Summary
Houston Community College’s Distance Education (DE) developmental education (DevEd) course retention rates are lower than target retention rates (see Appendix A). Often, new students or less academically prepared students, enroll in DE courses unaware of DE’s differing demands and intensity versus face-to-face courses. HCC did not require any mandatory measurement to assess readiness for online learning. As such, students were open to enroll in an online environment without the minimum technical or computer proficiencies to succeed. A mandatory screening tool, such as SmarterMeasure (SM), formerly known as READI, was adapted and implemented for HCC to ensure proper placement in DE sections of student success and developmental education courses. By providing a preventive intervention, HCC can facilitate appropriate student placement into the “best fit” learning environment.

Objective: To implement SmarterMeasure as a prerequisite for students enrolling in DE student success and developmental education courses (GUST 1270, LEAD 1200, MATH 0306, MATH 0308, MATH 0312, and ENGL 0310 courses).

What is SmarterMeasure? (from http://smartermeasure.com/about)
SmarterMeasure is a web-based tool that assesses a learner’s likelihood for succeeding in an online learning program. It indicates the degree to which an individual possesses attributes, skills and knowledge (Self-motivation, Time-management skills, Self-discipline, On-screen Reading Rate and Recall, Persistence, Availability of time, Ability to use a laptop, printer, software, and the Internet, Typing speed and accuracy) that contribute to success in online learning. SmarterMeasure does not rely on simple self-assessment questions with obvious "right" and "wrong" answers. Rather, SmarterMeasure uses a sequence of activities to measure the degree to which students possess the traits needed for success in studying at a distance. SmarterMeasure provides an immediate score and diagnostic interpretation of results to the student and to their prospective school. SmarterMeasure includes five major assessment components that measure:

- On-screen Reading Rate and Recall
- Technical competency
- Individual attributes
- Preferred learning styles
- Typing speed and accuracy

Design and Development
In April 2010, as part of the Leadership Excellence Institute project, Dr. Lesli Lam Rowell, under sponsorship from Dr. Charles Cook, began researching the use of SM to potentially combat HCC’s low retention rates for new and at-risk students interested in enrolling in Distance Education sections of student success and developmental education courses.
Initial plans with SmarterServices, the developers of SmarterMeasure, were established to tailor SM to meet specific institutional needs. Dr. Rowell, along with Krasi Shapkarova (a DE counselor) researched SmarterServices’ Student Readiness Report (taken from 209,025 unique students from 274 higher education institutions who took the SmarterMeasure assessment from July 1, 2009 to June 30, 2010): http://smartermeasure.com/research

It was discovered that little research and no comparable studies had been conducted on the use of the SM as a mandatory screening tool for at-risk community college students. A survey of HCC students enrolled in Fall 2010 DE GUST 1270 & DevEd sections was conducted. The findings revealed that:

1. The majority enrolled in a DE section vs. that of a face-to-face because of job conflicts. Less than five percent reported that they chose the mode due to their computer and Internet experience. See Appendix B, Chart I
2. The majority believed they were prepared for an online environment. See Appendix B, Chart II
3. The majority was not aware that SmarterMeasure was available, but would have taken it had they known. See Appendix B, Chart III
4. The majority expressed an interest in taking a free online tutorial. See Appendix B, Chart IV

These student responses suggested that the implementation of SmarterMeasure is needed and would be welcomed by students.

Dr. Rowell, Ms. Shapkarova, and the LEI SmarterMeasure Team consulted with GUST 1270, developmental education council, and other faculty and student services staff to determine selected components, cut-off scores, and testing parameters.

**Implementation**

During subsequent months an integration plan between SmarterServices and HCC IT was created to automate SM into HCC’s ERP system, PeopleSoft (PS). SmarterServices provided the administrative tools and data for HCC’s Information Technology (IT) department to complete such an implementation. A team of IT specialists developed a business process for creating test IDs, a single sign-on link to identify users, a testing environment, and production deadlines. In addition, PS prerequisites were set, web instructions were developed, and courses were loaded.

In summer and early fall of 2010, presentations were conducted district-wide to inform student services staff, Deans, and faculty of new prerequisites. Other marketing efforts included listserv, HCC News, and email publications. Dr. Rowell and the LEI Team presented the final project proposal to Dr. Mary Spangler and her executive cabinet on November 19, 2010. In early December, DE Counseling team assisted IT in extensively testing system capabilities. On December 16, 2010, the project went live.
**Future Plans**

This LEI project hopes to acquire funding to investigate and analyze the effectiveness of the SmarterMeasure implementation. This would include an examination of the impact and application for future modifications and expansion. Depending on the success of this initiative, one possibility is the expansion of the prerequisite to other DE courses. A grant development plan for the analysis of this project is currently underway. Proposals have been and will be submitted to local and national conferences.

**Acknowledgements**

*Principal Investigator*  
Dr. Lesli Rowell

*Research Assistant*  
Krasi Shapkarova

*Project Sponsor*  
Dr. Charles Cook

*DE Faculty and Administrators*  
DE Developmental Education Faculty  
DE Student Success Faculty  
Dr. Stephen Levey

*LEI Project Team*  
Evelyn Ballard, Dr. Micheal Edwards, Dr. Richard Merritt, Evelyn Velasquez, Dr. Pauline Warren

*IT Development Team*  
Bill Carter, Ron Agatep, Melissa Anderson, Edgar Chucle, Maria Garcia, Kim Moreno

*Testing Team*  
Anjabeen Ashraf, Tiffany Bunch, Tamara Herod, Lisa Parkinson, Elu Su

*Course Prerequisite Setup*  
Mark Tengler, Eva Gonzalez
APPENDIX A

DevEd and GUST 1270 Comparative Fall 2009
% Completion Rates (C or Better)

Completion Rate

60  64  54  56  52  66  60  72
MATH 0306  MATH 0308  MATH 0312  ENGL 0310  GUST 1270

Distance Education
Face-to-Face
**APPENDIX B**

**Student Survey**

**Chart I**

What is the main reason you (or why do you think students) enroll in a Distance Education class instead of a face-to-face class?

- Belief that DE classes would be easier (7%)
- Face-to-face classes were full (8%)
- Conflicts with childcare (13%)
- Conflicts with my job (11%)
- Transportation problems (4%)
- Experienced or savvy with computers and Internet (42%)

**Chart II**

Do you believe you were adequately prepared for the Distance Education environment?

- Yes (86%)
- No (14%)
Chart III

Are you aware that HCC offers a free assessment of your readiness for online classes? (ex. READI/SmarterMeasure)

- 20% Yes, I took the assessment
- 25% Yes, but I did not take the assessment
- 34% No, I was not aware, but would like to take it
- 21% No, I am not interested

Chart IV

Would you be interested in free online tutorials aimed at improving your online skills (ex. Computer and Internet knowledge, learning styles, etc.)?

- 35% Yes
- 65% No
APPENDIX C

Registration Workflow

Student directed to F2F, Hybrid, or Web-enhanced. Encouraged to use tutorials, contact counseling. Can retake after 14 days.