

<b>Committee for Mathematics Achievement Review of <i>Autoskill</i> by Educational Technology Partners</b>					<b>Comments</b>
<b>Theoretical/ Research Basis</b>	Program based on solid theories of learning <b>and</b> teaching mathematics conceptually.	Program based on solid theories of learning <b>or</b> teaching that focus on mathematics conceptual development.	Program based on theories of learning and teaching that focus primarily on skill mastery.	Program is not based on any theory of learning or teaching.	The program is based on a “practice makes proficient” philosophy, utilizing a task analysis and mastery learning approach.
<b>Effects on Student Achievement</b>	Randomized trial experimental research indicates program’s effect on student achievement.	Quasi-experimental design research indicates program’s effect on student achievement	Non-experimental or anecdotal evidence indicates program’s effect on student achievement.	No evidence of program’s effect on student achievement is available.	Study in Kansas showed a significant increase in grade level scores in a pre- and post administration of STAR Math with 890 students. One study in Florida showed significant gains in achievement over a control group of students.
<b>Mathematics Content</b>	Program’s mathematics content aligns highly with Core Content 4.1 (90%)	Program’s mathematics content aligns moderately with Core Content 4.1 (75%).	Program’s mathematics content aligns minimally with Core Content 4.1 (50%)	Program’s mathematics content alignment with Core Content 4.1 not evident or provided.	Program states the focus is on NCTM Standards that address “fundamental math skills with a particular emphasis on computational fluency.” The content has not been aligned to Core Content 4.1.
<b>Depth of Knowledge</b>	Program focuses on Webb’s Depth of Knowledge Levels 1, 2, and 3.	Program focuses on Webb’s Depth of Knowledge Levels 1 and 2 only.	Program focuses on Webb’s Depth of Knowledge Level 1 only.	Program’s focus on Depth of Knowledge is not evident.	In reviewing tasks and assessments, Committee members found very few tasks considered to be at level DOK 2.
<b>Instructional Strategies</b>	Program employs multiple and appropriate instructional strategies to develop all DOK levels.	Program employs limited but appropriate instructional strategies to develop most DOK levels.	Program employs limited instructional strategies to develop some DOK levels	Instructional strategies employed by the program are not clear.	Program’s instructional sequence is: introduce terms, develop computational skill, and apply to one-step or two-step word problems.
<b>Assessment Strategies</b>	Program utilizes formative and summative assessments focused on all DOK levels.	Program utilizes formative and summative assessments focused on DOK levels 1 and 2.	Program utilizes summative assessments focused on all DOK levels.	Program utilizes summative assessments focused on DOK level 1 and 2.	Most formative and summative assessments focus on mastery and automaticity in computational skills and facts. (DOK 1)
<b>Remediation Strategies</b>	Program provides specific remediation strategies for common misconceptions.	Program provides general remediation strategies for common misconceptions.	Program’s remediation strategies focus on specific factual/computation errors.	Program’s remediation strategies do not have a focus.	Program focuses on correcting specific factual/computation errors. After one error, students are provided one hint After next error, students are provided correct answer.
<b>Reporting System</b>	Reporting system includes individual and composite data for teachers, parents and students.	Reporting system includes individual or composite data for teachers, parents and students.	Reporting system includes individual or composite data for teachers.	Program does not include a reporting system.	Software provides individual and composite data that is available to teachers, students, and parents.
<b>Professional Development</b>	Program offers PD that assists teachers in diagnosis and remediation.	Program offers PD that assists teachers in limited diagnosis or remediation.	Program offers PD that assists teachers in technical aspects of program.	Program does not offer PD for teachers.	PD includes two days of initial training with one day of follow-up; an additional day is available upon request. Training is based on implementation of program, use of placement tests, and “moving students forward.”

<b>Committee for Mathematics Achievement Review of <i>Autoskill</i> by Educational Technology Partners (Continued)</b>					<b>Comments</b>
<b>Teacher Materials/Technology</b>	Teacher materials/technology provide substantial assistance to teachers in diagnosis and remediation.	Teacher materials/technology provide some assistance to teachers in diagnosis and remediation.	Teacher materials/technology provides minimal support to teachers.	No materials or technology are available to teachers.	The elaborate reporting system gives feedback about student performance. There is no evidence of providing assistance to teachers in addressing misconceptions, which is necessary for effective remediation.
<b>Student Materials/Technology</b>	Student materials/technology are user friendly and developmentally appropriate.	Student materials/technology are user friendly or developmentally appropriate.	Student materials/technology provide minimal support for students.	No materials or technology are available for students.	Materials are user-friendly and individualize pace by student ability to get correct answers.
<b>Diverse Learners</b>	Program allows students to progress individually at an appropriate pace AND addresses the needs of diverse learners.	Program allows for student to progress individually at an appropriate pace OR addresses the needs of diverse learners.	Program has some individualized components and/or addresses the needs of some diverse learners.	Program is essentially the same for all students.	Materials individualize by pace and correct answers. Accommodations are made for students with reading needs through voice synthesized reading. Mode, presentation style, multiple representations, or complexity are not addressed.
<b>Program Purpose and Use</b>	This program is designed specifically to supplement existing curriculum by helping students build foundational skills in ten mathematics areas.				
<b>Costs</b>	Cost ranges from \$9,000 for 10 concurrent student users to \$21,000 for unlimited concurrent student users.				
<b>Time</b>	In addition to regular mathematics classroom instruction, developers recommend 30-minute sessions for elementary and middle school students and 45-minute sessions for high school students for 3 to 5 times a week.				