What Defines Online Tutoring?

Because of our nation's emphasis on educational reform, as well as the inherent appeal of any new technology, online after-school tutoring has gained a great deal of popularity (and notoriety) over the past five years. The term "online tutoring" now encompasses a myriad of very disparate services and learning models. Based on a review of the current providers of online tutoring, there are certain characteristics that we have discovered to be fundamental in defining what online tutoring is – and is not.

First, any online tutoring application must harness three important components that all online spaces share: *interactivity, geographic independence*, and *measurability*. *Interactivity* relates to the power to connect people who need a specific service with those who are qualified to offer that service. *Geographic independence* describes the capability to overcome geographic barriers in providing this service. And *measurability* involves the ability to capture data on an online activity, and use this data productively to continually better the online user's experience.

So how does this relate to "online tutoring"? The tenets above provide a roadmap to four simple guidelines for online tutoring:

What Makes Online Tutoring?

1. **Certified U.S.-Based Teachers.** Whether online or offline, "classrooms" rely on the expertise of true teachers, trained in both the relevant subject matter and instructional methodology. Some so-called "online tutors" utilize "instructors" for their service, an undefined designation that can connote practically any educational background. This places at risk the strong foundational gains that live teacher interaction can provide. Many programs supplement a core of direct instruction with asynchronous activities, such as workbooks or software. These devices can be effective secondary tools for continual learning, but the key here is that the foundation for academic growth still resides in the direct interaction between a qualified teacher and a student.

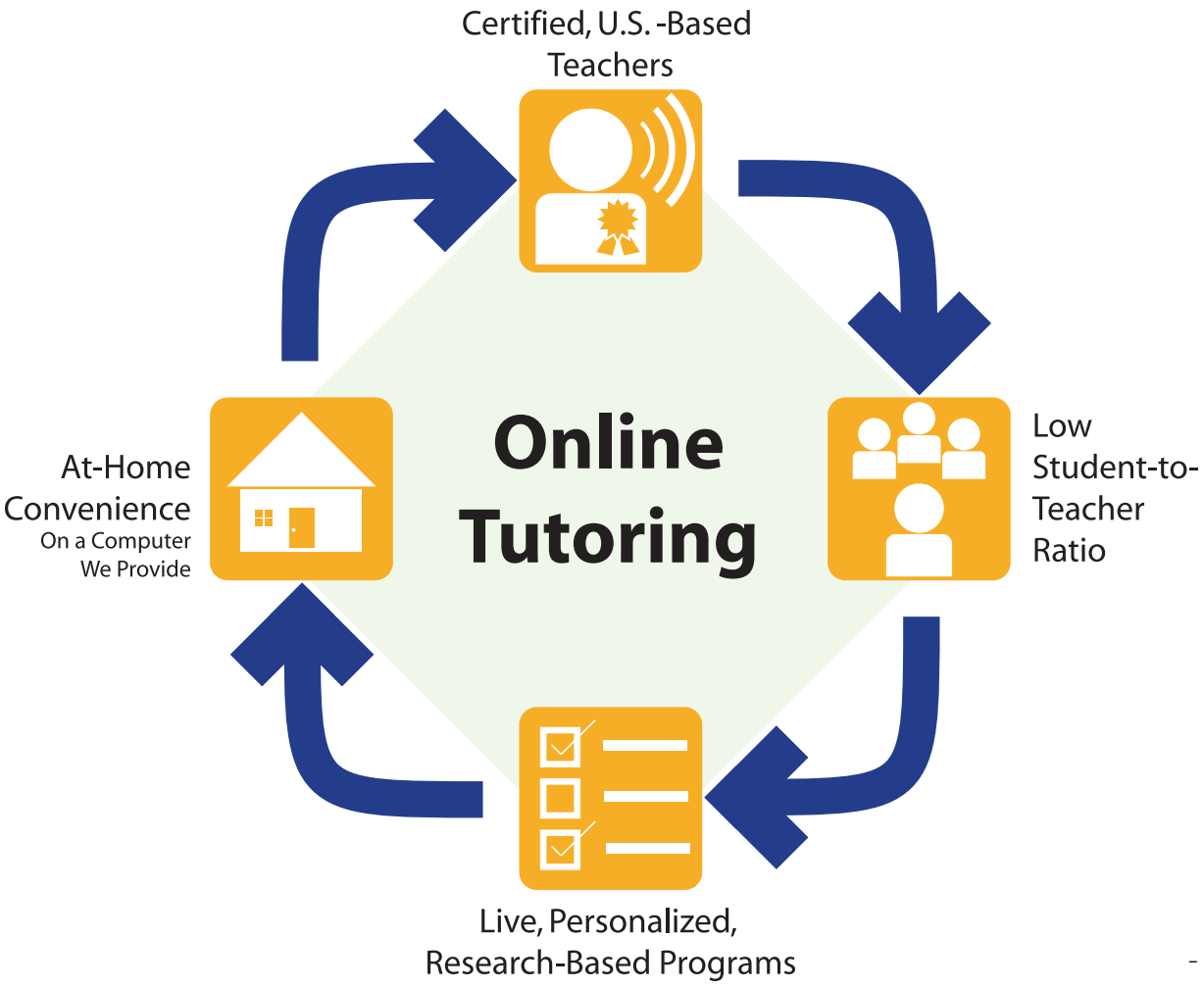
2. **Low Student-to-Teacher Ratio.** Without substantial contact and communication between students and teachers, any tutoring program will struggle to elicit significant changes in a student's academic growth or self-confidence. Student-to-teacher ratios of no greater than 5:1 allow tutors to deliver high-impact instruction in the shortest period of time possible. Low ratios also make instruction much more engaging for students, and deter students from yielding to external distractions or peer pressure during their sessions.

