "ATOS switch" will automatically change new quizzes to ATOS levels and point values, but it won't change historical student records.

For more information about ATOS or guiding students to books, please refer to *Using Readability Levels to Guide Students to Books* (L0787) available from Renaissance Learning by calling (800) 338-4204.