



Castle Software, Inc.
626 Layport Drive, Suite 100
Sebastian, FL 32958
800-345-7606
Fax: 772-581-1066
CastleLearning.com

Case Study

Islip UFSD and Castle Learning Online

Islip, Long Island, New York

Field Study by Bill Ingui
President and 33-Year NYS Educator (Retired)
Castle Software, Inc.

Demographic Background, Islip, Long Island, NY

Islip is a hamlet and census-designated place (CDP) located in Suffolk County, on the South Shore of Long Island, New York. It is within the Town of Islip. As of the 2000 census, there were 20,575 people, 6,868 households, and 5,302 families residing in the CDP. The median income for a household in the CDP was \$65,657, and the median income for a family was \$72,361. Males had a median income of \$49,424 and \$33,600 for females. The latitude of Islip is 40.729N. The longitude is -73.21W. It is in the Eastern Standard time zone. Elevation is 7 feet.

The Islip UFSD (Union Free School District), for the purpose of this brief study, is comprised of one high school and one middle school. The Islip High School serves grades 9-12, and has an approximate population of 1,178 students (2006-07; NYSDOE BEDS [Basic Educational Data System] census), with 10% eligible for Free Lunch, 6% eligible for Reduced-Price Lunch, a student stability rated at 93%, and a racial/ethnic diversity of 4% Black or African American, 11% Hispanic or Latino, 1% Asian or Native and 83% White. The Islip Middle School serves grades 6-8, with figures, supplied on the BEDS from the NYSDOE that exactly replicate those for shown here for Islip High School.

District Assessment of Current Education Needs

The administration of Islip UFSD has recognized that federal laws have directed schools to focus more on helping all children learn by addressing problems at an earlier age, before the child is so far behind that a referral to special education services is warranted. These include the *No Child Left Behind Act* of 2001 and the *Individuals With Disabilities Education Improvement Act (IDEA)* of 2004. Both laws underscore the importance of providing high quality, scientifically-based instruction and interventions, and hold schools accountable for the progress of all students in terms of meeting grade level standards.

Schools are being asked to identify students who are in need of help. Part of this request is the Response to Intervention (RtI) and Universal Screening. RtI is an array of procedures that can be used to determine if and how students respond to specific changes in instruction. It provides an improved process and structure, over earlier methods of identifying students in need, for school teams in designing, implementing, and evaluating educational interventions.

- Goal—In order to monitor the RtI, the Assistant Superintendent for Curriculum and Instruction, Mr. Michael O'Brien, has set a goal to help the district begin to use Universal Screenings as a part of the Response to Intervention.
- Purpose—The purpose is to determine which students are “at risk” for not meeting grade level standards. He explained that the screenings would be administered from one to three times per year, using Curriculum Based Measurements (CBMs) to ‘spot-check’ student progress after interventions have been employed.
- Universal Screening—can be accomplished by reviewing recent results of state tests, or by administering an academic screening test to all children in a given grade level. Those students whose test scores fall below a certain level are identified as needing more specialized academic interventions. After Universal Screening has been completed, the district must frequently assess students’ academic performance; i.e. Student Progress Monitoring for individual students or an entire class.
- CBM (Curriculum Based Measurement)—One of the tools used by Islip schools to address their needs is *Castle Learning Online*, a web-based review, testing, and assessment. Information about the features and benefits can be found by visiting www.CastleSoftware.com.

“It’s a no-brainer to me that Castle Learning has the mechanism to do *both* the RtI and the Universal Screening,” Mr. O'Brien said. Islip teachers are already using *Castle Learning* to find out how students are progressing in basic academic areas including math, reading, writing, and spelling.

- Using *Castle Learning* as a CBM, it can be helpful by providing current, week-by-week information on the progress students are making. Research has shown that when teachers use some form of CBM, they can find out how well students are progressing toward learning the content for the academic year.
- Mr. O'Brien described *Castle Learning Online* as the CBM which already allows teachers to monitor the success of the instruction the student is receiving. If a child’s performance is not meeting expectations, the teacher can adopt new or different ways of teaching or provide remedial assignments to assess whether sufficient progress is being made toward meeting academic goals.

