



U.S. Department of Education Green Ribbon Schools

**2011-2012 Presentation of Nominee to the
U.S. Department of Education**

Part I – Principal and Superintendent Eligibility Certification.....2
Part II – Summary of Achievements4
Part III – Documentation and Certification of State Nomination.....4
Attach State or Nominating Authority’s Evaluation of School Nominee (Either application or other
documentation of review)

OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

PART I - ELIGIBILITY CERTIFICATION

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school achieves or comes close to achieving the goals of all three green Ribbon Pillars: 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.
3. The school has been evaluated and selected from among schools within the state or Nominating Authority's jurisdiction (BIE, DoDEA), based on *documented achievement* toward the three Green School Pillars and Elements.
4. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
5. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
6. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
7. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
8. The school meets all applicable federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education
Green Ribbon Schools 2012

For Public Schools only: (Check all that apply) [] Charter [] Title I [] Magnet [] Choice

Name of Principal Dr. Lark Palma Ph.D.
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Catlin Gabel School
(As it should appear in the official records)

School Mailing Address 8825 SW Barnes Rd.
(If address is P.O. Box, also include street address.)
Portland Oregon 97225

City _____ State _____ Zip _____

County Washington State School Code Number* N/A

Telephone (503) 297-1894 Fax (503) 297-0139

Web site/URL www.catlin.edu E-mail palma@catlin.edu

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate.

Lark P. Palma Date 3-13-12
(Principal's Signature)

Name of Superintendent* N/A
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* N/A Tel.() N/A

I have reviewed the information in this application, including the award and eligibility requirements on page 2-4, and certify that to the best of my knowledge all information is accurate. I concur that this is one of the highest performing green school applicants in our state.

N/A Date N/A
(Superintendent's Signature)

**Private Schools: If the information requested is not applicable, write N/A in the space.*



Catlin Gabel

THE BEGINNING SCHOOL

THE LOWER SCHOOL

THE MIDDLE SCHOOL

THE UPPER SCHOOL

How does Catlin Gabel School represent Oregon's highest achieving green school effort?

The Vision

Catlin Gabel School has committed to becoming a sustainable school by:

- Educating students to develop the wisdom, vision and drive to create a sustainable society;
- Modeling sustainable practices throughout the school;
- Inspiring others to join with us in our commitment to sustainability.

This commitment holds across all of the school's 14 grades, and from teachers to students to staff members to parents and alumni. Everything Catlin Gabel does is guided by our established strategic directions—and we are proud that sustainability is one of those guiding directions. Our sustainability efforts, and community interest in the effort, have increased and show signs of undiminished growth.

Some history: more than 70 Catlin Gabel community stakeholders came together at our Imagine 2020 Conference in 2006 to determine the school's long-term direction, and what we felt our students most needed to be responsible citizens. Sustainability emerged as a strong and shared core value.

That vision was buttressed in 2007, when staff, faculty, students, parents, and alumni were trained in the Natural Step process to encourage systems thinking and create the conditions for profound change to occur.

We came to understand how four sustainable system conditions could guide us, and teachers, students, and staff members take these conditions seriously. We aim to eliminate our contributions:

- To systematically increasing concentrations of substances extracted from the Earth's crust
- To systematically increasing concentrations of substances produced by society
- To the physical degradation of nature
- To the creation of barriers that keep people from meeting their human needs.

A Few of the Results: Highlights

Since our renewed commitment to sustainability and our Natural Step training:

- * Our food service started using washable dinnerware and increased local food purchases. Food waste is composted.
- * Electricity and water use has dropped to the lowest levels since before 2000, as did waste production. A Zero Waste goal has been established.
- * The Tualatin Valley Water District presented its first Water Heroes award to Catlin Gabel for reducing domestic water use from 7.3 million gallons in 2000 to less than 1.5 million gallons in 2010.
- * We continue to strengthen our employee commute options program and introduced bus routes for students and employees.
- * Catlin Gabel was the first organization to make the shift to ultra-low sulfur diesel fuel for buses, qualifying us as the first Platinum level participant in the Oregon Clean Diesel Initiative. Oregon DEQ identified the school as a five star member with the Fleet Forward Award.
- * The school established an outdoor education program, which creates a strong sense of both environmental awareness and responsibility among its participants.
- * The school reorganized, established a coordinator position, and placed new emphasis on our global education program, which brings awareness of differing values across the globe and the ways other cultures deal with sustainability.

