

Compendium Study

**Setting Standards on the
TOEIC[®] Listening and Reading
Test and the *TOEIC*[®] Speaking
and Writing Tests:
A Recommended Procedure**

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Employers often use scores on the *TOEIC*® tests as one source of information to make a number of decisions. These include, for example, recruitment of new employees, movement of current employees into jobs that require English-language skills, and placement of employees into English-language training programs.

For example, an organization may wish to transfer an employee into a position that requires activities that involve extensive listening and speaking, such as attending meetings conducted in English. To make sound decisions, the organization will need to know (a) what levels of English listening and speaking skills are needed and (b) how to determine what *TOEIC* test score or scores correspond to these proficiency levels.

The purpose of this document is to provide a method of identifying the *TOEIC* test scores needed to support these types of decisions. The basic process outlined in this document is referred to as *standard setting*, and the specific approach recommended is typically referred to as *contrasting groups*. This document leads decision-makers through the steps to be followed to complete the contrasting groups approach.

Standard Setting

The general purpose of a standard-setting process is to identify the test score that best distinguishes test takers who have a sufficient level of skill from those who do not. Many different standard-setting methods exist, and several are based on assembling one or more panels of staff members (e.g., employees and managers) to review the test and to make various kinds of judgments about the test questions or tasks. These panel-based methods require, in addition to staff members, a trained standard-setting facilitator and multiple days to complete. Organizations may not have the resources necessary to implement these types of standard-setting designs. The contrasting groups approach that is described here is more likely to be accessible to organizations.

Overview of the Steps in the Contrasting Groups Standard-Setting Process

You will find detailed instructions under the heading *Contrasting Groups: Detailed Steps 1–5*.

- Define the level of English-language skills required for a job or group of jobs (job family) that share similar English skill requirements. (See Steps 1 and 2 and the English-Language Skills form in the appendix.)
- Classify each employee in the job or job family into one of three levels based on his or her English-language skills. (See Step 3 and the Classify Employee English Skill Level form in the appendix.) Classifications should be done without knowing an employee's *TOEIC* scores.

- Have employees take the TOEIC test. (See Step 4.) If an employee has taken the test within the past two years, he or she does not need to retake it.
- Use the available Excel workbook (*TOEIC Standard Setting Analysis Program*) to compute the minimum TOEIC scores needed for the job or group of jobs. (See Step 5.) The workbook may be downloaded at <http://www.ets.org/Media/Research/TOEIC%20Standard%20Setting%20Analysis%20Program.xlsx>

Contrasting Groups: Detailed Steps 1–5

Step 1: Identify the Specific Job for Which You Need to Establish English-Language Skill Requirements

The use of English-language should be a major factor in an employee's ability to perform the job satisfactorily. If English plays only a minor role in the job, you may not need to establish TOEIC score requirements. If English-language skills in only one or two domains (e.g., reading and writing) are important for the job, you may want to focus on establishing score requirements only for those skills.

If groups of jobs (job family) require similar levels of English-language skills, you may decide to focus on that job family, rather than a single job.

However, if jobs likely require different levels of English-language skills for an employee to perform satisfactorily, you will need to complete the contrasting groups steps for each of the jobs separately.

Step 2: Define What an Employee in the Identified Job (or Job Family) Should Be Able to Do With Regard to Each of the English Skills Needed to Perform Satisfactorily

To complete this step, consider reviewing the official job description for the job, consulting with the director of human resources or personnel, talking with and/or surveying employees who perform that job, and talking with and/or surveying supervisors of employees in those jobs. The goal is to establish a clear and realistic understanding of what an employee needs to be able to do *in English* for that job.

English skills in all four language domains may be needed to perform some jobs. For other jobs, skills in only one, two, or three domains may be applicable.

For skills in each of the applicable English-language domains (listening, reading, writing, and/or speaking), write specific examples of what the employee should be able to do to perform the job satisfactorily (i.e., "can do" statements; see Table 1).

Write as many examples as needed to provide an accurate representation of what the employee should be able to do when using English skills in a domain. You do not need to write everything that the employee is required to do, but you should provide a variety of examples so that it is clear what is expected of an employee in that job (or job family).

