Description of **SmarterMeasure**

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SCALES AND SUBSCALES

Section of SmarterMeasure	Subscales	Number of Items	Average Length of Completion
Life Factors	 Availability of time to study Availability of a dedicated place to study Reason for continuing one's education Support resources from family, friends, and employers Perception of academic skills Optional financial items 	20 or 24	5 minutes
Individual Attributes	 Procrastination Time management Persistence Willingness to ask for help Academic attributes Locus of control 	24	5 minutes
Learning Styles	Identifies the degree to which they possess each of the following learning styles: Visual Verbal Social Solitary Physical Aural Logical	21	5 minutes
On-Screen Reading Skills	 Reading rate On-screen reading recall Passages exiled at multiple grade levels (8, 9, 10, 11, 12, Freshman) 	11	10 minutes
Technical Competency	Computer competency Internet competency	10	5 minutes
Technical Knowledge	 Technology usage Technology in your life Technology vocabulary Personal computer/Internet specifications 	23	5 minutes



BACKGROUND

Section of SmarterMeasure	Subscales	Number of Items	Average Length of Completion
LMS Competency	LMS experience / competency	10	3 minutes
Typing Skills	Typing rateTyping accuracy	1	3 minutes
Cognitive Models			
Math Readiness	 Computation Factoring Decimals Equations Fractions Percents Integers Currency Time Geometry 	30	30 minutes
Writing Readiness	 Grammar, usage, and style Structure of academic writing Writing apprehension 	30	30 minutes



SUBSCALE DEFINITIONS

LIFE FACTORS

Place to Study – The degree to which the student has availability of an appropriate place that is conductive to study.

Reason for Education – The degree to which the student has a strong reason for continuing their education.

Support Resources – The degree to which the student has access to support resources from family, friends, and employers.

Perception of Academic Skills – The degree to which the student has a strong perception of their own academic/study skills.

Time to Study – The degree to which the student has ample time to engage in study and academic tasks.

INDIVIDUAL ATTRIBUTES

Academic Attributes – Measures a person's level of prior academic success, comfort, and skill levels with reading and writing, and specific motivations for engaging in higher education.

Help Seeking - Measures the degree to which the student is willing to ask for help when needed.

Locus of Control – Measures the degree to which the student feels that they are in control over their own academic success based on the degree of effort they exhibit.

Persistence – Measures a person's tendencies toward task completion and deadline utilization as well as past completion of academic goals and their level of confidence that they will continue to completion of their current academic goals.

Control Over Procrastination –Measures a person's habits regarding delaying working, continuing working, and completing academic assignments in a timely manner.

Time Management – Measures the student's habits toward managing the time that they have available to work on academic tasks.

LEARNING STYLES (MULTIPLE INTELLIGENCES MODEL)

Visual – Learners who think in terms of physical space, as do architects and sailors. They are very aware of their environments. They like to draw, do jigsaw puzzles, read maps, daydream. They can be taught through drawings, verbal and physical imagery. Beneficial tools include models, graphics, charts, photographs, drawings, 3-D modeling, video, videoconferencing, television, multimedia, and texts with pictures/charts/graphs.

Physical – Learners who use the body effectively, like a dancer or a surgeon. They posses a keen sense of body awareness. They like movement, making things, touching. They communicate well through body language and can be taught through physical activity, hands-on learning, acting out, role playing. Beneficial tools include equipment and real objects.

Aural – Learners who show sensitivity to rhythm and sound. They love music, but they are also sensitive to sounds in their environments. They may study better with music in the background. They can be taught by turning lessons into lyrics, speaking rhythmically, tapping out time. Beneficial tools include musical instruments, music, radio, stereo, CD-ROM, and multimedia.



SUBSCALE DEFINITIONS

Social – Learners who appreciate understanding and interacting with others. These students learn through interaction. They have many friends, empathy for others, street smarts. They can be taught through group activities, seminars, dialogues. Beneficial tools include the telephone, audio conferencing, time and attention from the instructor, video conferencing, writing, computer conferencing, and E-mail.

Solitary – Learners who appreciate understanding one's own interests, goals. These learners tend to shy away from others. They're in tune with their inner feelings; they have wisdom, intuition and motivation, as well as a strong will, confidence and opinions. They can be taught through independent study and introspection. Beneficial tools include books, creative materials, diaries, privacy and time. They are the most independent of the learners.

Verbal – Learners who appreciate using words effectively. These learners have highly developed auditory skills and often think in words. They like reading, playing word games, making up poetry or stories. They can be taught by encouraging them to say and see words, read books together. Tools include computers, games, multimedia, books, tape recorders, and lecture.