Providing a strong database of questions for Universal Screening is important for Mr. O'Brien and his staff. On that level, teachers who employ *Castle Learning Online* currently use its **Personal Content Set (PCS)** feature. The **PCS** is a unique teacher authoring tool on the *Castle Learning Online* website where educators can enter new questions, designate an answer and provide both hints and reasons that will guide the learning process. Mr. O'Brien has discussed with Castle Software the feasibility of using *Castle Learning Online* in a way that would allow the district to enter an answer key, to tie those answers to several specific fields, such as State Standards or State Performance Objectives and to thereby address the **RtI** component of evaluating a student’s performance and determining their academic needs.

- In this model, a question bank of **Universal Screening** questions would be written and selected by Islip educators that would be unique for their population. Mr. O'Brien seeks a screening mechanism that is truly ‘universal’ (students take the same assessment for their grade level and/or subject).
- Throughout the year, teachers can use the extensive database of questions found on *Castle Learning Online* to focus on student strengths and weaknesses and continually monitor student progress (i.e. CBM) between each scheduled **RtI** screening.
- The **Universal Screening** question bank would be securely maintained independent of the *Castle Learning Online* site, and of course would be particularly suited to students in Islip UFSD and then delivered to students in a manner acceptable to the administration.

Castle Learning Online in the Islip UFSD

In order to learn how teachers currently use *Castle Learning Online*, a Teacher Questionnaire was provided to teachers in Islip High School and Middle School who are using *Castle Learning Online* (found at www.CastleLearning.com). The questions encompassed two primary areas: how teachers currently use *Castle Learning Online* and its effectiveness in several areas.

Current Use of *Castle Learning Online* by Educators

The *Teacher Questionnaire* provided three questions regarding how teachers were using *Castle Learning Online*, how often they were using it and what features were being used for their students. The results revealed the following:

- **Purposes for Use:** Teachers are using *Castle Learning Online* primarily for
 - Review of several units of study
 - Homework
 - Remediation before a quiz or test
 - To a lesser degree for extra credit or as a way to create tests for a grade.
- **Frequency of Use:** Teachers use *Castle Learning Online* a minimum of once per month and a majority of teachers use it weekly—from three to four times per month.
- **Features Used:** Features of *Castle Learning Online* that teachers find extremely useful are
 - The ability to import questions from old assignments
 - To share assignments with colleagues
 - To group assignments into folders for future use
 - To post a “Public Assignment,” a term that requires some explanation for the reader. In essence, Posting of Public Assignments can be defined in this way - (i.e. a feature developed in response to requests from administrators in many districts. It can be used as an invaluable tool for teachers and district administrators when used correctly. The Public Assignment is a set of questions that are posted by the creating teachers for other educators to use for review or testing. These Public Assignments have two key features
 - They can be edited to the new teachers liking, but
 - If used as a formative assessment or benchmark, the session would be submitted as a ‘benchmark.’ In this way, the test is ‘locked in place’ and it eliminates any changes being made by teachers. These sessions must be OPENED for access by a school administrator on *Castle Learning*. If not opened by an administrator, the teacher cannot access the benchmark).

Effectiveness of *Castle Learning Online* in Meeting Needs of Students and Teachers

The *Teacher Questionnaire* also provided teachers an opportunity to elaborate on the effectiveness of *Castle Learning Online* in meeting the academic needs of their students. In these responses, teachers refer to the NYS Regents exams, which are state course tests given each year, similar to EOC (End of Course) or EOG (End of Grade) exams administered in other states.

- **Types of Students Who Benefit.** When asked what kinds of students would benefit most from using *Castle Learning Online*, teachers explained that assignments can be given to all kinds of students and found all students can benefit equally because the website provides basic, intermediate and advanced level questions.