3. **Live, Personalized, Research-Based Programs.** After-school tutoring should, by definition, be more tailored to individual needs than typical in-class instruction, particularly for students who are underperforming in the classroom. Personalization is especially critical for online customized to meet the needs of any of their students. Additionally, because online instruction offers tutors the ability to capture a much broader, richer set of data on the student's academic progress, personalization can extend throughout the student's program, in the form of adjustments to curriculum and/or pace of instruction.

4. **At-Home Convenience.** Many after-school tutoring programs have rigid schedules on school sites, which makes attendance a challenge, especially for busy middle- and high-school students. Because online programs are not constrained to any specific geographic location, they should offer a wider range of time slots than offline programs, and therefore facilitate stronger, more consistent attendance rates.

These characteristics serve to not only measure the effectiveness of an online tutor, but to designate a service as being "online tutoring" in the first place. For example, certain educational games and software are sometimes labeled as "online tutoring", but their typical lack of live instruction and personalization makes this an inaccurate description.

So why are these criteria so important? Because any online service that does not meet these factors is less likely to produce significant academic gains in the long run. Generating (and accurately measuring) student progress is consistent with the present national emphasis on accountability within public education. Accountability can be characterized as measurement combined with continual optimization. This research-based, data-driven approach is precisely the forte of true, high-quality online instruction.



Does Online Tutoring Work?

After several years of real-world application, we can now better assess the current state of online tutoring. The current evidence strongly suggests that true online tutoring has matured into a proven effective method of supplemental instruction. For example, at Catapult Online, America's leading provider of online tutoring for underperforming students, several points indicate the effectiveness of and positive reaction to online tutoring:

- Students who completed at least 20 hours of Catapult Online tutoring averaged grade-level gains of about one full year in their chosen program, as measured by a nationally normed diagnostic pre- and post-assessment. This statement held true for both math and reading programs.

- Because of its flexible scheduling and individual instruction, Catapult Online has also been able to produce superb attendance rates for our program. Students attend Catapult Online sessions at greater than a 85% clip - well above that national average of 65% for other supplemental service providers.

- Catapult Online has proven to be a strong ally for in-need families and students throughout America. The following statistics are from 2005-06 parent surveys received to date from parents whose students completed their program:

  - 94% rated their overall satisfaction with the Catapult Online program as either a 4 or 5 (based on a 5-point scale)
  - 91% rated the "ease of at-home instruction" as either a 4 or 5
  - 90% rated the effectiveness of Catapult Online as either a 4 or 5

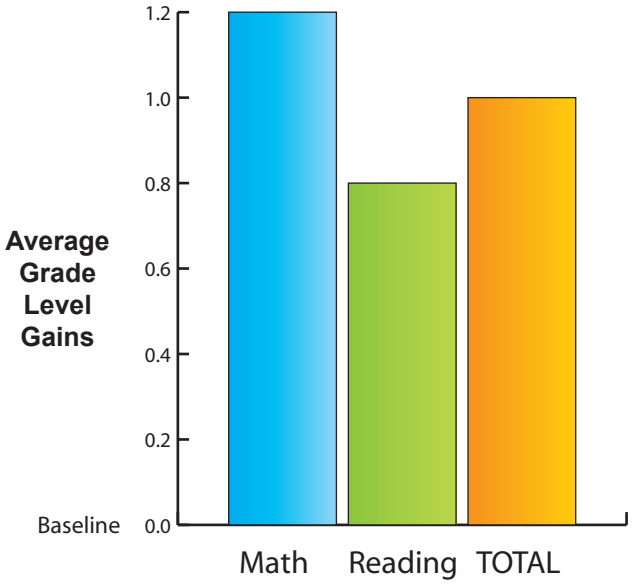
This high level of approval can be attributed to a number of factors. Students were drawn to the engaging, interactive nature of online tutoring, while the convenience, security and safety of at-home instruction appealed to concerned parents, in both rural and large urban areas. Both parents and students responded very well to the intimate setting of the "online classroom"; at no point were student-to-teacher ratios higher than 3:1.

