



Validation Supplement: Version Comparison

To ensure that SkillCheck validation applies to all versions of Microsoft Office applications and other software skills products (word processor, spreadsheet, presentation program, and database), research was conducted to determine if content and statistical analysis performed on Microsoft Office 97 applications was consistent with data available for subsequent versions of the same tests (such as Office XP).

Content Consistency

The original content validation for desktop applications (summarized in Appendices A and B of SkillCheck's Validation manual) specified content balance requirements between different topics covered in SkillCheck's Microsoft Office assessments. For example, the SkillCheck assessment for Microsoft Word covers the following domains:

Word 97 Topics or Domains	Number of Questions	Tasks in this topic or domain included in the SkillCheck standard test
File Management	5	Create letter, open document, save document, create document, display comments on versions of documents.
Editing	6	Copy text, insert text, redo command, find word, go to page, spellcheck.
Formatting	12	Set margins, choose landscape orientation, display header, choose paper size, change line spacing, set tab, change font, change bullets, draw table, center page numbers, create new style, footnote reference
Desktop Publishing	4	Insert picture, page border, drawing, border lines.
Customizing Word	2	Display ruler, record macro.
Printing	5	Print preview, print document, create merge form, merge field, specify printer
Online/Internet Use	1	Display Web toolbar.

Assessments based on subsequent versions of Word utilized this same content balance and set of domains, understanding that the SkillCheck Standard tests (the tests upon which this validation research is based) continue to be validated for the original target group: a permanent or temporary worker utilizing the application as a critical skill or job segment for their position in a clerical job.

Statistical Analysis

SkillCheck compared the results of its original statistical analysis of score results for each Microsoft Office '97 application with a comparable number of tests taken with subsequent versions of the software. In each case, the tests appear to perform with a high degree of consistency between different product versions.

A summary of statistics appears below:

Percent Correct	Valid N	Mean	Median	Std.Dev
Word 97	250	64.05	67.50	17.69
Word XP	562	62.62	66	23.10

Percent Correct	Valid N	Mean	Median	Std.Dev
Excel 97	199	55.85	57	17.81
Excel XP	485	53.67	56	22.81

Percent Correct	Valid N	Mean	Median	Std.Dev
PowerPoint 97	86	63.49	66	16.30
PowerPoint XP	68	64.78	67.5	18.77

Distribution of tests scores is similarly comparable between different versions.

Conclusions

For the well-defined job segment (Microsoft Word User, Microsoft Excel User, etc.) covered by SkillCheck's Standard assessment, there is no content variability and minimal variability in statistical performance between different versions of SkillCheck tests on Microsoft Office.

This is to be expected, given the similar interface between different versions of Office, and the relatively few changes there have been in these applications for the features and functions covered in the Standard tests. The continued importance of the critical features covered in the Standard tests, even as desktop applications have been augmented with new high-end features and integration functionality (features not used regularly by everyday users and not covered in the Standard Tests), is the most likely reason behind the high level of consistency in statistical performance between SkillCheck Standard Tests for all versions of Microsoft Office applications.