

# Grading and Survey Solution



## Introduction

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With the advent of the “No Child Left Behind” Act (NCLB), schools around the nation are required to track and report the effectiveness of their curriculum and teachers. This new requirement adds a new burden to the already overburdened resources of our nation’s schools. With more and more of our schools turning to technology to optimize and streamline their core processes, there is a growing need for low cost grading and survey solutions.

Samsung Electronics of America (SEA) has used its vast resources to develop such a grading and survey solution in conjunction with its multifunction devices (MFDs). By incorporating Samsung MFDs into their processes, schools are able to perform all of their fax and document management tasks using an affordable centralized solution. The network capabilities of these MFDs, along with the CounThru 2 Enterprise software, allow the school districts to manage the fleet of Samsung devices and track school grades and performance statistics without the need for extensive IT resources.

## Overview

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The Grading and Survey solution uses a leading Windows-based forms-processing software package. The software recognizes optical marks (bubbles and checkboxes), machine-generated characters (OCR) and barcodes. You can design your own forms using any word processor and print them on your printer.

You can then use the solution to scan and recognize data with your Samsung MFD scanner and analyze the data or export the data to the application of your choice! It's that easy!

Samsung’s Grading and Survey solution is an easy-to-use process that uses Samsung MFDs, customer networks, and custom PCs. The general process used for Grading or Surveys includes the following:

- Form Design
- Form Generation
- Form Scanning
- Data Export
- Results Calculations
- Report Generation.

## Form Design

Samsung’s Grading and Survey solution provides the tools and examples you can use to design the testing and survey forms that meet the needs of your situation.

The majority of forms designed for use with this solution are the bubble type used for years by K-12s all over the country.

This solution creates one-sided or two-sided forms and forms including text, numbers, and bar codes. You can use any of the popular word processing tools to create your Grading and Survey forms. There are many example forms you can use to get started designing your own forms.

This solution is also capable of reading other types of bubble forms from other grading/survey suppliers.

## Forms Generation

Once you have designed your forms, you can print them from the MFD. The high-quality laser printed form provides the best resolution for scanning later. However, the Grading and Survey solution is capable of processing photocopies of the original forms.

## Form Scanning

Samsung MFDs include automatic document feeders (ADFs) capable of scanning 50 sheets at a time double-sided. This allows you to scan test and survey results quickly. The scanned documents are sent to the location you specify on your network.

## Image Formats

This solution can process forms that have been saved as image files. This allows you to process incoming faxes and pre-scanned forms.

Supported image types include the following:

- Macintosh Picture (PCT)
- Multipage PCX (DCX)
- PCX
- PDF
- Portable Network Graphics (PNG)
- TIFF (Uncompressed)
- TIFF CCITT G3
- TIFF CCITT G3 (2d)
- TIFF CCITT G4
- TIFF Multipage
- Windows Bitmap (BMP)

## Data Export

The Samsung Grading and Survey solution allows you to export your result using many formats. The data export formats include the following:

- Remark (RMK)
- SPSS (SAV)
- Survey Pro SRV (SRV)
- Survey Pro STL (STL, ST3)
- Survey System (DAT)
- ASCII [commas] (ASC)
- ASCII [tabs] (ASC)
- Spreadsheet [commas]
- Spreadsheet [tabs]
- Report (RPT)
- DIF Files (DIF)
- Access 2007 (.ACCDB)
- Access 2000, 2002, 2003 (MDB)
- Access 95, 97 (MDB)
- Access 2.0 (MDB)
- Access 1.1 (MDB)
- Access 1.0 (MDB)
- HTML (HTM)
- dBase V (DBF)
- dBase IV (DBF)
- dBase III (DBF)
- Excel 2007 (XLSX)
- Excel 97-2003 (XLS)
- Excel 5.0-7.0 (XLS)
- Excel 4.0 (XLS)
- Excel 3.0 (XLS)
- Lotus WK3 (WK3)
- Lotus WK1 (WK1)
- Lotus 1-2-3 (WKS)
- Paradox 5.X (DB)
- Paradox 4.X (DB)
- Paradox 3.X (DB)
- Questionmark (QSF)
- ODBC
- SQL Server
- Oracle Database
- XML

## Results Calculations

The Samsung Grading and Survey solution includes the Gravic Remark Quick Stats<sup>®</sup>, which allows you to tabulate surveys or grade tests with the click of a button.

### Survey Statistics

For each item, Quick Stats calculates the following:

- Mean
- Variance
- Standard Deviation
- Standard Error
- Minimum
- Maximum
- Range
- Median
- Skewness
- Kurtosis
- T-Value
- Percentiles
- Confidence Intervals.

For each answer choice, Quick Stats calculates the following:

- Frequencies
- Percentages
- Valid Percent.