Perhaps most interesting is the unique impact that online tutoring can have on students in rural communities. The dearth of on-site educational service providers in rural regions puts an even greater premium on finding creative methods to assist in-need students in these communities. Rural areas require a solution that addresses their distinctive challenges around geography, logistics, and scale (since there are typically fewer students per district than in urban or suburban districts). True online tutoring is an ideal response to these needs.

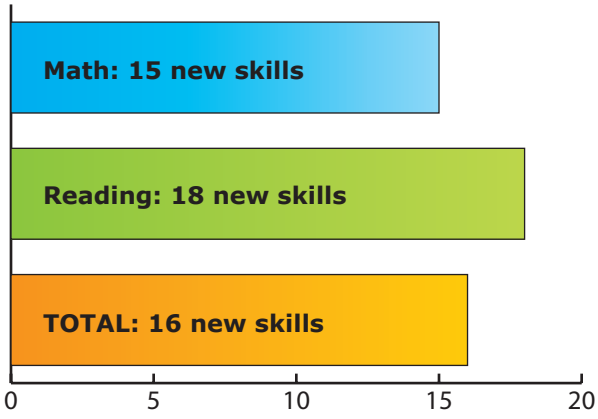
2005-2006 Educational Gains

Catapult Online has served over 9,000 students across more than 50 districts throughout America.

GRADE-LEVEL GAINS

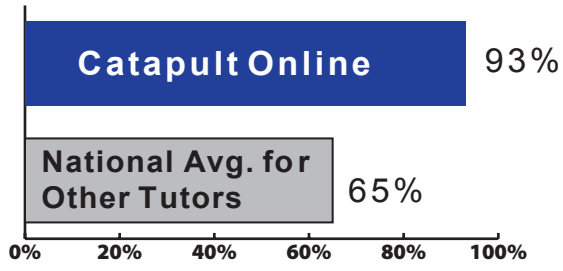


Average Number of Skills Mastered per Student



***Educational gains are calculated by taking grade-level measurements in a preliminary assessment based on the California Achievement Test. The assessment is retaken at program completion to measure academic gains. Data above accurate as of 6/15/2006.**

Superb Program Attendance:



For more information, call Catapult Online at 877-543-8801.

A Foundation in Research

Catapult Online has incorporated rigorous, proven research methods throughout our instructional processes.

✓ Diagnostic-Prescriptive Method

Catapult Online instruction is founded on identifying a child's specific academic weaknesses, then developing a personalized learning plan to address just those areas. Initial assessment results are recorded and aligned with learning objectives. Throughout instruction, students are tested frequently to fine-tune their learning objectives as needed, and to ensure that new skills have been retained.

Research Basis: Austin, Blanta, er.al, Meyers, (1992), Frye (1999), Bloom, Astings & Madaus (1971),Walberg, Haertel & Gwelach-Downie (1994), Scriven (1967), Pikulski (1994) Wang & Walberg (1985), Miller & Meese (1997), Cordova & Leper (1996), Davidson (2000).

✓ Mastery Learning Model

Mastery learning forms the foundation for Catapult Online's individualized instruction is built. Mastery learning emphasizes that nearly every student can learn if his/her current aptitudes and individual differences are taken into consideration and instruction is adapted accordingly. Widely embraced by educators in the years since, mastery learning involves a process that moves a student through a series of progressively more challenging stages or skills in order to master a subject or level. Over the past 30 years, mastery learning has consistently and repeatedly been proven to be an effective method of promoting student learning.

Research Basis: Anderson (1976), Arlin & Webster (1983), Bryant et al. (1982), Fernald & DuNann (1975), Guskey (1982), Kulik et al. (1990), Mevarech (1985), Slavin & Karweit (1984), Stinard & Dolphin (1981), Anderson (1987), Block & Burns (1976), Block (1977), Bloom (1977), Fehlen (1976), Guskey (1987), Guskey & Gates (1986), Guskey & Pigott (1988), Slavin (1980) (1987).

✓ Curriculum Aligned to Local and National Standards

Catapult Online's reading curriculum includes the five essential elements of effective reading instruction as mandated by the **National Reading Panel (NRP)**. And Catapult Online's math content include the six principles that are seen as necessary in high-quality mathematics programs as defined by the **National Council of Teachers of Mathematics (NCTM)**.

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