



Standard Aero maintains, repairs and overhauls turbine engines for more than 1,400 customers worldwide in the global aerospace, defence and energy industries. Their 2,500+ employees are located in six different countries and their main operations are in the United States, Canada and the Netherlands.

**STANDARD  
AERO**

Rob Despins, General Manager  
Standard Aero University

**I**mmune... It's a catchy name for an initiative at Standard Aero, a worldwide leader in the maintenance, repair and overhauling of turbine engines. One might assume it's a campaign to fight computer viruses or germs that spread between co-workers, but it's not.

Immune at Standard Aero refers to a shift in corporate mindset – one which promotes proactive efforts to promote the health of the company, like building Essential Skills to break the quality barrier.

"We have a respected product, but there's a quality ceiling," explains Rob Despins, General Manager at Standard Aero University, the company's corporate training entity. "How do you break that barrier? We launched a significant project to find the answer."

Some of Standard Aero's best minds were assigned to the Immune initiative. They turned to a body of research and practical application used by the nuclear, medical and aerospace industries. It highlighted the importance of having highly competent people with the skills to process the work and handle variability.

"We work on many different products by different manufacturers," says Despins, explaining the significance of variability. "Our documents are not standardized, so our technicians need to be highly proficient in document use."

Document use, one of nine Essential Skills, is the ability to decipher and apply information organized in lists and tables, and in visual displays such as schematics and assembly drawings. Employees with poor document use skills can locate information, but only if they are familiar with the document, which presents obstacles to change.

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Knowing that document use is critical at Standard Aero, the company launched a research project to assess the Essential Skills levels of production workers in Canada, the United States and the Netherlands. Working with Bow Valley College in Calgary, Alberta, they randomly selected 152 employees in the technician group to take a TOWES (Test of Workplace Essential Skills) assessment customized for the aerospace industry.

TOWES is the only assessment available in Canada that accurately benchmarks a test-taker's level of three Essential

Skills, including document use, reading text and numeracy. It uses authentic workplace documents such as schematics and manuals to assess how well the test-taker can handle workplace situations. By comparing the test results to the skills required, employers can clarify training needs.

As Despins suspected, TOWES test results revealed that numeracy and reading text scores were close to the occupational requirement, but document use scores were low. The results were further analyzed to compare the relationship between test scores and factors such as age, location, industry experience and certification. There were some surprises.

"The number of grads from technical programs had decreased and we were picking up entry level people from other sources," says Despins, "so people with less than three years of industry experience had low levels of literacy. It showed up in the reading text scores. We hadn't used any assessment tool during that hiring period but our Human Resources department is using TOWES now for anyone who doesn't come out of a technical program."

Despins adds that Standard Aero is also encouraging technical training programs to incorporate TOWES so Essential Skills deficits can be addressed before candidates graduate.

"If they don't have level 3 Essential Skills scores, the industry doesn't want them," says Despins.

Essential Skills also play a role in promoting from within, a philosophy Standard Aero strongly supports.

"People with strong Essential Skills are highly trainable in the sense that they can learn a lot on their own; they like learning and they like challenges. TOWES helps us calibrate employees' skills so we don't push people into situations that are beyond them and they experience failure."

Standard Aero is also piloting a document use course created for technicians.

"We'll run (the course) in a computer lab and it will be quite interactive," says Despins. "We'll give them very applied scenarios that they'll encounter in a work environment. In many cases, they'll need to get the information they need from more than one source of information."

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Despins adds, "Don't assume that just because you're in a highly technical sector like medicine or electronics that low Essential Skills is not an issue. We have some people with low document use scores who have exceptional practical skills, but they don't have the strategies for finding information and understanding how it's organized. We can bite off a big part of our quality issue if we work with this subset of people and offer a little intervention. That's what it means to be proactive."