What’s the Difference Between Technical Writing and Other Types of Writing?

Presented by Paul Joseph of International Writing Institute, LLC

There are no special kinds of writing…

You've got to look at it this way: There is only one English language, and the principles for using it effectively are the same, regardless the subject.

In that sense, there are no special kinds of writing. If the subject is technical, it is technical writing.

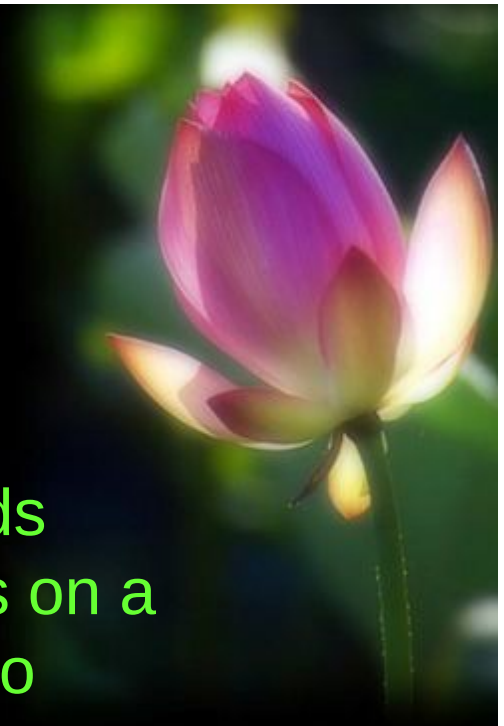
The same for financial, or legal, or any other kind. There is just writing. And the things that make it easy to read and understand are the same—regardless the subject.

Measuring Your Clarity

Measuring Your Clarity

The reading process
consists of two major steps.

Measuring Your Clarity



First, the brain receives words and sentences--black marks on a page-and converts these into meaningful concepts. And second, it intelligently examines those concepts.

Measuring Your Clarity

Difficult subjects need greater clarity. The harder the ideas, the easier the words and sentences should be--if they are to be received accurately.

Measuring Your Clarity

At any given time, a reader has a given amount of energy to devote to the reading. And it must be divided those two ways.

Measuring Your Clarity

At any given time, a reader has a given amount of energy to devote to the reading. And it must be divided those two ways.

The more energy your reader uses on words and sentences, the less is available for the ideas.

Technical Writing

THIS…The equilibrium activity of the fission produces as well as the induced activity from the isotopes observed, with the exception of W-187, indicated a linear relationship with reactor power level, and although the tungsten activity was higher than anticipated, it neither posed a safety problem nor caused any reactor operating difficulties. The varying manner of the tungsten activity levels in the coolant suggested that the cause in part was due to a non-uniform corrosive mechanism or that the total tungsten area exposed to a neutron flux varied during operation. Subsequent shutdown tests indicated that each of these conditions was indeed part of the release mechanism.

24.3 fog index

MEANS THIS…

The equilibrium activity of the fission produces a linear relationship with power level. With the exception of W-187, the induced activity from the observed isotopes showed the same relationship. Although the tungsten activity was higher than expected, it did not pose a safety threat. Nor did it cause any reactor operating difficulties. The varying tungsten levels in the coolant suggested two possible causes: Either a non-uniform corrosion problem existed, or the tungsten area ex[posed to a neutron flux varied during operation. Later tests confirmed that both these conditions existed. **16.4 fog index**

Financial Writing

THIS:

Loan agreements requiring The Company and its subsidiaries to maintain a consolidated net working capital, as defined in the credit agreement of September 22, 2018, of not less than $8,000,000 and limiting dividends, except in capital stock of the Company , and stock payments subsequent to December 30, 2018 to the consolidated net income accumulated after that date plus $500,000 (approximately $2,061,000 unrestricted at December 31, 2018) necessitated long-tern borrowing in the amount of $3,750,000 to correct the deficiency of approximately $350,000 in working capital s of December 31, 2018.

50.2 fog index (!)

MEANS THIS…

The loan agreements call for two restrictions. They require the Company and its subsidiaries to maintain a consolidated net working capital, s defined in the credit agreement of September 17, 2018, of not less than $8,000,000. They also limit dividends, and stock payments after December 31, 2018, to the consolidated net income accumulated after that date plus $500,000. This amount was approximately $2,061,000 unrestricted at December 31, 2018. Dividends in capital stock of the Company, however, are exempt from that limit. A deficiency of approximately $350,000 in working capital existed as of December 31, 2018. Long-term borrowing of $3,750,000 corrected this.