Logical – Learners who prefer reasoning and calculating. They think conceptually, abstractly and are able to see and explore patterns and relationships. They like to experiment, solve puzzles, ask cosmic questions. They can be taught through logic games, investigations, mysteries. They need to learn and form concepts before they can deal with details.

READING

Reading Rate – The number of words per minute at which a learner can read unfamiliar academic content when reading for comprehension.

Reading Recall – The degree to which a learner can recall information based on five categories of comprehension: sequencing, factual information, inferential information, close process and the main idea of the passage.

TECHNICAL KNOWLEDGE

Technology Usage – The degree to which a learner possesses the knowledge and skills necessary to utilize common instructional technology.

Technology in Your Life – The degree to which an individual integrates technology into common life tasks. The more comfortable a person is with using technology for non-academic tasks (shopping, social media, entertainment) the more comfortable they are likely to be using technology for academic tasks.

Technology Vocabulary – The degree to which a learner comprehends the definitions and usage of common technical terms used in education.

Personal Computer / Internet Specifications – Information about the devices which the learner will be using to complete academic tasks.



SUBSCALE DEFINITIONS

TECHNICAL COMPETENCY

Computer Competency - The degree to which a learner possesses basic computing skills.

Internet Competency – The degree to which a learner possesses basic skills for utilizing online learning resources.

KEYBOARDING

Keyboarding Rate – The number of words typed per minute.

Keyboarding Accuracy – The number of words typed mer minute.

Keyboarding Accuracy – The number of typing errors detected.

OVERVIEW OF ASSESSMENT SECTIONS

PERSONAL INFORMATION

The opening screen of SmarterMeasure collects demographic information such as name, email address, age range, gender and the number of online courses the person has taken. In addition to these standard demographic variables, schools can add custom variables to the opening screen. Schools may opt-out of asking these demographic variables.

LIFE FACTORS

The life factors section of SmarterMeasure quantifies variables in five areas: time, place, reason, resources, and skills. Many students strongly desire to continue their education. However, often other situations in life deter them from being able to do so. The Life Factors section asks questions about other elements in their life that may impact their ability to continue their education. Students may be able to modify circumstances which impact some of these life skills. If so, they are encouraged to take appropriate action to help themselves succeed. But some of the circumstances in life may be beyond their control. If this is the case, just being aware of these realities and planning accordingly may be beneficial for the students. There are 20 items in this section with each of the five factors being measured by four items. The items are mostly measured on a five-point likert-type scale.

INDIVIDUAL ATTRIBUTES

The individual attributes section of SmarterMeasure measures traits, habits and attitudes that impact one's readiness for learning. This section measures attributes categorized by these six sub-scales: time management, procrastination, persistence, academic attributes, locus of control, and willingness to ask for help. There are 24 items in this section with each of the six attributes being measured by four items. The items are measured on a four-point likert-type scale of not like me at all, not much like me, somewhat like me, or very much like me.



OVERVIEW OF ASSESSMENT SECTIONS

LEARNING STYLES

The learning styles section of SmarterMeasure identifies the preferred learning style(s) of the student. The learning styles inventory is based on the multiple intelligences model which measures the following seven learning styles: visual, verbal, social, solitary, physical, logical, and aural. Schools have the option of selecting a 35 or 21 item instrument for this section.

ON-SCREEN READING RATE AND RECALL

The on-screen reading rate and recall section of SmarterMeasure consists of passages which are selected by the institution based on the appropriate Flesh-Kincaid Grade Level for the participants. The section begins with an instruction screen which informs the student that they are about to read a passage and then be quizzed on their recall of the passage. Participants are notified that they will not be able to view the passage during the assessment and that their reading is being timed. The on-screen reading rate and recall assessment contains eleven items which are each measured by a multiple-choice item containing three choices.

SmarterMeasure contains multiple reading passages at grade levels 8 through 12. Recall of these passages is measured by ten items which are based on the following five categories of comprehension: sequencing, factual information, inferential information, close process and the main idea of the passage.

TECHNICAL COMPETENCY

The technical competency section of SmarterMeasure measures the degree to which the participant possesses basic instructional technology skills. In this section students demonstrate mastery of the technology skills through ten technology related tasks. The tasks are identifying a properly formatted email address, following a link on a web page, opening a file, identifying an appropriate software application for a specific task, downloading and listening to an audio file, working within a file structure, identifying an email attachment, saving a file, printing a file, and using a search engine. Mastery of the tasks are indicated through ten multiple choice and fill-in-the-blank questions.

