INFORMATION CANNOT always be trusted. Despite popular opinion regarding the devastating impact of the Internet on the modern age, the inherent untrustworthiness of information is not new. Satire, misinformation, and disinformation have been circulating for centuries, even long before the printed word. However, thanks to the relative ease of creating and sharing content online, our students are confronted with publications created solely to entertain, persuade, and incite via incorrect or incomplete statistics.

Meanwhile, rapidly advancing technology provides novice researchers with immediate access to overwhelming numbers of resources, and the traditional steps of the research process—such as resource evaluation—have seemingly fallen to the wayside in deference to instant gratification and confirmation bias. Students diving into the world of academic and professional-level research often have no awareness of the gaps in their understanding when it comes to performing critical, thoughtful research. As educators, we must spare the time and effort required to help fill in these gaps and provide students with a workable set of skills to address this lack of critical thinking in the research process.

Beyond the potential lack of credibility of information resources, students also struggle with other steps of research performance such as locating viable resources in a timely manner, accurately determining the relevance of found information to their topics, and applying the information to their assignment in a way that is both informative and useful. Each of these steps of the research process require not only a deeper understanding of how research should be performed but also a toolbox of critical thinking skills that students can use to overcome potential obstacles. Too frequently, students find themselves encountering research roadblocks (inability to develop the correct search terms with which to find the most useful information; inability to locate free, reliable sources; inability to synthesize the information into something useable once found) with no idea of how to resolve these common problems. This leads to frustration and may cause students to resort to the use of more accessible (but ultimately much less viable and pertinent) information materials.

Making critical thinkers of burgeoning researchers in a age of information overload and “fake news” requires three steps to help students and faculty alike reevaluate the nature of research as it is viewed in and outside of the classroom:

1. Explain the consequences. By providing examples of the impact that false or bad information can have on a community (whether it be within your own institution, within your home state, or even on a national/international level), students will be more aware of why thorough evaluation of research matters in the long term. Locating real-life examples of faulty research (e.g., Andrew Wakefield’s debunked research on autism and vaccinations) and its massive impact (the birth of the entire anti-vaccination movement) will help bring a sense of reality to this often nebulous topic. Educators may even consider charging students with finding examples of research fraud and charting its impact themselves as part of this learning process.

2. Encourage researchers to be skeptics. More often than not, students are unaware of just how much of the information they find online is intended to mislead them in some way. Even information that does not intend to be disingenuous (“misinformation”) exists in droves, thanks to a surplus of non-expert authors and open source, self-funded publishers on the web. The first component of this step is to spend time with students explaining the differences between viable information, misinformation, and disinformation (information presented with the purposeful intention of misleading the reader). Exploring the nature of bias, satire, and viral content will provide students with a stronger understanding of the pitfalls of online information use.

Following this introduction to the large variety of faulty information available to them, students should be provided with a practical tool they can use to determine the overall viability of a resource. The CRAAP test—as originally developed by librarian Molly Beestrum of Dominican University— is a great example of such a tool. By see MISINFORMATION, Page 3
GRADUATING FROM A four-year college in four years may sound like a fairly straightforward course of action. But only a minority of students manage to do it.

For college students, the decision takes, the less likely a student is to make it to graduation:

A quarter of students drop out after four years (just over 70 percent of students graduate on time, according to the National Center for Education Statistics). For many of these students, the decision to drop out is a major issue for many families — in-state tuition and fees run $8,940 on average at public institutions and $28,308 at private ones. Of all the families that don’t graduate in four years, 38 percent of them have annual incomes between $13,000 and $29,999.

Many of those who finish in five or six years have either unnecessarily drained their savings or simply applied for more financial aid.

Research shows that students who graduate in four years tend to have lower levels of debt, and save a lot more.

In addition, working more than 30 hours a week can negatively impact academic performance. "If you’re working a lot of hours, you’re going to have less time to spend on your studies," said Kristie Ramirez, the director of career services at the University of Texas at Austin.”

"The time you spend working is time you’re not spending on your education," she said. "If you’re not spending time in class, doing homework, you’re not going to learn the material, you’re not going to be successful on exams, and you’re not going to be successful in college."