16.8 fog index

Medical Writing

THIS…

Prior to admission the subject was ingesting NPH insulin, between 18 and 25 units on a daily basis, and on the initial day of admission was rehydrated through the utilization of forced fluids, normal saline with 5% dextrose and water, with subsequent augmentation of potassium supplement due to hypokalemia. On the above regimen the patient's condition improved and subsequent feeding initially included full liquids, subsequently 1500-calorie diabetic diet. The subject also during this admission experienced the aspiration of a thin bloody secretion via the nasogastric tube, indicated by a subsequent upper G.I. series to be associated with a sliding hiatus hernia without evidence of reflux or esophagitis.

21.2 fog index

MEANS THIS…

Before admission the patient was taking between 18 and 25 units of insulin daily. On the day of admission she was rehydrated with forced fluids, normal saline with 5% dextrose and water. Later we added potassium supplement to relieve hypokalemia. The patent's condition improved on this regimen, and we began feeding her full liquids, then a 1500-calorie diabetic diet. Also during this admission, the patient aspirated a thin, bloody secretion through the nasogastric tube. An upper G.I. series showed a sliding hiatus hernia without evidence of reflux or esophagitis.

14.2 fog index

DEVIL'S ADVOCATE:

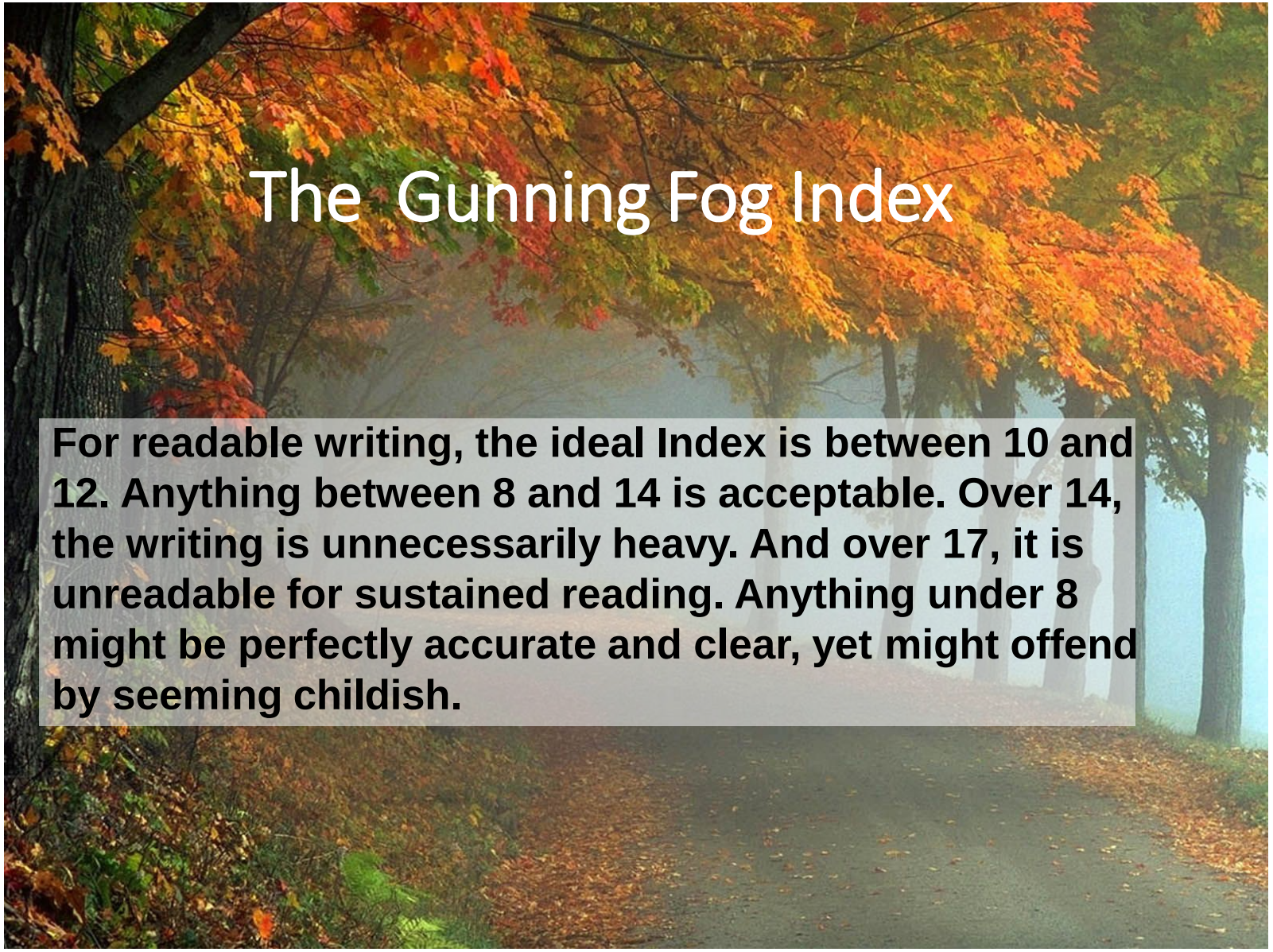
"But the non-professional reader still can't understand the right-hand version."