TECHNICAL KNOWLEDGE

The technical knowledge section of SmarterMeasure measures the degree to which the participant possesses knowledge of items related to instructional technology. In this section there are seven technology usage items which measure the degree to which the participant uses specified instructional technologies. This item is measured through multiple choice items containing four choices. The technology in your life section contains two items through which the participant indicates the level at which they integrate technology into other areas of their life. This section is measured through a dropdown menu of numerical choices which indicate the appropriate frequency of the technology integration. The technology vocabulary section contains ten items which are measured by four-choice multiple choice questions. The personal computer / Internet specification section contains four items and allows the student to report facts about the primary computer and Internet connection which they will be using to participate in their courses.

TYPING SPEED AND ACCURACY

The typing speed and accuracy section of SmarterMeasure is a skills test through which the student demonstrates their typing skills. Participants are first allowed to select the orientation of the sample passage to be typed in relation to the typing input window. Students then type the text. The score report visually presents their errors and typing rate.



OVERVIEW OF ASSESSMENT SECTIONS

LMS EXPERIENCE/COMPETENCY

The LMS Experience/Competency Scales allows the learner to report on the level of prior experience they have in using a learning management system (LMS) which is an indicator of their perceived level of competency in using an LMS. Participants are asked to rate their experience/competency on ten common tasks conducted while using an LMS such as viewing announcements, participating in a discussion board, and using an assignment drop box. The items are not LMS brand specific nor are they a skills text. The items utilize a five point scale ranging from "I have no experience in this area." to "I have had extensive experience in this area and I am competent enough to teach others."

MATH READINESS INDICATOR

The purpose of the Basic and College Math Readiness Indicators is to identify learners who may need additional testing and support to be successful in a math course. The assessment is not intended to be a placement exam, rather a screening device to identify learners who may need additional testing for placement or remediation. The Basic Math Readiness Indicator is a thirty-item assessment measuring twenty-four skills grouped into ten concepts - computation, factoring, decimals, equations, fractions, percent, integers, currency, time and geometry. Each of the thirty items are equally weighted at 3.33 points for a total point value of 99.9.

WRITING READINESS INDICATOR

The purpose of the SmarterMeasure Writing Readiness Indicator is to identify learners who may need additional testing and support to be successful in a college-level course which requires writing skills. The assessment is not intended to be a placement exam, rather a screening device to identify learners who may need additional testing for placement or remediation. The Writing Readiness Indicator is a thirty-item assessment measuring readiness across these concepts - structure of academic writing, grammar, usage, style, as well as writing apprehension. Each of the thirty items are equally weighted at 3.33 points for a total point value of 99.9.





OVERVIEW OF ASSESSMENT SECTIONS

SCORE REPORT AND GUIDE TO INTERPRETATION

Three categories of reporting are provided.

- 1. Student Report. Immediately upon completion of SmarterMeasure students are provided a score report and a guide to interpreting the scores. Scores for each of the scales and sub-scales measured by SmarterMeasure are presented through color-coded graphics and explanatory text. Students are provided their composite scores through a color-coded chart ranking their performance on a four-point scale of opportunity for improvement through strength. The student's individual SmarterMeasure scores can be compared to the national averages through a color-coded scatter plot. SmarterMeasure scores are presented through visually appealing graphics resembling speedometers, radars, and dart boards. Explanatory text is provided for each item scored in SmarterMeasure. The report concludes with over thirty links to additional resources for remediation and support. Schools may also customize the resources for remediation section by adding their own resources if applicable.
- 2. Educator Report. The Educator Report is designed to present relevant, individual student information to educators such as advisors, guidance counselors, success coaches, faculty members, and other administrators. The Educator Report provides an executive summary of the student's scores and the educator can click from the Educator Report to the full Student Report.

The Educator Report contains three sections: Readiness Ranges, Grit Grid, and Readiness Resources.

The Readiness Ranges section indicates the student's placement into low, medium, or high levels of readiness. The cut points for determining these classifications can be adjusted by the school for each assessment group.

The Grit Grid section graphically presents the student's quantitative results on each of the sub-scales measured. The Grid allows the educator to graphically view the student's strengths and opportunities for improvement. A definition of each of the constructs measured is provided within the Grid.

The Readiness Resources section provides a link to a recommended, free, web-based resource for the three items on which the student scored the lowest.

The Educator Report is designed to equip an educator with the most relevant information about the student's scores to facilitate a conversation with the student about their readiness to learn.

3. Administrative Reports. Persons with appropriate levels of access to SmarterMeasure data can log into the Administrative Panel and generate individual and aggregate reports. These reports include individual student reports, data at-a-glance for a group of students, descriptive and demographic analytics across a population of students, and aggregate readiness ranges. Through the Administrative Panel data at the sub-scale level can be exported into an Excel or delimited data file for additional statistical analysis.

CUSTOM USER INTERFACE

The SmarterMeasure assessment is provided to students through a custom user interface which is based on the visual identify of the student's school. You can view our <u>client list</u> to view the interfaces of some of our clients.