### Test Statistics

A Grade Wizard steps you through the process of setting up an answer key, grade scale, questions points, learning objectives, benchmark scores and other grading information for your test.

For each item, Quick Stats calculates the following:

- Mean
- Variance
- Standard Deviation
- Standard Error
- Minimum
- Maximum
- Range
- Median
- Skewness
- Kurtosis
- T-Value

- Percentiles
- Confidence Intervals
- P-values
- Point Biserial Correlation.

For each answer choice, Quick Stats calculates the following:

- Frequencies
- Percentages
- Point Biserial.

For each student, Quick Stats calculates the following:

- Total score
- Raw score
- Grade
- Dev. IQ
- Number correct
- Number incorrect
- Number unanswered.

For each test, the solution calculates the following:

- Number of graded tests and items
- Minimum
- Maximum
- Median
- Range
- Percentile scores
- Mean
- Variance
- Standard Deviation
- Confidence Intervals (1,5,95,99%)
- KR 20
- KR21
- Coefficient (Cronbach) Alpha

## Report Generation

The software provides many standard reports. You can create custom reports that include user specified titles, colors, fonts and graphics.

For a survey, you can run reports such as an item analysis, item statistics or crosstabs to view your results. When you administer tests, the software can automatically grade them. For tests, you can specify an answer key, grade scale, learning objectives, benchmark scores and other options, and then the software can grade the test and produce statistics and graphs representing the item analysis, frequency distribution, student scores and several other test statistics. This solution also produces a grade report for each student which can be printed and handed back to the student.

A Response Report displays all of the handwritten comments for any Image field on one, easy to read, report

## Crosstab Reports

Crosstab reports include a Group Report displaying the means for question groupings, a Grade Report displays each student's results on the test and optionally an image of the test, a Group Report that displays grades for specific subsets of your data.

A variety of graph types are also included:

- Pie
- Bar
- Horizontal Bar
- Line
- Area
- Point
- Polar
- Fast Line

Sample Performance Assessment Form

**Integrated Language Arts**

*Language in Use: Manual Pages 14-16*

Rater Initials	Item	Score
	1 a	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
	1 b	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
	1 c	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
	1 d	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
	1 e	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
	1 f	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
	1 g	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
	1 h	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2

*Book Handling: Manual Pages 17-18*

Rater Initials	Item	Score
	2	<input type="radio"/> 0 <input type="radio"/> 1

*Storytelling: Manual Pages 18*

Rater Initials	Item	Score
	3	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4

*Letter Recognition: Manual Pages 19*

Rater Initials	Item	Score
	4	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4

*Listening: Manual Pages 20-21*

Rater Initials	Item	Score
	5	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4

*Writing--Attitude: Manual Pages 22-23*

Rater Initials	Item	Score
	6	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3

*Written Expression: Manual Pages 24-28*

Rater Initials	Item	Score
	7	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4

Prior early care and education experience – Most recently dominant structured experience (Jan – June)  
**MARK ONLY ONE**

- 1 Head Start
- 2 Pre-K
- 3 Child care center
- 4 Licensed family day care
- 5 Non-public nursery school
- 6 Home/informal care
- 7 Child Find
- 8 K-Retention
- 9 Other

**Mathematics**

*Number Sense and Numeration: Manual Pages 30-35*

Item	Score
1 a-1	<input type="radio"/> 0 <input type="radio"/> 1
1 a-2	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
1 b-1	<input type="radio"/> 0 <input type="radio"/> 1
1 b-2	<input type="radio"/> 0 <input type="radio"/> 1
1 b-3	<input type="radio"/> 0 <input type="radio"/> 1
1 c	<input type="radio"/> 0 <input type="radio"/> 1
1 d	<input type="radio"/> 0 <input type="radio"/> 1
1 e	<input type="radio"/> 0 <input type="radio"/> 1
1 f	<input type="radio"/> 0 <input type="radio"/> 1

*Measurement: Manual Page 36*

Item	Score
2 a	<input type="radio"/> 0 <input type="radio"/> 1
2 b	<input type="radio"/> 0 <input type="radio"/> 1
2 c	<input type="radio"/> 0 <input type="radio"/> 1

*Algebra: Patterns, Manual Page 37*

Item	Score
3 a	<input type="radio"/> 0 <input type="radio"/> 1
3 b	<input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2
3 c	<input type="radio"/> 0 <input type="radio"/> 1

*Geometry: Manual Pages 38-39*

Item	Score
4 a	<input type="radio"/> 0 <input type="radio"/> 1
4 b	<input type="radio"/> 0 <input type="radio"/> 1
4 c	<input type="radio"/> 0 <input type="radio"/> 1
4 d	<input type="radio"/> 0 <input type="radio"/> 1
4 e	<input type="radio"/> 0 <input type="radio"/> 1

