# INTERNATIONAL ACADEMY OF SCIENCE

## The Art of Teaching Over the Internet

The Acellus CybrSchool Partner Program

By Dr. Roger Billings, Chairman Acellus Learning System

### The Art of Teaching Over the Internet

The Acellus CybrSchool Partner Program

By Dr. Roger Billings, Chairman Acellus Learning System

Teaching students over the Internet is quite a different experience than teaching in the traditional classroom setting. When teacher and students are separated by a network, it is easy for students to feel ignored and adrift in their studies — as though no one is there to help them if they get stuck. Furthermore, the adjustment to online learning is particularly challenging for some. It is crucial that students achieve early success with online learning so that their confidence will grow. Sometimes it is necessary to place a student into an earlier course so they can begin experiencing success before they are ready to start moving forward with their learning.

In addition to the difficulties faced by the virtual student, teaching at a distance also brings about its own set of challenges for the remote teacher. Knowing exactly which students need personal attention and who needs it most urgently is sometimes difficult to ascertain. Then, discerning what feedback they need and providing it in the moment can, at times, be particularly daunting.

In this paper, we will talk about these challenges and how to use the special learning resources Acellus provides to help the virtual teacher teach effectively at a distance. We will also discuss several best practices that can be used to support online students.

#### Background - An Asynchronous System That Provides Synchronous Support

One of the very significant challenges facing the online learning community is the fact that students often come online at unpredictable times. It is impossible for teachers to always be available every time their students decide to study. In the traditional classroom, students attend classes at the precise time they are scheduled, and of course, their teachers are present and ready to provide instruction and support. Online learning is a different story. Whenever a student decides to sign in and study, the learning resources must be available and ready to go. This is why Acellus provides *asynchronous* interaction resources for teachers. Teachers can go online whenever they are

available. Meanwhile, the Acellus system provides student interface and assistance, creating the feeling that the teacher is always nearby to provide caring reinforcement. This provides students with the feeling of *synchronous* support.

Various tools and techniques have been built into Acellus to address the challenges facing online learning:

- All of the lessons for every course are professionally prerecorded and edited. The student is always able
  to watch a lesson. Lessons are short and concise, usually focusing on just one concept or learning
  objective. After each lesson, the student is given problems to assess her understanding of the concepts.
- Based on the outcome of the assessments, the student progresses to the next lesson or is diverted to additional instruction or resources, depending on individual needs or deficiencies.
- Students are allowed to work at their own pace, moving as fast or slow as required to achieve optimum
  outcomes.
- Local teacher interactions are crucial to the student's success. The system is designed so that each teacher is able to focus time and effort on the highest priority needs of each student. We know that the role of the local teacher is even more critical to student success in the distance learning environment than in the conventional classroom. However, the way teachers interact with students is fundamentally different. The role and function of the local teacher will be discussed later in this paper.
- Many of the most fundamental teacher-support functions are time critical. To not interrupt the progress of a student, some types of teacher support must be provided immediately when needed by the student. For example, immediate-need teacher interventions are required when a student is stuck, discouraged, confused, or lost in the lesson. Even if the teacher happens to be online during this critical moment, if two or more students need help at the same time, two teachers are needed to fill the gap. Since teachers always being available to help students is not feasible, Acellus Cybrschool has developed a live-teacher backup function. This resource is advisable when students will be spending extended time studying online and in the case of district-supported home schooling.
- The Acellus CybrSchool Partner Program, provides full-time live-teacher backup for the local teachers. When a time-sensitive need is detected and the local teacher cannot respond right away, the Cybrschool live-teacher backup support system kicks in to automatically help the student. Since details of the backup support are logged into the system, the local teacher is automatically aware of the action taken and is therefore able to provide a contiguous stream of support for each student. Details regarding the Acellus CybrSchool Partner Program (CPP) are discussed in a later section.

#### The Role of the Local Teacher

The local teacher provides a central and crucial role to ensure students studying online achieve successful outcomes. Experience provides several "do's" and "don'ts" for distance learning teachers:

#### The Do's

- Get personally connected with each student. Know their needs, goals, and concerns.
- To overcome and offset the separation and loneliness associated with distance learning, provide students with a relationship that offers support and mentoring.
- Offer encouragement and personal counseling to inspire and motivate students to put in the effort required to succeed. Help them understand the value and importance of their education.
- Make sure learners always understand and remember that they CAN succeed in distance learning. Use a
  combination of chat and live face-to-face sessions to look students in the eye as often as needed,
  providing the encouragement and support they require.

#### The Don'ts

- Never do a student's work for him.
- Never let live sessions last longer than 5 minutes. First, because you will be pulled away for too long from
  the needs of other students. Second, because longer sessions break up study programs and the
  momentum needed to complete lessons and assignments. Exception: Whenever a student is in
  emergency need of consoling or support, that becomes the overriding consideration. An emergency
  should always be your highest priority.
- **Never** publish negative energy to a student. Sessions should always be upbeat and positive. It is amazing what a shot of positive energy can do for a student!
- Avoid teaching students via online tutoring. It is very time consuming, and in the end, it usually does not
  work well. Instead, use live sessions to discover what help he or she needs. In most cases, pointing the
  student to the available support resources will be the best solution.