- * We established PLACE (Planning and Leadership Across City Environments), an urban leadership program open to all students in the area. Through PLACE, students come to understand how a city works or doesn't work, in areas including equity, infrastructure, disposal, and sustainability planning.
- * Robotics programs across the school attract students to use science, technology, engineering, and math skills. The TechStart Education Foundation named robotics coach Dale Yocum Oregon Technology Educator of the Year. Upper School students of Team Turbine were Oregon finalists in the Seimans We Can Change Challenge with an energy-saving invention.
- * We established the Catlin Gabel Service Corps to bring generations together in service to our community.
- * We built a garden that now serves as a curricular focus of several Middle School classes. A newly founded Garden Club continues with garden construction and curriculum development.
- * The 5th grade changed its entire yearly focus from colonial history to Pitchfork to Plate, studying how food works, from production to consumers.
- * A group from a Fulbright Japan conference toured our campus to learn about sustainable development from an exemplary school.

A Few of Our Continuing Efforts

- * For 15 years our high school students have taken part in the Elana Gold Memorial Environmental Restoration project on Mt. Hood, where thousands of student hours have resulted in restoration of a critical and damaged habitat.
- * Faculty and students plant replacement trees each year on Campus Days to improve our tree canopy, which already covers 40% of the campus.
- * Service and volunteerism remains an integral part of our students' education, beginning in preschool.

Please see our application for the many ways that Catlin Gabel contributes to both activism and education about sustainability. In this school we walk the walk, and I hope you will consider Catlin Gabel for national recognition of our efforts.

Zane P. Palmer
Head of School



APPLICATION FORM
2012 Oregon Sustainable Schools Award
(Part 3 of 3 award documents)

This application form works together with the "Award Information" and the "Award Framework" documents.

Name of School: Catlin Gabel School

School Type: Public Charter Alternative Private

School District: County: Washington

Grade Span at School: PS-12

Current Total Enrollment: 742 **Total Number of School Staff:** 203

For public schools: Is your school Title 1 eligible? Yes No

What percentage of the school's student body is eligible for Free and Reduced Lunch? %

School Street Address: 8825 SW Barnes Rd, Portland, Oregon 97225

Principal / Head of School: Lark Palma

Principal / Head of School E-mail & Phone #: palmal@catlin.edu 503-297-1894

Applicant Name (if different from Principal / Head of School): Eric Shawn

Applicant Title: Director of Facilities

Applicant E-mail and Phone #: shawne@catlin.edu 503-203-5100

Number of permanent buildings that make up your school: 27 **Number of portable buildings:** 0

Total area of all buildings: 188,405 square feet

Please try to fill out the section for each pillar. For which pillars have you provided data?

- Pillar 1: Environmental Impact: Buildings, Grounds and Operations
- Pillar 2: School Environment Supports Healthy, Safe Students and Staff
- Pillar 3: Education for Sustainability: Environmental and Social Literacy
- Pillar 4: Social Sustainability

If your application indicates progress in Pillars 1, 2 and 3, you will be considered for Oregon's nomination to the U.S. Department of Education for Green Ribbon School Recognition. Pillar 4 only applies to the state award program.

Oregon Sustainable Schools Awards Application

PILLAR ONE: Environmental Impact - Buildings, Grounds and Operations 30 points total

Utilize the 4 following Elements to demonstrate progress toward the goal of net zero environmental impact.

Select metrics from Award Framework Document that are relevant for your school, or provide other evidence of progress.

Element 1A: Greenhouse Gas Emissions

15 points

Quantify and describe how your school has reduced its greenhouse gas emissions since January 2006.