*Algebra: Sorting, Manual Pages 40-41*

First Grp	Score	Second Grp	Score
5 a	<input type="radio"/> 0 <input type="radio"/> 1	5 d	<input type="radio"/> 0 <input type="radio"/> 1
5 b	<input type="radio"/> 0 <input type="radio"/> 1	5 e	<input type="radio"/> 0 <input type="radio"/> 1
5 c	<input type="radio"/> 0 <input type="radio"/> 1	5 f	<input type="radio"/> 0 <input type="radio"/> 1

Kindergarten Status – MARK ONLY ONE

- Regular Entry
- K-Retention
- K-1 Split
- Early Entrance
- SE Inclusion



311012

Last Name, First Name

Room: 104

Teacher: Teacher Name

School Name Elementary School

Rater Initials



23

Rater Initials

Rater Initials

Rater Initials

Rater Initials

Do NOT Photocopy

Kindergarten Performance Assessment  
Fall

Rater Initials

## Sample Performance Assessment Report

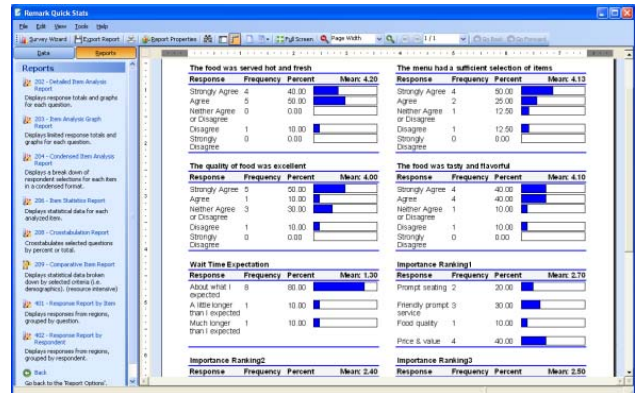
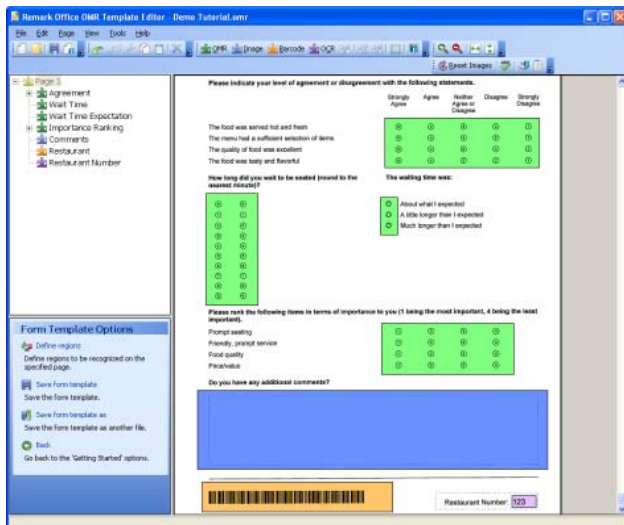
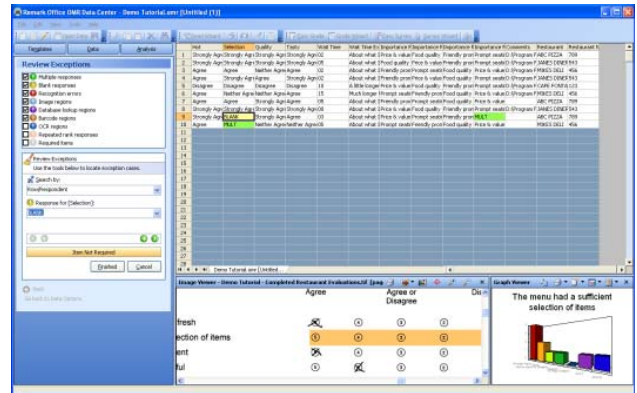
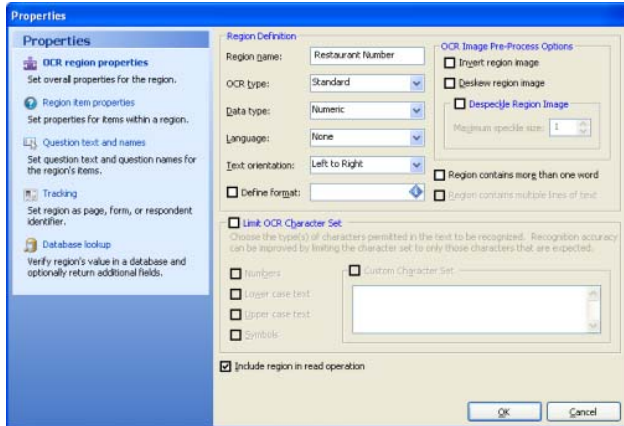
## Fall 200n KPA Individual Performance Profile

