Costs and Funding for Virtual Schools

Dr. Allison Powell
Vice President, State and District Services
International Association for K-12 Online Learning (iNACOL)

• iNACOL is the premier K-12 nonprofit in online learning
• 3700+ members in K-12 virtual schools and online learning representing over 50 countries
• Provides leadership, advocacy, research, training, and networking with experts in K-12 online learning.
• “Ensure every student has access to the best education available regardless of geography, income or background.”
• Conference – Virtual School Symposium (VSS): Indianapolis, IN on November 9-11, 2011
New Models Using Online & Blended Learning

Source: Susan Patrick, iNACOL
THE DEFINING DIMENSIONS OF ONLINE PROGRAMS

**Comprehensiveness**
- Supplemental program (individual courses)
- Full-time school (full course load)

**Reach**
- District
- Multi-district
- State
- Multi-state
- National
- Global

**Type**
- District
- Magnet
- Contract
- Charter
- Private
- Home

**Location**
- School
- Home
- Other

**Delivery**
- Asynchronous
- Synchronous

**Operational Control**
- Local Board
- Consortium
- Regional Authority
- University
- State
- Independent Vendor

**Type of Instruction**
- Fully Online
- Blending Online & Face-to-Face
- Fully Face-to-Face

**Grade Level**
- Elementary
- Middle School
- High School

**Teacher-Student Interaction**
- High
- Moderate
- Low

**Student-Student Interaction**
- High
- Moderate
- Low
Attributes of State Virtual Schools

Most state virtual schools share the following attributes:

- **Size** - Most have a few thousand to about 16,000 course enrollments (one student taking one semester-long course) in 2009-10.

- **Funding** - Funded primarily by legislative appropriation, sometimes supplemented by charging course fees.

- **Grade level** - Grade levels are primarily high school, although half offer middle school courses and most offer high school courses to middle school students.

- **Full-time students** - Most provide supplemental courses to students who are enrolled in another school full time. Though half offer a full-time option, most serve few or no full-time students.

- **Organization type** - Run by or within the state education agency.

- **Accountability for student achievement** - Most state virtual schools work in partnership with local school districts, which grant the credit for the online course. The state virtual school provides the grade for the course. With the exception of courses that have a common exam that is the same for both online and face-to-face courses (e.g., Advanced Placement courses and, in some states, end-of-course exams), in most cases student achievement is not easily tracked beyond measures such as grades and course completions.
Exceptions to the Common Attributes

- **Size** - Florida Virtual School is roughly three times larger than any other state virtual school, and 10-25 times larger than most, with 213,926 course enrollments in 2009-10.

- **Funding** - The growth of FLVS is in part due to its funding, which draws on the same funding formula as the state’s traditional public schools. Any high school student in Florida can choose an FLVS course without restriction, and the funding tied to that student goes to FLVS. No other state-led program has this funding model, although for 2010-11 North Carolina has instituted a funding formula approach that is similar in some ways to Florida.

- **Grade level** - Florida Virtual School (FLVS) offers elementary school courses (in conjunction with Connections Academy); the Missouri Virtual Instruction Program also offers elementary courses, though either students or their home district must pay tuition.

- **Full-time students** - Some state virtual schools have a small number of full-time students; FLVS has full-time students in its K-8 programs.

- **Organization type** - Colorado Online Learning and the Michigan Virtual School are (or are part of) non-governmental, non-profit organizations. Idaho Digital Learning Academy is a government entity but is recognized (by legislation passed in 2008) as existing outside the state education agency. Mississippi Virtual Public School is now run by Connections Academy through a contract with the MS Department of Education. Montana Digital Academy is a unit of the Montana higher education system hosted by the University of Montana’s College of Education. Missouri Virtual Instruction Program and Illinois Virtual School outsource operations to other government entities in the state.
Full-Time, Multi-district Online Schools

- Online schools that serve students full-time from across multiple districts, and often an entire state
- Make up a second major sector of online learning.
- These schools are often, but not always, charter schools.
- In full-time online schools, students enroll and earn credit and diplomas issued by the online school.
- The number of states that have full-time online schools is growing, as is the number of these schools, and the number of students obtaining most or all of their education online.
- Although growth has not been equal across all states, in general growth in full-time online schools across the country has been more steady than the uneven growth experienced by state virtual schools.
- As of fall 2010, 27 states and Washington DC have at least one full-time online school operating across multiple districts.
Attributes of Full-Time, Multi-district Online Programs

• **Organization type** - Often organized as a charter school.