#### **Local Teacher Guidelines**

The services and functions provided to students by the team of local teachers include the following:

#### 1. Detect students needing help.

Acellus provides several tools to help teachers see how their eLearning students are doing and to quickly detect those in greatest need of assistance. See "Live Class Monitor" and "Performance Reports" below for some of the ways these tools can be used to help struggling students. In addition, students can reach out when they need assistance by sending a message within the Acellus Messaging System with specific questions.

#### 2. Congratulate, encourage, motivate, and "touch" students on a regular basis.

Many students find remote learning challenging. Online students need regular, timely "touches" – teacher engagements to encourage them to persevere and to motivate them to continually strive to do better and better. Be proactive – reach out to students early and often.

#### 3. Counseling and one-on-one interventions.

Sometimes, rather than exercising their minds and working to learn the concepts, students decide instead to ask for help, before they even try. These struggling students will often be flagged in Live Class Monitor as needing help. They also will frequently send messages asking for help, expecting their teachers to show them how to solve the problem and do their work for them.

Be flexible with these students – but not *too* flexible. Sometimes it is helpful to provide counseling or one-on-one interventions. Keep live sessions short and concise (2 to 5 minutes). Listen to the problems students are having and provide encouragement and emotional support.

- Never do the work for a student.
- It is not a good idea to tutor students during live sessions.

Do not create dependencies. Instead, point the student to the learning resources. This will develop independent thinkers. Rather than showing students how to solve the problem and providing the answers, refer them to the help resources. A help video, providing the solution to a question similar to the one the student is asking about, is often available within the Help tab.

#### 4. Reposition students needing additional intervention.

When Acellus diagnoses a deficiency, **Vectored Instruction** immediately begins, going back as far as necessary to ensure that each student's underlying knowledge is intact.

Once the student has built the requisite foundation, she resumes the course where she left off. Vectored Instruction is a powerful intervention strategy that provides targeted instruction needed to fill critical holes in a student's foundational understanding. In practice, it has been shown to be VERY effective in helping students recover from previous understanding deficiencies.

On occasion, students have been enrolled in a course for which they are completely unprepared, perhaps because they have forgotten, or never learned, important foundational concepts needed for success.

Expecting students to succeed without first helping them become confident with this new way of learning is like throwing non-swimmers into the deep end of a swimming pool – they may drown before they learn to swim. These students literally find themselves "drowning" before they learn.

Helping students achieve early success is very important in distance education. Move floundering students into a more basic course where they can succeed first, even if this means putting them in a course below grade level.

As these students begin experiencing success, they will soon be "swimming" and will then be able to make significant strides toward achieving their academic potential. Repeated studies have consistently indicated that student success and confidence improve when students are given content they can handle.

Once these students are in the correct course, the course where they begin experiencing success, they start making steady progress and soon gain the confidence they have been lacking. Students move through easier material quickly and soon will be back on grade level, achieving higher standardized year-end test scores than if they had remained the whole year drowning in coursework they are not prepared to handle.

Although it may seem counterintuitive, students stuck in a class they cannot handle only become frustrated and discouraged. They do not progress. In the long run, it is a better strategy, especially in a distance learning environment, to get them succeeding in material they can handle.

#### The First Touch

An excellent time to reach out, introduce yourself, and get acquainted with new elearning students is when they are getting started in a new online class. As early as possible after a student's enrollment in the class, the local teacher should do a live visit over the live session video chat to make an introduction and help the student get started.

Here are some things to consider talking about during the First Touch:

- Introduce yourself.
- Welcome the student to the course.
- Tell the student about Acellus and how it works.
- Go over the Student Interface.
- Introduce the student to the Help tab and Help features of Acellus.
- Explain daily progress goals. Class goals are found on the teacher desktop under the Classes tab.
- Introduce the student to the Messaging System.
- Answer any questions the student may have.
- Make sure the student knows to reach out when needed.

#### **Live Class Monitor**

The Acellus Live Class Monitor is a powerful monitoring system that enables the remote teacher to efficiently and effectively monitor student progress. In addition to empowering the teacher to address individual student needs, Live Class Monitor apprises the teacher of students completing significant events, like passing an exam.

This is how Live Class Monitor works:

The teacher begins by selecting the class or classes to monitor. Live Class Monitor displays the status of each active student.