Energy, Greenhouse Gases and Buildings (10 points possible)

Catlin Gabel School reduced energy greenhouse gas emissions 23.07% between the 2006-07 school year (11.031 MMBTUs; 61 kBTU/SF/yr; 11,939 kBTUs/person) and the 2010-11 school year (6,393 MMBTUs; 47 kBTU/SF/yr; 9,389 kBTUs/person) by reducing energy use (based on invoices). Campus SF increased 3.44% during this period. Electricity consumption for 2010-11 was the lowest since 1996-97 while building SF grew 16% since 1996-97. Greenhouse gas emissions are calculated based on 0.0054 tons/kwh (PGE), 0.00585 tons/therm (U.S. EPA) and 0.0111 tons/gallon (carbonify.com, carbon emissions calculator). Charging of electric vehicles (7) is not metered. 75% of building operations staff hold Building Operator Certification. 33% of buildings commissioned or re-commissioned since 2006. There is an energy management plan. Electricity use is monitored weekly and monthly. Natural gas is monitored monthly. HVAC technician and facilities manager monitor EMS daily. Communication plan includes internal and external websites plus all-campus emails. 2.21% of total campus energy used (natural gas, electricity, heating oil) is renewable. 4% of standard electricity mix from PGE is renewable (3% wind; 1% biomass). Electricity for Art Barn (22 MMBTUs) is green source renewable power. School continues to pursue installation of a 200KW solar power generation facility on campus and 25KW solar on science. 33% of buildings have lighting motion sensors. More lighting upgrades - including LED stage lighting - are pending. HVAC set points are 68-70F during the heating season and 78-82F during the cooling season. EMS and thermostats are programmed for night time, weekend and holiday shutdown.

There is a business case for reducing energy use. Electricity use in 2010-11 was 80% of peak year 2003-04 and the school has saved \$84,761 since 2003-04. Natural gas use in 2010-11 was 75% of peak year 2002-03 and the school has saved \$8,000 since 2002-03. Freshman students used energy data in curriculum to be Oregon finalists in Siemens national "We Can Change" Challenge.

Water and Energy Efficient Products (5 points possible)

School replaced 77% of toilets/ faucets with low flow units, and uses electric demand hot water in buildings renovated or constructed since 2007. Gym HW has been converted to a gas demand hot water system. Commercial energy efficient dish machine was installed (2010-11) in Barn kitchen with a gas demand hot water unit. Gym & Beehive have energy efficient washer/dryers. 100% of purchased appliances in past year were energy/water efficient. Procurement policy pending approval. There is a business case for reducing water use. Campus water consumption in 2010-11 was 20% of peak year 2000-01 and the school has saved \$136,964 since 2000-01.

Element 1B: Water Quality, Efficiency, and Conservation

5 points

Quantify and describe how your school has improved water quality, efficiency, and conservation since January 2006.

Water Quantity (2 points possible)

Tualatin Valley Water District (2011) presented Catlin Gabel School with the water district's first Water Hero Award for reducing domestic water consumption from a peak of 7.3 million gallons per year to 1.5 million gallons per year. The school has sustained an average 44% less water use than the 2002-04 peak average. Domestic water consumption is currently 34% below the benchmark 2005-06 school year. (TVWD documents attached.) Irrigation is supplied by a 900-foot deep well with a variable speed drive pump. A computerized maxi-com system based on evapotranspiration controls campus irrigation, audits daily and reports leaks. Irrigation heads are adjusted annually. Native plants have priority in landscapes.

Water Quality (2 points possible)

The school uses domestic water provided by TVWD. Water from campus drinking fountains was tested in 2001. Results met drinking water standards. Water filters were installed on drinking fountains and some sinks as part of a decision not to sell bottled water in the cafeteria or use vendor provided bottled water in buildings. There have been no citations. Stormwater from housing developments to the Northeast passes through a campus bioswale (maintenance is current) and a buffered

stream source before becoming the headwaters of Johnson Creek North. Stormwater from the main campus storm system passes through the forest before entering a buffered stream source.