• **Affiliation** - Many schools are affiliated with a national organization, such as Connections Academy, K12 Inc., Advanced Academics, or Insight Schools, which provides courses, software, teacher professional development, and other key management and logistical support.

• **Geographic reach** - Most of these schools attract students from across the entire state, in order to achieve scale; therefore most of these schools are in states that allow students to enroll across district lines and have funding follow the student. The Electronic Course Program in Texas offers full-time online courses statewide to students in grades 3-10.

• **All grade levels** - are offered in online schools collectively, although individual schools may be limited to older or younger students.

• **Funding** - is often provided via state public education funds that follow the student, though some are funded through appropriations, fees, or grants.

• **Enrollments** - Most have few or no part-time students, and most have enrollment of a few hundred to several thousand students (FTE).

• **Accountability for student achievement** - Because these are full-time schools, they are accountable in the same ways as all other public schools and/or charter schools in the states in which they operate. They report results of state assessments and Adequate Yearly Progress (AYP).
Exceptions to the common attributes include:

- **Organization type** - Some states that do not have charter schools have districts that are offering online schools to students across the state. In some states such as Colorado, full-time online schools are a mix of charter schools and district programs.

- **Affiliation** - There are many online schools that are not affiliated with a national organization. Most of these are independent.

- **Geographic reach** - Multi-district schools in California are limited to drawing students from contiguous counties. Some national education management organizations have multiple schools in California, in effect covering most of the state.

- **Funding** - Some states, for example Colorado, have established funding levels for online students that are different than funding for students in physical schools.
Differences in Funding Responsibilities

• Supplemental
  – Do not grant credit
  – Implement IEP (sometimes)
  – Primarily HS only (some middle school)
  – Part-time Faculty

• Full-Time
  – Must adhere to all state and federal accountability req. (State Assess., NCLB, etc.) Space Needs Across State
  – Special Needs Accommodations (all)
  – Student Support Services (Enrollment, Counseling, Extra-curriculars)
  – Serve all grade levels
  – Data compilation (Tracking students academic records)
  – Full-time Staff (benefits)
  – Student Technology
Fair and Sustainable Funding

• Independent, national studies suggest virtual schools funding should be about the same as those of a regular brick and mortar school. Costs for full-time virtual schools ranged from $7,200 - $8,300 per pupil (Augenblick, Palaich and Associates)
  – savings compared to $10,000 per pupil national average for K-12 education

• Average funding for virtual charter schools in U.S. is $6,500 per pupil (2010)
Funding Online Learning

• Key Considerations:
  – What are the **COSTS** of quality online learning?
  – How do taxpayer dollars **FLOW** to K-12 online learning?
  – How can funding be made **SUSTAINABLE** so every student who needs online can have it?
What are the COSTS?

• **Myth:** Online learning is cheap.
  – It’s just a kid, a computer, and stuff on the screen – how much could that cost?

• **Reality:** Quality online learning is cost-effective.
  – Real costs include expert teachers, curriculum development/licensing, computers, course delivery and data systems PLUS special services and often physical materials
Costs of Typical Online School

Total per-pupil expenditure = $6,500
Cost Considerations

- **Management** — administrative personnel, travel, supplies, office furniture, facilities, insurance, legal, postage, marketing, public relations, recruitment, and strategic planning

- **Instruction** — instructional personnel, professional development, travel, instructional supplies and materials, assessment/test preparation, contracted services, and software licensing

- **Course Development** — costs associated with developing or purchasing new courses and maintaining or redoing existing courses

- **Technology Set Up** — computers and office set-ups for all staff members, computers and connectivity for students, the LMS and SIS, and networking hardware, software and connectivity (for staff and students)

- **Technology Personnel** — all non-management personnel dedicated to technology, software licenses for all non-instructional staff and contracted services

- Augenblick, Palaich, & Associates, 2006
What are the COSTS?