Table 1 provides some sample “can do” statements for each of the four language domains that may help you when you write what is expected for the job (or job family) identified. To show a range, the samples within each domain increase in difficulty or complexity. These samples are not specific to a particular job; your statements will need to be specific to the job (or job family) that you have identified.

We have included a two-page form, English-Language Skills, in the appendix for you to write down the English skills expected of an employee in the identified job (or job family). You may reproduce the form. You may also modify it, if doing so better meets your needs.

Table 1
Sample “Can-Do” Statements

English domain	Skill
Listening	Understand a coworker discussing a simple problem that arose at work.
	Understand a client’s request made on the telephone for one of the organization’s products or services.
	Understand explanations about how to complete several new work tasks or procedures.
Reading	Understand step-by-step written instructions for how to operate a new piece of office equipment.
	Understand an e-mail of complaint written by a dissatisfied customer.
	Understand a document that presents more than one view about an issue specific to your job.
Writing	Write a short thank-you note to a business colleague for a gift or dinner.
	Write an e-mail to an important client describing progress on a current project or task.
	Write a document that summarizes the major discussion points and decisions reached at a business meeting.
Speaking	Leave a message on an answering machine explaining the new location and time of a business meeting.
	Explain a business policy or plan to a new coworker.
	Give a prepared 20-minute presentation at a business meeting.

Step 3: Make a Classification Decision for Each Employee in the Identified Job (or Job Family) That is Included in the Contrasting Groups Process

In this step, each employee’s level of English-language will be compared to the English-language skills needed to perform satisfactorily (see Step 2) in the identified job (or job family).

This step should be completed by a person who has substantial (or preferably the most) knowledge of the employee’s ability to use English-language skills on the job. The person doing the classification

should talk with others who also know the employee's level of English on the job to help inform the classification decision. Gathering input from others should help the accuracy of the classification decision.

There are three levels of classification: Level A, Level B, and Level C. Level A represents the lowest level, and Level C the highest. The levels are defined on the Classify Employee English Skill Level form in the appendix.

Using the contrasting groups process, complete the classification decision for each employee included in that job (or job family). For each employee, complete one Classify Employee English Skill Level form.

Try to include at least 30 employees for each classification level (A, B, C). If you classify fewer than 30 in a level, you may still conduct the contrasting groups process, but recognize that the results may be less accurate.

Complete the classification without knowledge of how the employee scored on the TOEIC test(s), if he or she has already taken the test(s). The classification decision should not be influenced by knowing the employee's TOEIC scores.

Step 4: Each Employee Included in the Contrasting Groups Process for a Job (or Job Family) Should Take the TOEIC Test(s)

Each employee should have a TOEIC score for each of the English-language domains defined in Step 2. If employees have already taken the TOEIC test(s) within the past 2 years, they do not need to retake the test(s). You will need to have access to each employee's TOEIC scores, as the scores are needed to complete the contrasting groups process.

Step 5: Use the Available Excel Workbook (*TOEIC Standard Setting Analysis Program*) to Compute the Minimum TOEIC Scores Needed for the Job (or Job Family)

Enter the classification decisions and the TOEIC scores into the Excel workbook that you downloaded. There is a separate worksheet for each of the four English-language domains.

Each worksheet will enable you to include up to 300 employees, in total, for that specific job (or job family).

You will need to copy the Excel workbook for each specific job (or job family) you are including in the contrasting groups process. For example, if you have five different jobs (or job families), each requires its own Excel workbook.

Enter the employee classifications (from the Classify Employee English Skill Level forms) and TOEIC scores into the worksheets. The worksheets compute the recommended minimum scores.

Using the Excel Worksheets

How to Enter Information in the Excel Worksheets

- After you open the Excel workbook, click one of the tabs for listening, reading, speaking, or writing.
- In the upper left corner of the worksheet, type the title of the specific job (or job family). See Figure 1.