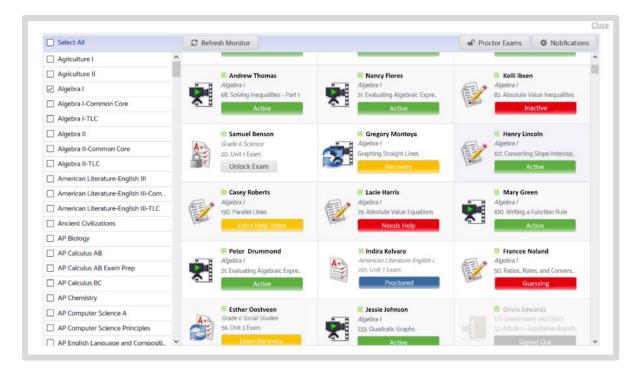


Figure 1: Acellus Live Class Monitor

Live Class Monitor uses color-coded flags, empowering teachers to quickly see where they can most effectively use their time helping students. Red flags indicate learners in greatest need of attention, followed by yellow flags. Students with green flags are active and proceeding well through the course material.

By clicking on the student's name, the teacher can drill down into the details to learn more about the current status of the student's studies. Live Class Monitor alerts teachers about concerns, and also informs them when students have passed an exam or repeated a lesson after completing Vectored Instruction.

The Acellus Live Class Monitor helps teachers stay connected to their virtual students so they can provide the timely touches needed to keep learners encouraged, motivated, and making forward progress.

#### **Performance Reports**

Acellus provides monthly Performance Reports to help teachers see how many of their students are working in their Success Zone and, through the Acellus built-in Teacher Aids, see recommended actions to help students have more effective learning experiences.

Teacher Aids include the following:

#### Attendance Concerns

This section of the Performance Report provides a list of all students with low attendance in a course. The intervention is to send a message to the student about this problem. Encourage the student to log in consistently. Alert parents via email regarding the attendance issue and enlist their help encouraging, motivating, and inspiring their student.

#### Removal of Students Having Completed Course

When students have completed a course, they can be moved into the Acellus archive mode taking them out of the current course statistics.

#### Success Zone Ratings

This feature identifies students needing intervention. Acellus automatically creates a listing of students needing help providing suggestions on actions to be taken. Upon approval of the local teacher, the proposed intervention is automatically implemented by the system.

#### **Acellus CybrSchool Partner Program**

In situations where students will be spending a substantial amount of time studying from home, additional teacher support has been found to be valuable.

In home schooling, students sometimes sign in to study at unpredictable times. That means it is not always possible for the local school to provide adequate teacher support at all times of the day, including evenings.

For this reason, Acellus has created a live-teacher backup support program which has been demonstrated to improve student outcomes. Many student needs are time sensitive. If student assistance is not provided quickly, the opportunity to provide helpful input and motivation is missed.

The CybrSchool Partner Program (CPP) provides real-time, synchronous support for students. This program is designed to lighten the load for the local teachers and to improve student achievement. The Cybrschool specialists monitor students at each CPP school and provide intervention with students when needed. This additional support, which is often time-critical, helps keep students motivated and making forward progress as it provides a feeling that their efforts are being monitored real-time.

The CPP program has also been found helpful in providing training to local teachers new to the distance learning environment. Since local teachers are able to view and monitor each student touch provided by the live-teacher backup system, they are able to see how to best contribute to online student progress.

#### **CybrSchool Helps Districts Recover Homeschool Students**

The CPP program was developed and tested in conjunction with participating public schools in the State of Wyoming. The CPP team provides advertising and marketing programs to identify parents located inside the boundaries of each participating school district. Many of these students are already enrolled in the online home school program operated by Acellus Academy, but paid for by the parents.

By offering parents the opportunity to move their students into a CPP school, the students are able to continue their home schooling, with the cost picked up by the school district rather than by the parents. This makes it possible for the teachers from the local school district to stay involved as the teachers of record and for the district to qualify to receive state funding for these home school students.

The Acellus CPP program has grown rapidly in the State of Wyoming where it has been notably successful in bringing students back to local school districts. This program is now being expanded nationally. Acellus considers CPP to be a program of the highest priority since it keeps home school students enrolled in their local districts, and it keeps local teachers employed by the districts. This is critical at a time when many students are transitioning to home schooling. As a result, district budgets have been tightening, and the potential of teaching positions being terminated threatens to become a national crisis. In addition to helping schools keep their talented teachers, students in CPP schools are in line to receive home school graduation diplomas directly from their local districts.

The Acellus CybrSchool Partner Program is now available to public schools in all 50 states. Information concerning enrollment in the program is available at http://www.cybrschool.com/schools/.

#### Conclusion

The distance learning environment is new and challenging. Teachers must learn and master new methods and techniques for providing effective instruction to students. Students must develop skills of self-discipline and motivation to be able to be successful.

In spite of the challenges, effective distance learning programs allow students to move at their own pace and to get specialized help and support not previously available in conventional classroom settings. **Especially in the case** of very gifted or very challenged students, distance learning has been shown to be very effective in achieving positive student outcomes.