“The operating costs of online programs are about the same as the operating costs of a regular brick-and-mortar school.” – iNACOL Promising Practices: Funding and Policy Frameworks for K-12 Online Learning

Cost-effectiveness derives from:

• Ability to deliver courses that the local school could not afford to staff up for

• Ability to satisfy parent choice and serve students with unique learning needs without building a new school
How do taxpayer dollars FLOW?

• **Full-time online** (e.g., cyber charter schools and contract schools) typically funded through state’s per-pupil funding formula: Funding (some or all) follows the student

• **Supplemental online** (e.g., by the course) typically funded through state appropriation and/or course fees paid by districts and/or students: Fee for service
How do taxpayer dollars FLOW?

• Accounting Considerations
  – “Seat time” vs. mastery: Online learning can make traditional methods of student accounting irrelevant
  – Scale vs. control: Open enrollment/growth across boundaries (district and state) begets efficiencies – but creates funding competition
  – Supplement vs. supplant: How much of online learning must be additive to traditional school program, and when can it be a substitute?
Toward SUSTAINABLE Funding

– Consider flexible uses of existing funds (e.g. textbook dollars)

– Integration of online learning into essential K-12 education funding process: “Part of how we educate kids in this state”

– Public-private partnerships to achieve efficiencies, avoid re-invented wheels

– Fractional backpacking: Funding following students down to the course level
Categories of States with Full-Time Schools

• Category 1: Stable
  – Full-time statewide online schools operate under a policy and reporting framework. The policy may still be the subject of political debate

• Category 2: In Flux
  – Full-time schools are operating, but no policy exists or is in question

• Category 3: Not Yet Created
  – No full-time statewide schools exist
Category 3

• Not yet created
  – No full-time statewide online schools
  – No charter school laws or a charter law that prohibits online charter schools
  – Do not allow students to enroll across district lines, or
  – Have another policy that prohibits full-time online schools
Massachusetts

• Newly created law, districts can operate statewide program
• 25% of students must come from local district and only 2% of students can come from any other single district (unless they receive waiver)
• Limited to total enrollment of 500
Category 2: In Flux

• States have some full-time online schools, but there is still some factor limiting online school enrollment

• States in Category 2:
  – Michigan
  – Georgia
  – Oregon
  – Indiana
  – Florida
  – Arkansas
Example Category 2 States

- Oregon – capped growth of online charter schools
- Arkansas – one full-time online school, limited to 500 students
- Indiana –
  - Small pilot programs with enrollment restrictions. (500 students)
  - 75% of students from school must have been enrolled in public school previous year.
  - Students are funded at 80% of the average state level.
Category 1: Stable

- Usually have an online learning law that regulates schools
- Have experienced growth in number of schools, number of students per school and overall number of online students
- States in Category 1:
  - California, Colorado, Idaho, Kansas, Minnesota, Nevada, Ohio, Pennsylvania, Texas, Washington, and Wisconsin
Category 1 Attributes: Stable

• A clear law under which online schools operate
• Open enrollment allowing students to choose an online school outside their district of residence
• A reporting requirement – lets everyone know which schools are available and their achievement results
Category 1: Funding Models

- **Idaho** - Charter schools are funded based on ADA, must be accredited, reporting
- **Kansas** - Online students funded at same level as face-to-face students
- **Nevada** - Funding follows student. Student may enroll in another district's program with permission from local district. No permission required to enroll in virtual charter.
# Cost of Serving a “Virtual” Student Locally

Note: Average expenditure per K-12 student (08-09) $9,760. Open enrollment tuition estimate $6,322 (FY09) per student.

<table>
<thead>
<tr>
<th>Scenario 1 (one full-time virtual student)</th>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Cost (6 per semester @ $325 per 1/2 credit course)</strong></td>
<td>$1,950</td>
<td>$1,950</td>
</tr>
<tr>
<td><strong>LEG Support approx. 1 hr per week for 36 weeks (Average teacher salary with benefits $50,000/185 days = $270/day, $270/7 periods = $39/hr.)</strong></td>
<td>$702</td>
<td>$702</td>
</tr>
<tr>
<td><strong>Computer Purchase</strong></td>
<td>$800</td>
<td>$0</td>
</tr>
<tr>
<td><strong>IT Support (30 min/month @$39hr/for 9 months)</strong></td>
<td>$88</td>
<td>$88</td>
</tr>
<tr>
<td><strong>Internet Stipend ($20 per month for 9 months)</strong></td>
<td>$90</td>
<td>$90</td>
</tr>
<tr>
<td><strong>Cost per semester</strong></td>
<td>$3,630</td>
<td>$2,830</td>
</tr>
</tbody>
</table>

Note: Computer may be provided if the student is full time virtual student at "home."