Grounds (1 point possible)

The forest (14 acres - including bird blind), natural areas (3.27 acres), Challenge Course, Middle School Garden and the apple orchard serve ecological as well as social and educational purposes. The Lower School Playground (community-built), Beginning School covered play with water feature, Fir Grove (50+ trees), Sports Fields (4.75 acres), Turf (10.22 acres), Paddock, Schauff Circle (includes basketball hoop) and Upper School Quad (benches) are locations for student social interaction and recreation. 87.4% of the campus involves pervious surfaces. 40% of the 60-acre campus has tree canopy. Over the past three years faculty and students have planted over 450 trees on Campus Days to offset the natural loss of tree canopy to age and disease. Nearly 100% of the campus is used for ecological or social benefits.

Element 1C: Material Resource Management

5 points

Quantify and describe how your school has improved material resource management since January 2006.

Waste Stream (3 points possible)

In 2007 the school established a Zero Waste by 2012 initiative. Food Service uses washable dinner ware and does not sell bottled water or soda. Landfill contributions have dropped 61% from 70.23 tons in the benchmark year of 2005-06 (154 lbs./person /year or 16 lbs./student/month) to 27.02 tons in 2010-11 (57.55 lbs./person/year or 6 lbs./student/month). Since 2007 approximately 8 tons of food waste per year has been hot composted on site (using electricity) with compost distributed on campus. In 2010-11 the school composted 1.9 lbs of food waste/student /month, recycled 3.9 lbs/student /month and landfilled 6.10 lbs/student/month. Recycling/composting rate is 48.7% by weight. Starting in January 2012 food waste has been transported to New Earth Farm, composted with the Bokashi fermentation method and used to grow local food crops. There is a business case for reducing waste. Campus landfill contributions in 2010-11 were 38% of peak year 2001-02 and the school has saved \$28,592 since that time.

The school has a comprehensive recycling plan and a written hazardous materials protocol in place for storage, management and disposal of laboratory chemicals and other hazardous materials. Upper School science chemicals are stored in a room designed for that purpose. The facilities department arranges removal of chemicals for disposal through Metro. There are no citations related to hazardous waste.

Specific Type of Goods (1 point possible)

90% of computers purchased are listed with a gold rating on the EPEAT search site. The re-use protocol requires newly purchased computers to do service in their primary capacity for four years, after which another use is found within the school. Computers cascade through re-use until they are not sufficiently reliable to serve the school's needs. Computers are then transferred to local computer refurbishment or recycling facilities. The move to use refillable dry erase markers has been under way for two years. Color copy paper is 30% post-consumer content. White copy paper is 100% processed-chlorine-free but has no recycled content. Facilities prefers to use Miller brand zero VOC paint.

Fundraisers have not been tracked. The 2012 senior class gift to the school is an all-school walkathon to raise money for financial aid. The walkathon is student generated and operated.

Cleaning Products and Practices (1 point possible)

95% of cleaning products by cost YTD are Sustainable Earth, Green Seal, Design for Environment or EcoLogo certified. Custodial staff members are Cleaning Management Institute certified and follow APPA level 2 cleaning frequencies. Toilet paper and paper towels are 100% recycled fiber with 40% post-consumer content and SFI certified.

Element 1D: Environmental Impacts from Transportation

5 points

Quantify and describe how your school has reduced environmental impacts from transportation since January 2006.

Commuting (2 points possible)

CGS is a commuter school serving the Portland-Vancouver Metro area with students from as far north as Ridgefield, WA, as far south as Salem, Oregon, as far East as Sandy and as far West as Banks. There is a student parking lot for carpools only. 22% of

campus parking is designated as carpool parking. 10.65% of the studentbody use 3-person assigned carpool spaces, 5% use school bus routes (daily counts) and 3.5% use public transportaton (ticket & pass sales). 27% of employee commute trips use alternative transportation (TriMet/DEQ Survey). The school tracks the number of vehicles entering campus and provides cafeteria credits to employees using alternative forms of transportation.

Idling (1 point possible)

All vehicle loading and unloading areas are more than 25-feet away from air intakes, entrances and openable windows. Both the Uppere School Environmental Club and the 5th grade involve themselves in the "no idling" campaign.

Vehicles (2 points possible)

CGS started 3 school bus routes in 06/07, adding a 4th route in 08/09. Routes averaged 13,700 rides/year over the past 3 years (5.34% of the studentbody). In September 2008 CGS qualified at the Platinum Level for the Oregon DEQ diesel recognition program. Oregon DEQ recognized Catlin Gabel's fleet as the first in the area to use ultra low sulfur diesel fuel (transported from Tacoma, WA). Oregon DEQ presented Catlin Gabel School with a Five Star Fleet Forward clean diesel award in 2010.