A	B	C	D
Job Title:			
LISTENING			
Skill Level			
Employee	Classification	TOEIC® Score	
1	A	200	
2	A	210	
3	B	345	
4	B	350	
5	B	325	
6	A	250	
7	A	230	
8	C	400	
9	C	430	
10	C	395	
11	B	325	

Figure 1. Sample Excel worksheet.

- Employee numbers 1 through 300 are already entered.
- Under the heading Skill Level Classification, enter the classification (A, B, or C) from the Classify Employee English Skill Level form.
 - Click on the cell in Column B next to the employee number, and an arrow appears.
 - Click on the arrow and then click on either A, B, or C; your selection will appear in the cell.
 - Repeat the classification assignment for each employee.
- Under the heading TOEIC Score, enter the employee's TOEIC score. (Do not change your classification decision, now that you know the score.)
- Repeat these steps for each English-language domain (worksheet) relevant for that job (or job family). First click on the name of the worksheet at the bottom to open that worksheet, and then follow the steps above.

Where to Find the Results on the Worksheets

Next to where you entered your classification judgments, you will find two tables of results.

- The first table in the worksheet, Summary of Your Classifications (see Figure 2), is a descriptive account of your classification decisions. It presents the following information:
 - the median TOEIC score (the score at the 50th percentile) of the employees you classified at each of the three levels
 - the lowest and highest TOEIC scores for these employees at each level
 - the number and percent of employees you classified at each level

Table 1. Summary of Your Classifications

Total Number You Classified	11		
	Group A	Group B	Group C
Median TOEIC® Score	220	335	400
Lowest Score	200	325	395
Highest Score	250	350	430
Number You Classified	4	4	3
Percent You Classified	36%	36%	27%

Figure 2. The first table in the Excel worksheet shows the summary of your classifications.

The table shown in Figure 2 presents a summary of classifications. (The table format is the same for all four English-language domains.) This example in Figure 2 uses the data from the sample Excel worksheet in Figure 1, where 11 employees were classified.

The median TOEIC Listening score for the employees classified in Group A is 220, 335 for Group B, and 400 for Group C; 4 of the 11 (36%) were classified into Group A, 4 (36%) into Group B, and 3 (27%) into Group C.

In the Excel worksheet, if you place the cursor over the Median TOEIC Score cell, a reminder of what the numbers mean appears.

Figure 3. Tip for working with Table 1 on the Excel worksheet.

The second table in the worksheet (see Figure 4) presents the suggested TOEIC scores to enter Level B and Level C. The TOEIC scores of the employees you classified in Groups A and B and in Groups B and C (Figure 2) may overlap. For example, some employees you had classified as being in Group A may have TOEIC scores that fall within the range of scores for Group B; some in Group B may have scores within the range of Group C. The focus of the contrasting groups analysis is to identify TOEIC scores that reasonably distinguish between (a) Groups A and B employees and (b) Groups B and C employees.

Suggested TOEIC® Scores	A	B	C
Score to Enter Level		277.5	367.5
Number at Level	4	4	3
Percent at level	36%	36%	27%

Figure 4. The second table in the Excel worksheet shows the results of contrasting group analysis. The shaded A cell indicates that there is no minimum score to enter Level A.

- One way to do this is to compute the average of the median TOEIC scores for adjacent groups. This is the approach used in the Excel workbook.
 - The suggested score needed to enter for Level B is the average of the median scores for Levels A and B (see Figure 4).
 - The suggested score needed to enter for Level C is the average of the median scores for Levels B and C (see Figure 4).
 - A score less than the score needed to enter Level B locates the employee in Level A.
- If an employee needs to meet some but not most of the English skills defined for the job, then focus on Level B. If an employee needs to meet most or all of the English skills for the job, then focus on Level C.

Figure 4 shows the results of the contrasting groups' analysis for listening. (The table format is the same for all four English-language domains.) This example uses the data from the sample Excel worksheet (see Figure 1), in which 11 employees were classified.