Note: Internet access may be provided if the student is full time virtual student at "home."

Note: $5,660 (year two - no computer purchase)
State by State Variations

• Student-Teacher Ratio
• Blended Learning/Face-to-Face Experiences (Size and Location of Facilities)
• Technology/Internet for Students
• Support Personnel for Student Services
• Personnel Salaries
• Per-pupil Funding (Special Needs Students)
Appendix Slides

• Any questions, please contact:

  Allison Powell
  703-752-6216 or apowell@inacol.org
Examples of Funding Models for Virtual Schools

- Full-time Virtual Charter Schools
  - Funding follows student in full-time virtual charter schools in 27 states
- State Virtual Schools (supplemental) have different funding models
  - Funding follows student 1/6 FTE
    - Florida Virtual “Performance-based funding model” and funding follows student
    - Minnesota funding follows student course enrollment
    - North Carolina FTE/6 * .75
- Annual legislative allotment limits access to number of online courses available
  - Kentucky, Virtual High School, Virtual Virginia, Georgia
  - Texas Virtual School Network – provider and user districts
Examples of Funding Models for Virtual Schools

• Local School Districts support own program (Fairfax County, VA)
• Special Funding Sources (Federal/State/AT&T – Louisiana Virtual)
• Private Foundation Grants
  • Indiana Virtual Academy is a non-profit (501c3)
• Tuition
  – Illinois Virtual High School (within regional service agency)
Michigan

- Two charter schools recently authorized
- Limited to enrollments of 400
- Virtual charter schools receive same funding level as other charter schools.
Indiana

- Small pilot programs with enrollment restrictions. (500 students)
- 75% of students from school must have been enrolled in public school previous year.
- Students are funded at 80% of the average state level.
Florida

- All school districts are required to provide full-time online options for students grades K-12. (Created confusion and inefficiencies across state)
- Full-time online students are funded at same rate as face-to-face students, but only receive funding upon successful completion.
Arizona

• Online schools receive funding at 85% of the normal base support level for part-time students and 95% of the normal base support level for full-time students

• FTE funding follows the student and may be split between the school and district

• Receive funding based on current year enrollments whereas virtual public schools receive funding based on prior year enrollments
Washington

- No charter school law, all programs are run by school districts
- Receive same funding as face-to-face students
- Full-time online programs are required to meet certain quality provisions.
  - Offered by state approved provider
  - Offered by district itself to own students and to fewer than 10% of out-of-district students
  - Offered by a regional provider operating under an inter-district cooperative agreement
Texas

• Full-time for grades 3-8
• Based on successful program completion
• Equivalent to state funding for a full-time student enrolled in a traditional classroom
• Funding penalty may apply based on student performance on the statewide student assessment exams
• Grades 9-10, generate $400 per semester course completion
• TxVSN – Quality Control
South Carolina

• Funded by the same formula applied to all charter schools in the state
• No more than 75% of a student’s core academic instruction in K-12 [may occur] via an online or computer instruction program”
• Other 25% - Regular instructional opportunities in real time that are directly related to the school’s curricular objectives (field trips, teacher meetings, etc.)
• Base amount of support, try to supplement it with other funds (with state of economy, not able to appropriate funds as this is not in funding formula)
• Course approved by State DOE, Proctored Assessments, frequent monitoring
Ohio Funding

- The Ohio Legislative Committee on Education Oversight found that online charter schools at that time spent $5382 per student, compared with $7452 for students in brick and mortar charter schools, and $8437 for students in traditional public schools. (2003)
- Funded at same level as face-to-face students. ($5,718 in 2011)
- Receive some additional funds via special education appropriation, ARRA, state fiscal stabilization funds, EduJobs, and other federal funds
- Community Schools are funded based on a deduct off the traditional public school (transportation, building, etc.) district PASS form (state allocated funds only). School is paid based on a per pupil subsidy plus the additional “supplements”. State average is $10,000 per pupil.
- Not eligible to receive poverty-based funding
- Required to spend a designated amount for pupil instruction or face a possible fine of up to 5% of state payments to the school (computers and software are eligible expenses)
Ohio Governance