Total response for PILLAR ONE may not exceed TWO pages

Oregon Sustainable Schools Awards Application

PILLAR TWO: School Environment Supports Healthy, Safe Students and Staff 30 points total

Utilize the 3 following Elements to demonstrate progress toward the goal of healthy, safe students and staff.

Select metrics from Award Framework that are relevant for your school, or provide other evidence of progress.

Element 2A: School Environmental Health Program

15 points

Quantify and describe how your school has positively impacted environmental health for students & staff since January 2006.

Integrated Pest Management (3 points possible)

In 2005 the school started using goats for invasive weed control and will meet all IPM requirements of Oregon senate bill 637 by July 1, 2012. Step one is prevention with focus on regular monitoring, ID, habitat manipulation and sanitation practices. Priority is given to nonchemical control measures. Interior pest control is contracted. All groundskeepers hold applicator licenses for parent comfort and educational purposes. The electronic MSDS database is available to all parents, students and employees.

Indoor Air Quality (8 points possible)

Smoking and the use of tobacco products are prohibited on the school's property or at events sponsored by the school (Handbook & Directory 2011-12). Local exhaust systems are inspected & filters changed quarterly. All spaces are visually inspected as part of quarterly safety inspections and free of mold, moisture & water leakage. Ventilation systems meet state and county codes. IAQ complaints are investigated and corrected immediately. Interior asthma triggers are reduced with daily HEPA vacuuming. Parent-provided medications and emergency forms are handled by division administrative assistants. All employees are first aid & CPR trained. 75% of building operations staff hold Building Operator Certification. Facilities director & manager are APPA members and completed training in APPA's Insitutute for Facilities Management.

Chemical and Toxics Management (4 points possible)

Within the past 24 months Wise Steps, Inc. performed Radon testing on 100% of ground contact classrooms with vertical ground contact. The school has an electronic database of combustion appliances, inspected with quarterly PM. The school disposes of unwanted mercury containing items in accordance with federal, state and local environmental regulations. There are two playgrounds with limited quantities of encapsulated chromate copper arsenate-treated lumber. CGS staff were trained in 2003 to seal CCA-treated materials. Playgrounds are re-sealed annually. Tobacco is prohibited on school grounds and in school buses. The school has a written hazard communication program with annual web-based re-training for all employees. 95% of cleaning products by cost are Sustainable Earth, Green Seal, Design for Environment or EcoLogo certified. The campus is inspected annually for stray chemicals.

Element 2B: Nutrition, Fitness and Outdoor Time for Students and Staff

10 points

Quantify and describe how your school has improved nutrition, fitness and outdoor time for students & staff since Jan 2006.

Fitness and Outdoor Time (4 points possible)

Pre-school has three 40 min. PE classes/week (120 min.) plus five 45 min. recess periods/week (225 min.) Kindergarten has three 45 min. PE classes/week (135 min.) plus five 45 min. recess periods/week (225 min.). (See note from BS Head, Hannah Whitehead.)

First and second grades have four 40 min. PE classes/week (160 min.) plus 20 min. and 25 min. daily recess periods (225 min.). Third through Fifth grade students have three 40 min. PE classes/week (120 min.) plus 20 min. and 25 min. daily recess periods (225 min.). (See note from LS Head, Vicki Roscoe & LS physical education philosophy on website.)

Students in grades six through eight participate 50 minutes per day in activities that help work towards creating life-long fitness habits. Specific competencies are listed on the website at <http://www.catlin.edu/middle/course-of-study>. In March 2012 the Outdoor Education Program took a group of Middle School students to Smith Rock State Park in Central Oregon for hiking and rock climbing.

Grades 9-12 are required to take nine trimesters of physical education and health courses. Virtually 100% of students are engaged at least 150 minutes/week in school supervised physical education. Percent of physical activity and/or education that occurs outdoors has not been tracked or calculated. The school has a "no cut" policy for participation in athletics. In March 2012 the Outdoor Program took a group of Upper School students Nordic skiing in the backcountry of Mt. Hood.