TEACHER:

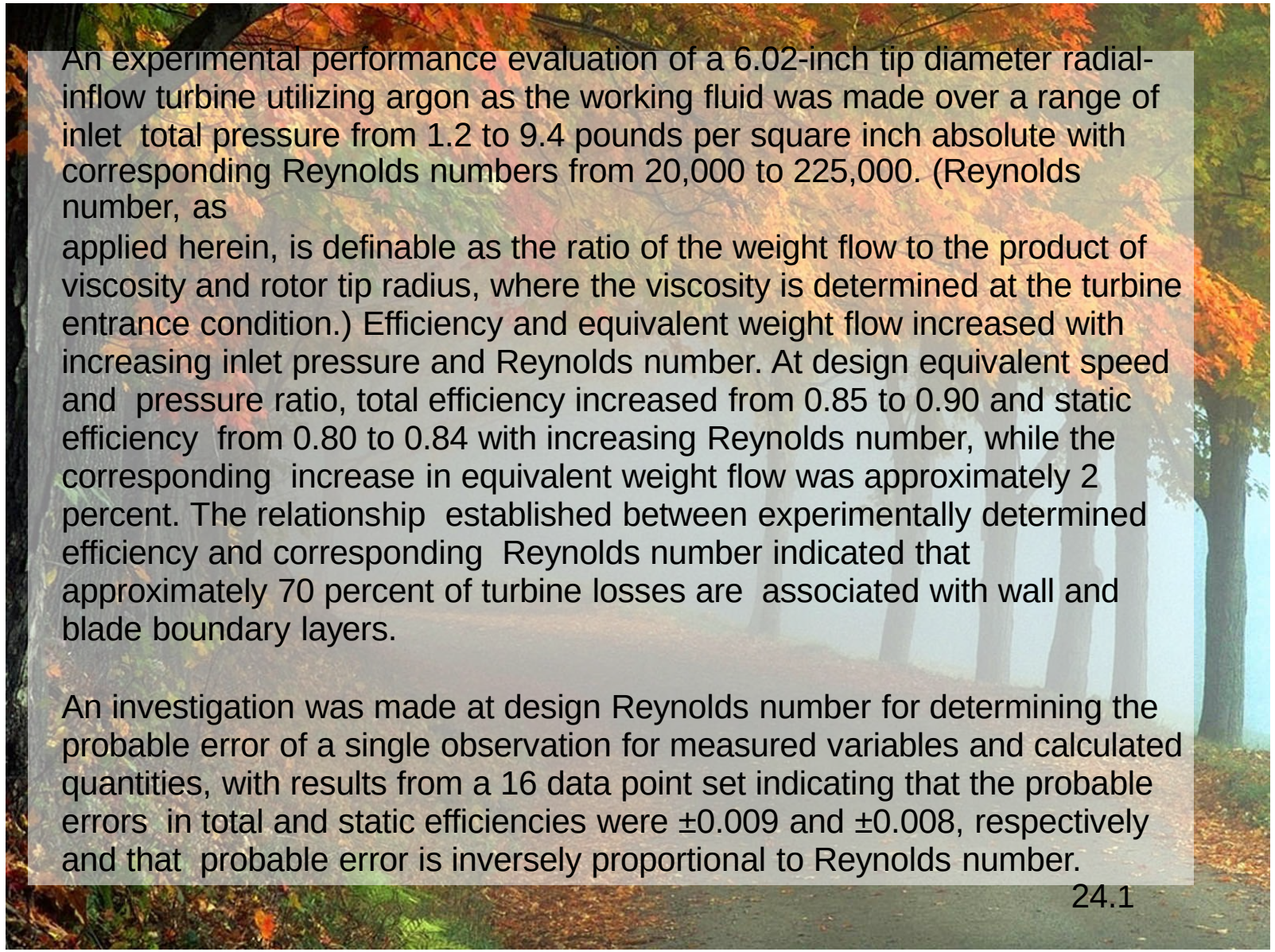
"But you usually aren't writing for non-professional readers. Engineers and scientists write to other engineers and scientists, and so on. If you must write for non-professional readers, then of course, you must avoid (or define) words they wouldn't know—if you care to be understood. That's the only difference."