• No teacher of record can be responsible for more than 125 students
• Must provide a minimum of 920 hours of “learning opportunities” (no more than 10 hours a day can count towards this)
• Student learning can be counted in days rather than hours
• Each student is entitled to a computer supplied by the school
Wisconsin Funding

- In 2008, the Wisconsin Legislature passed a law enabling virtual charter schools without modifying the funding which, at the time, was slightly below the national average of $6,500. Are at about $6,700 now.
- An audit by the Legislative Audit Bureau showed that overall the state’s virtual charter school costs were reasonable and the funding they received were in line with their costs.
- 5,250 virtual charter student enrollment cap.
Wisconsin Governance

• Teacher must complete at least 30 hours of professional development to prepare to teach online
• If a student fails to respond appropriately to teacher within 5 school days, school must notify family
• Student fails to participate 3 times in semester, may be transferred to another school
• Teachers required to be available minimum number of hours depending on grade level and must respond to students and parents within 24 hours
• Required to report to students’ resident districts the students who will be attending the charter school, in June prior to the school year
Pennsylvania

• Funding level is based on student's resident district.

• Virtual charter schools must invoice the district directly, and receive about 72% of standard funding.

• State also provides funding to local district, so the district ends up receiving about 50% of the funding for the student that has transferred to a state cyber charter.
Colorado

- A minimum level of funding is set and adjusted upward based on a number of factors for brick and mortar districts, (state minimum for most students)
- Average is $6487
- Limited to 1.0 FTE per student and may be split in half but not into smaller units
- Must be certified by the CDE
- Must adhere to quality standards
US Online Learning Facts

• 32 states have state virtual schools (KP 2011)
• 8 state have online learning initiatives (KP 2011)
• 46 states have significant state policies (KP 2009)
• 27 states and Washington DC allow over 220 full-time virtual charter schools with over 225,000 students (CER)
• 2 states require an online course for high school graduation
• 30% of all employers use e-learning for training, in 5 years it will be 50%
• 1 in 4 undergraduate and graduate student enrolls in an online course in higher education
• 75% of school districts had one or more students in a fully-online or blended course
• More universities are offering K-12 courses online
  – MIT open courseware for K-12 students
  – Stanford, Northwestern programs for gifted
• K-12 Online Learning enrollments growing 30% annually nationwide with 50,000 in 2000 over 2 million enrollments in 2008-2009
State Online Learning Trends & Examples

• **Michigan, Alabama, Florida, Idaho:**
  – Online learning HS graduation requirement

• **Florida**
  – Funded through performance-budgeting system

• **Utah**
  – Funding follows student down to course level

• **Montana: new state virtual school**
  – Managed by the University of Montana’s College of Education
State Online Learning Trends & Examples

• California and Texas
  – Course quality – review all online courses against iNACOL/SREB online course standards

• Full-Time Virtual Charter Schools
  – Florida (blended too), Georgia, Indiana, Louisiana, New Jersey

• More Districts
  – A shift to districts starting their own online programs
International Trends in Online Learning

- **Mexico**
  - K-12 Digital Content, Laptop for Every Teacher, Pre-service methods using engaging digital content, new strategies

- **Turkey**
  - 0-15 million enrollments in 3 years

- **Canada**
  - All 13 Provinces and Territories offer K-12 online learning

- **South Korea**
  - National Virtual School

- **Hong Kong**
  - Blended learning for Continuity of Learning
India

• Size
  – 1 billion+, 70 % rural population
  – Need 200,000 more schools
  – 29 Languages (none of which are English)

• Internet Accessibility
  – 2007-08 - 42 million users (3.7%)

• Online Learning
  – Universal Access for K-12 Education in 10 yrs
  – Shortage of good teachers
  – Leverage teachers using technology to bring to scale
  – Educomp Program digitizing learning resources (online content) in K-12 Education
    • View as export opportunity
China

- China: 1.3 billion people
  - Digitized K-12 curriculum
  - Training Master Teachers to teach online
  - With online learning: increase educational opportunities to 100 million new students
European Union