- While one educator simply stated that “any student who uses this tool does better.”
 - Another educator elaborated by saying that “the individuals that get the most out of it are the students that sometimes fall a little bit behind the rest of the class. These students often benefit from going on this website and practicing questions, and going through vocabulary words and definitions. I think these students also put the most time into these assignments and really get the total package out of this learning tool.”
 - Parents were also brought into the mix when an educator remarked, “Students who ignore the work or don’t put the effort in will struggle and (the site) provides a way for parents and teachers to visibly check the amount of effort a student puts into a course. If students create their own assignments, it tells me they are trying to succeed.”
 - Perhaps addressing the needs of the ESL (English as a Second Language) students, one educator admitted that all students benefit, “but the ones who benefit most are those with weak English skills. By practicing Regents questions, they bring their reading level closer to where the State expects them to be. Over time, students ‘get a feel’ for what the question is asking...a difficult skill for many of them.”
- **Benefits Offered to Teachers:** Teachers commented on the benefits Castle Learning offers to them as classroom educators.
- One educator wrote, “It allows me to view student weaknesses, as well as trends of weakness for an entire class, allowing me to self-check my own effectiveness. It also gives students exposure to the wording of Regents questions, which serves two purposes; first, students get experience with vocabulary and difficult grammatical construction and second, they can assess for themselves how much more studying they need to do.”
 - This educator also reported using “Castle Learning Online for individual make-up exams that needed to be administered well after the original test.”
 - Almost all of those educators surveyed, referred to their ability to discern the weaknesses and strengths of their students.
 - With a goal toward higher levels of achievement, an educator suggested that “with remedial ‘lab’ students,” they could “drill short concepts to steer them toward mastery.
 - Many of the educators use Castle Learning Online for end-of-course review and final preparation for the Regents Exams.
 - Recognizing that students are currently tech-savvy, an educator remarked that Castle Learning Online is a “great way for students to review content before exams because they enjoy working on the computer,” while another said that it “allows students to study for a test, rather than looking at their notes.”
 - From the perspective of economics and practicality, one educator remarked that Castle Learning Online “saves a lot of paper.”
 - Since Castle Learning Online provides a feature where educators can select questions from an existing database, then either keep the resulting assignment, add more questions from different subject content or grade levels, and even delete unwanted questions after re-considering their initial choice, an educator remarked that “I like being able to choose questions I like. It saves me time with grading and I can see who has and has not completed an assignment.”
- **Performance Results:** When asked whether students perform better or exceed expectations on state exams when using Castle Learning Online, teachers had positive comments.
- One teacher said that by looking at the results of tests, “I can see who ‘gets it’ (i.e. the content of a course as judged by results on tests) and who does not” and another said simply, “Absolutely!” with regard to whether students perform better or exceed expectations.

- In essence, Castle Learning Online is a predictor of success for the tests given at the end of units and especially for any end-of-course final or Regents exam. Put another way, a teacher suggested that “it often gives me a sense of how my students will fair on the upcoming test, as well as what part of the unit they seem to be struggling with the most.”
- Students “perform better” on Regents exams because they “become familiar with the questioning” format found on a Regents and the website is a “dose of reality for them to see the level of questioning they will face.”
- One teacher believes that “any student who uses this tool does better.”
- Another explained that “it helps throughout the year, not only on state assessments, but definitely in preparing for Regents exams.”
- In a concluding point to this question, a teacher remarked, “My Regents numbers are generally good, due in no small part to Castle Learning Online. As all of my own test questions come from past Regents exams, it is my experience that students who make use of Castle Learning Online perform better overall throughout the year than those who do not.”

Concluding Thoughts

Mr. O’Brien conveyed to the Castle Software team that he was “glad to see the staff perceptions and validation of your product—it just seems sensible to me to go with you for the screenings.” This will be our goal as we partner with Islip and other districts who seek to improve the academic comfort level and performance of its students.