Last Name \_\_\_\_\_ First Name \_\_\_\_\_ School Name Elementary School  
 ID: annnnnnn SECTION Room Number Age Sept 1: n years nn months Birth Date: mm/dd/yyyy

<u>Language Arts</u>		<u>Mathematics</u>	
<b>Language (20)</b>	<b>20</b>	<b>Number Sense and Numeration (22)</b>	<b>19</b>
1 a. Giving personal information (2)	2	1 a-1. Numerical discrimination (2)	2
1 b. Using words to express wants (3)	3	1 a-2. Numeral recognition	3
1 c. Explaining a point of view(3)	3	1 b-1. Concept "More" (2)	2
1 d. Solving problems (3)	3	1 b-2. Reason for More (2)	2
1 e. Communicating workable solutions(2)	2	1 b-3. Rational counting (2)	2
1 f. Describing objects (2)	2	1 c. Concept "Same" (2)	2
1 g. Giving directions (3)	3	1 d. Order by Size (3)	3
1 h. Demonstrating social skills (2)	2	1 e. One-to-One correspondence (3)	0
		1 f. Reason of Count (3)	3
<b>Book Handling (5)</b>	<b>5</b>	<b>Measurement (5)</b>	<b>5</b>
(Shows how to read a book)		2 a. Tallest (1)	1
<b>Storytelling (8)</b>	<b>8</b>	2 b. Shortest (1)	1
(Uses a series of pictures to tell a story)		2 c. Order by size (3)	3
<b>Letter Recognition (5)</b>	<b>5</b>	<b>Algebra Patterns (5)</b>	<b>3</b>
(Names capital letters)		3 a. Identify Patterns (1)	1
<b>Listening (5)</b>	<b>5</b>	3 b. Explain Patterns (2)	0
(Attends in a group setting for 15-20 minutes and responds appropriately)		3 c. Extend Patterns (2)	2
<b>Writing--Attitude (3)</b>	<b>3</b>	<b>Geometry (8)</b>	<b>8</b>
(Attempts an age-appropriate writing task without adult intervention)		4 a. Draw a Square (2)	2
<b>Written Expression (4)</b>	<b>4</b>	4 b. Attributes of Square (2)	2
(Communicates in writing using age-appropriate pictures, scribbling and letter strings)		4 c. Draw a Circle (1)	1
		4 d. Attributes of Circle (2)	2
		4 e. Circle inside Square (1)	1
		<b>Problem Solving (10)</b>	<b>10</b>
		5 a. Sorts / Criterion (1st) (2)	2
		5 b. Tells / Criterion (1st) (1)	1
		5 c. Sensible grouping (1st) (2)	2
		5 d. Sorts / Criterion (2nd) (2)	2
		5 e. Tells / Criterion (2nd) (1)	1
		5 f. Sensible grouping (2nd) (2)	2
<b>Total Language Score (Possible 50)</b>	<b>50</b>	<b>Total Mathematics Score (Possible 50)</b>	<b>45</b>
		<b>Total Score (Possible 100)</b>	<b>95</b>

Tuesday, February 19, 2008

## Easy to Use GUI



For more information about the Samsung Grading and Survey solution, please contact your Samsung representative or visit SAMSUNG at [www.samsung.com/printer](http://www.samsung.com/printer) or call us at 1-800-SAMSUNG.

### About Samsung Electronics America, Information Technology Division

Samsung's Information Technology Division (ITD) markets the award-winning line of Samsung printers including; black & white laser printers, black & white multifunction printers, color laser printers, and color multifunction printers. Samsung ITD is committed to supporting the needs of its channel partners in the professional, commercial, corporate, and small/home markets. ITD is a division of Samsung Electronics America (SEA), a U.S. subsidiary of Samsung Electronics Company, Ltd. (SEC). The SEA organization oversees the North American operations of Samsung, including Samsung Telecommunications America, LP, Samsung Electronics Canada, Inc. and Samsung Electronics Mexico, Inc. For more information, please visit [www.samsung.com](http://www.samsung.com), or call 1-800-SAMSUNG.

### About Samsung Electronics

Samsung Electronics Co., Ltd. is a global leader in semiconductor, telecommunication, digital media and digital convergence technologies with 2007 consolidated sales of \$103.4 billion. Employing approximately 150,000 people in 134 offices in 62 countries, the company consists of five main business units: Digital Media Business, LCD Business, Semiconductor Business, Telecommunication Business and Digital Appliance Business. Recognized as one of the fastest growing global brands, Samsung Electronics is a leading producer of digital TVs, memory chips, mobile phones and TFT-LCDs. For more information, please visit [www.samsung.com](http://www.samsung.com).



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