The
Gunning Fog
Index


The
Gunning Fog
Index
Difficult language fogs up the ideas, and this is a measure of how much fog.


The Gunning Fog Index
For readable writing, the ideal Index is between 10 and 12. Anything between 8 and 14 is acceptable. Over 14, the writing is unnecessarily heavy. And over 17, it is unreadable for sustained reading. Anything under 8 might be perfectly accurate and clear, yet might offend by seeming childish.


The Gunning Fog Index
The Indenture requires the redemption at par of $890,000 principal amount of debentures (less credits for converted debentures] each year beginning in 2012, authorizes the optimal redemption at par of an additional $890,000 principal amount of debentures in each year (non-cumulative) beginning in 2008 and optional redemptions at any time at prices ranging from $105,375 to $100.25, until 2002 and at par thereafter.
Loan agreements requiring the Company and its subsidiaries to maintain a consolidated networking capital....
20.96



An experimental performance evaluation of a 6.02-inch tip diameter radial-inflow turbine utilizing argon as the working fluid was made over a range of inlet total pressure from 1.2 to 9.4 pounds per square inch absolute with corresponding Reynolds numbers from 20,000 to 225,000. (Reynolds number, as
applied herein, is definable as the ratio of the weight flow to the product of viscosity and rotor tip radius, where the viscosity is determined at the turbine entrance condition.) Efficiency and equivalent weight flow increased with increasing inlet pressure and Reynolds number. At design equivalent speed and pressure ratio, total efficiency increased from 0.85 to 0.90 and static efficiency from 0.80 to 0.84 with increasing Reynolds number, while the corresponding increase in equivalent weight flow was approximately 2 percent. The relationship established between experimentally determined efficiency and corresponding Reynolds number indicated that approximately 70 percent of turbine losses are associated with wall and blade boundary layers.

An investigation was made at design Reynolds number for determining the probable error of a single observation for measured variables and calculated quantities, with results from a 16 data point set indicating that the probable errors in total and static efficiencies were ±0.009 and ±0.008, respectively and that probable error is inversely proportional to Reynolds number.

A radial-flow turbine with a 6.02-inch tip diameter was tested at inlet total pressures from 1.2 to 9.4 pounds per square inch absolute. Corresponding Reynolds numbers ranged from 20,000 to 225,000. The working fluid was argon. (Reynolds number = weight flow = product viscosity and rotor tip radius, with viscosity measured at turbine entrance conditions.)

Efficiency and equivalent weight flow increased as inlet-pressure and Reynolds number increased. At design equivalent speed and pressure ratio, total efficiency increased from 0.85 to 0.84. Equivalent weight flow increased about 2 percent. There was some relationship between efficiency and Reynolds number. It showed that about 70 percent of turbine losses are wall and blade boundary layer losses.

Probable error in total efficiency, at design Reynolds number, was calculated to be ±0.009, using a 16 data point set. In static efficiency this was ±0.008. Probable error increases proportionately as Reynolds number decreases.

Questions?

Contact:
Paul Joseph, M.B.A., Chief Executive Officer
INTERNATIONAL WRITING INSTITUTE, INC.
440-429-2067 | paul@iwitraining.com |
Creator of *“Put It In Writing”*
https://www.iwitraining.com/