Food and Nutrition (5 points possible)

The Food Service is managed by a professional chef (see Earth Friendly Activities attachment by Hen Truong), who monitors nutritional quality of foods and beverages sold and served. The cafeteria includes a daily salad bar. Menus - posted on the school website - include vegetarian and gluten-free options. The school food service does not sell soda, candy bars or bottled water. As much food as possible is purchased from local farms & suppliers. Percent is not known. Lower and Middle Schools have on-site vegetable gardens and compost bins. Garden food grown is used on site. Some fruit from the 50+ tree orchard is used on site. Remainder is given to gleaners. Beehives pollinate the orchard. Fifth grade social studies (Maggie Bendickson & Jordon Heintz) is constructed around a pitchfork to plate curriculum helping students understand how food moves from farms to farmers markets (and the science, economics and shipping of food), to food processing and supermarkets. Fifth grade students prepare a 150-mile lunch. Projects and trips are listed in the 5th grade page on the website. Middle school students in Modern Languages cook all year long. Sixth grade science studies digestion and effects of alcohol, tobacco and drugs. The seventh grade December Food Festival is about food diversity. Freshman take a Health curriculum which includes a 6-week unit on nutrition and healthy lifestyles. The course on lifetime fitness is required for graduation. There are numerous farm, processing and market field trips.

The school uses a coordinated health approach focused on physical activity, nutrition, healthy indoor and outdoor environments, education about alcohol and other drugs, age appropriate education about sexuality and counselling.

Coordinated School Health (1 point possible)**Element 2C: Emergency Preparedness**

5 points

Quantify and describe how your school has increased emergency preparedness since January 2006.

Classrooms and Students (2 points possible)

The school has a written crisis management plan for emergencies: medical, fire, earthquake, lockdown, shooting, hostage, bomb threat and hazardous material. Students practice monthly fire drills and annual earthquake drills. Drills have common elements to reduce confusion. There is a campus-wide phone-based pager alert system. Classroom bookshelves are anchored in place.

Building (3 points possible)

Buildings constructed or renovated since 1989 meet seismic standards. J.G. Pierson Structural Engineering is performing the school's seismic review. 100% of buildings are not in a 100 year floodplain or tsunami zone.

Total response for PILLAR TWO may not exceed TWO pages

Oregon Sustainable Schools Awards Application

PILLAR THREE: Education for Sustainability: Environmental and Social Literacy 35 points total

Utilize the 3 following Elements to demonstrate progress toward the goal of environmental and social literacy.

Select metrics from Award Framework that are relevant for your school, or provide other evidence of progress.

Element 3A: Interdisciplinary learning: Relationships between Human and Ecological Systems 15 points

Quantify and describe how your school uses interdisciplinary learning to educate about relationships between human and ecological systems.

Curriculum and Instruction (8 points possible)

The curriculum map published on the school website outlines the set of knowledge and skills used to guide instruction. The school looks for links wherever they can be found - between history and language, between environment and culture, between sustainability as economic theory and sustainability in campus maintenance. Environmental education pervades the LS science program (grades 1-5), focused on how to respect, protect, and care for living things, and how to manage our role in the environment, on campus and in the world. These themes are threaded through the health curriculum and surface as well as in modern languages, reading and library. 100% of all grade levels study some aspect of environmental and social sustainability at numerous stages of their course work. At least 55% of PS-12 course work includes one or more aspects of social literacy and 53% of PS-12 course work includes one or more aspects of environmental literacy.

In sixth grade students explore the variety of ways social scientists - historians, geographers, archaeologists and anthropologists study the past and present. They learn to view historical events from multiple perspectives. Course work includes examining the five themes of geography: Location, Places, Regions, Human/Environment interaction and Movement.

The MS garden, Apple Orchard, Patios, Forest, bird blind, Forest observation deck, Challenge Course and natural areas are used as outdoor classrooms. 100% of students participate in several campus day projects, community service, and extra-curricular trips, all involving elements of environmental or social sustainability. 23% of Upper School Winterim 2012 (USW) events and 23% of Middle School Break Away (MSB) events involve aspects of environmental education. 23% of USW and 30% of MSB involve outdoor programs. 33% of USW focus on food, film and culture.