As shown in Figure 4, the score to enter Level B (277.5) is the average of 220 and 335 (from the table shown in Figure 2); the score to enter Level C (367.5) is the average of 335 and 400 (from Figure 2); a score less than 227.5 locates the employee in Level A. Of the 11 employees, 4 (36%) at least met the minimum score needed for Level B, but did not score high enough to enter Level C; 3 employees (27%) did score high enough to reach Level C, earning a score of at least 367.5. Four employees scored less than 277.5 and so were located in Level A. (The shaded A-cell indicates that there is no minimum score to enter Level A, as any score less than what's needed to enter Level B puts an employee in Level A.)

In the Excel worksheet, if you place the cursor over the Score to Enter Level cell, a reminder of what the numbers mean appears.

Figure 5. Tip for working with Table 2 on the Excel worksheet.

Conclusion

The results of the standard-setting process are suggested scores. Setting a standard is based on judgment and includes uncertainty. Judgment is used to make the employee classifications, and likely some uncertainty is present in those decisions; also, TOEIC test scores include a degree of uncertainty (i.e., standard error of measurement).

Decision-makers should consider the results of the contrasting groups analysis (Table 2 on each worksheet), but also recognize that in some cases it may be appropriate to modify the suggested scores for each level, according to each decision-maker's own experiences.

Decision-makers may believe that higher or lower scores are appropriate to support the intended use. This is reasonable. Decision-makers should note, however, that raising a required score will result in more false negative errors (i.e., predicting a greater number of employees to be unsatisfactory performers when they would actually be satisfactory performers). On the other hand, lowering the required score will result in more false positive errors (i.e., predicting that more employees will be satisfactory performers, even though they will perform unsatisfactorily).

One way to evaluate the reasonableness of required test scores is to follow up with new employees who have met the minimum B- and C-level scores suggested by this standard-setting process. The follow-up focuses on how well they are meeting the English-language needs of their jobs. If most of these new employees are meeting the English-language needs of their jobs, then the required scores were likely reasonable. If most are not, that would indicate that the required scores may need to be changed.

Appendix

English Language Skills Form

Use this form to name the job (or job family) you have identified and to write down the English-language skills needed for an employee to perform satisfactorily in that job (or job family).

Job Title

English Listening Skills Needed to Perform Satisfactorily in This Job (or Job Family)

English Reading Skills Needed to Perform Satisfactorily in This Job (or Job Family)



Job Title

English Writing Skills Needed to Perform Satisfactorily in This Job (or Job Family)

English Speaking Skills Needed to Perform Satisfactorily in This Job (or Job Family)

Classify Employee English Skill Level Form

Use this form to classify the English-language skill level of the employee you have identified for this job (or job family).

This form needs to be completed for each employee that you are including in the contrasting groups process. For example, if there are 30 employees in the job (or job family) that you are including, then 30 forms need to be completed, one for each employee.

Job Title

Please Read

Three English-language skill levels are described below: Level A (*lowest*), Level B, and Level C (*highest*).

Each level is defined in terms of how much of the English-language skills needed for satisfactory job performance (see the English-Language Skills form) an employee has.

Level A

An employee at this level **meets very few or none** of the English-language skills that have been defined as needed in the identified job (or group of jobs).

Level B

An employee at this level **meets some but not most** of the English-language skills that have been defined as needed in the identified job (or group of jobs).

Level C

An employee at this level **meets most or all** of the English-language skills that have been defined as needed in the identified job (or group of jobs).

Employee Name *(The employee must be in the job (or job family) identified on the previous page.)*

Employee Number

Give each employee in the identified job (or job family) a unique number. The first employee would be 1; the second, 2; and so forth. (You will use these numbers when entering information in the Excel worksheets that will produce the contrasting groups results.)

Directions for Making the Classification Decision

1. Review the completed English-Language Skills form for this job (or job family).
 2. Review the descriptions of the three English-language levels.
 3. Based on what you and/or others know about the English skills of the employee named above, assign this employee to *one* of the three levels (A, B, or C) for each of the English domains defined for this job (or job family).
- Place an X in the box to indicate the assignment. (If a domain is not relevant for the specific job, leave that box blank.)

English domains	Level A	Level B	Level C
Listening			
Reading			
Writing			
Speaking			

Your Name