• EU:
  – EU E-Learning Action Plan
  – IB Diploma Programme Online (125 countries)

• UK: E-Learning Exports - 29 billion pounds annually; deal with China
  – Education as an export
Australia

• Pioneer in distance education, mainly servicing isolated rural schools and families
• Curriculum breadth and opportunities for students in rural and small schools still limited
• Online provision available in each state served via Blackboard, Moodle etc.
• Nationally, much is first generation online content – flat text, limited interactivity and use of Web 2.0 capacity
• Federal funded national rollout of 1:1 computing across years 9-12 by end of 2011
New Zealand

• Professional Development – ICT PD

• Teacher Laptop Program

• National Broadband Initiative

• Virtual Learning Network
Singapore

- Singapore: 100% of Secondary schools use online learning
- All teachers trained to teach online
- Blended Learning Environments
- E-Learning Weeks
New Solutions through Online Learning

- 40% of US high schools do not offer AP courses
  - 75% of districts use online learning to offer Advanced Placement or college-level courses.
- Teacher Shortages
  - 40% of public school districts in America today say they need online learning resources because certified teachers are not available for traditional face-to-face instruction.
- 60% of schools and districts say they need online learning for credit recovery.
- More than 50% need online learning to reduce student scheduling conflicts to graduate on time.
Trends in Education: Next Generation Models of Online and Blended Learning

- Continuity of Learning
- Blended Learning
- Computer Assisted Instruction (Credit Recovery)
- Competency-based Pathways
Snow Day!
# Contingency Plans: H1N1

<table>
<thead>
<tr>
<th>STATUS</th>
<th>GREEN (no/limited student infection)</th>
<th>YELLOW (significant student infection)</th>
<th>ORANGE – (significant student and staff infection)</th>
<th>RED – School/Campus Closures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>• Lessons and exams as normal</td>
<td>• Lectures, tutorials and laboratory sessions continue as normal</td>
<td>• Stop mass lectures and activities; replace by e-learning, if possible</td>
<td>• E-learning only via remote access for students from various locations, including homes</td>
</tr>
<tr>
<td></td>
<td>• Leave of Absence (LOA) Students to access materials from e-learning system (such as a Learning Management System/LMS) if available or in alternative/hard copy formats, if not available</td>
<td>• Home Quarantine Order (HQO) students to access materials from e-learning system if available, or, school provides instructional materials and assignments in alternative/hard copy formats, if not connected</td>
<td>• Tutorial via online tutors</td>
<td>• Tutorial via online tutors</td>
</tr>
<tr>
<td></td>
<td>• Isolate leave of absence (LOA) students for exams</td>
<td>• Isolate sick students for exams</td>
<td>• Laboratory sessions as normal, if possible; via online labs, if possible</td>
<td>• Hold exams on e-learning systems, if possible; otherwise postpone exams</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• HQO students to access materials from e-learning system</td>
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</tbody>
</table>
Definition of blended learning

Any time a student learns in part in a supervised brick-and-mortar place away from home

and

At least in part through online delivery, with some element of student control over time, place, path and/or pace

Innosight Institute, 2011
Blended Learning

• Face-to-Face Driver
  – Face-to-face teachers deliver most of curricula
  – Teachers use online resources to supplement or remediate
  – Often in back of classroom or in lab

• Rotation
  – For each course, students rotate on fixed schedule b/t online & f2f
  – “In between”
  – Sometimes online part is remote
  – Often same teacher for online and f2f
Blended Learning

• Flex
  – Online platform delivers most curricula
  – F2F teachers provide flexible, as-needed support
  – Individual tutoring, small group discussion

• Online Lab
  – Online platform delivers entire course, but in brick-and-mortar lab or classroom
  – Usually online teachers
  – Paraprofessionals supervise
Blended Learning

• Self-Blend
  – Individual students take online courses a la carte
  – Online learning is remote
  – Traditional learning is brick-and-mortar

• Online Driver
  – Online platform and teacher deliver all curricula
  – Students work mostly remotely
  – F2F check-ins are optional or required
Competency-based Pathways

• Students advance upon mastery

• Explicit and measurable learning objectives that empower students

• Assessment is meaningful and a positive learning experience for students
iNACOL National Standards for Quality