In 2009 three Upper School students repaired the hay-feeder at the elephant exhibit for their senior project as part of the robotics team. Four Middle School students on robotics Team Delta 2011 have applied for a patent on their concept to simply the prosthetic limb-fitting process for use in third world countries.

Cultural and global competencies are fostered by the Global Education program and outlined on the school website at <http://www.catlin.edu/global-education>. In March 2012 Middle School global trips went to Martinique and Costa Rica. An Upper School trip, led by a Middle School teacher, went to Nepal. The Viewfinder Global Film Series continues.

The Outdoor Education Program strives to include ecological component on every trip.

Professional Development (4 points possible)

This data has not been gathered in a data base. One Middle School faculty member obtained School Garden Coordinator certification and three attended workshops at the Edible Schoolyard in Berkley, CA. The 7th grade humanities teacher attended two one week workshops. The facilities director attended a sustainable practices workshop. There are at least two teachers focused on environmental & social sustainability education in each division.

Demonstration of Skills (3 points possible)

Participation in the Elana Gold Restoration Project is a requirement for graduation. 100% of upper school students are required to take two years of integrated science (includes earth systems). Approximately 18% of 2010 and 2011 graduates completed a senior project in environmental science, earth science or equivalent. 17 students are currently enrolled in environmental science and 15 enrolled in environmental politics.

Element 3B: Use of Education for Environmental & Social Sustainability to Develop and Apply STEM Skills 10 points

Quantify and describe how your school uses education for environmental and social sustainability to develop and apply STEM skills.

STEM Content and Thinking Skills (10 points possible)

CGS uses a "learning through experience" model of progressive education. The overarching theme of the Arts in the interdisciplinary 6th grade (reading & writing across the curriculum) is harvesting, which includes many opportunities in the organic garden, greenhouse and apply orchard. Students explore the variety of ways social scientists study the past and present. Human/environment interaction is one of five themes students examine. Sixth grade investigation of the human body culminates in Surgery Day, when hospital personnel bring authentic equipment to the classroom for hands-on practice.

Seventh grade students explore contemporary problems such as overpopulation and boundary disputes, are exposed to different fields of physical science, learn how math is integrated into science and how science is integrated into everyday life. The environmental science unit studies watersheds, water pollution and stream restoration. 100% of seventh grade students (35% of the Middle School) participate in three weeks of robotics, which involves them in real-world engineering, computer science, design, math and applied physics.

In the 8th grade students are encouraged to discover the links across literature, history and humanity. Robotics is an extracurricular Middle School and Upper School program designed to get students involved with real-world engineering, computer science, design, math and applied physics. In addition to seventh grade participation in robotics, 13% of Middle School students (6th through 8th) are currently participating in robotics after school. The Upper School formed the robotics team (the Flaming Chickens - www.team1540.org) in 2005. In 2010 Team 1540 won the prestigious Chairman's Award at the Oregon regional competition for their extensive support of other teams. The Chairman's Award qualified Team 1540 to compete in the world championships in Atlanta. This was the fourth year Team 1540 qualified for the world championships. Junior Henry Gordon was one of two finalists for the Oregon regional FIRST Dean's List for student leadership and contributions to his team and community. During Spring Break 2011 The Flaming Chickens won the Regional Champions Award and the Innovations in Controls award at the Colorado regional competition. 11% of the Upper School is currently on the 2011 Upper School team. 36% of 5th grade students are also participating in robotics after school.

HS students are required to take two years of integrated science (biology-chemistry-physics) and two years of math before selecting from math/science electives (20 science & 11 math), including options in ecology, environmental science and environmental politics. Senior projects are "meaningful experiences" posted on the school website. Seventy-one 2011 graduates (100%) completed senior projects. 47% of projects were STEM topics. Sixty-nine 2010 graduates (100%) completed senior projects. 38% projects were STEM topics. 15 students are enrolled in environmental politics and 17 enrolled in environmental science. This year almost 50% of high school students are involved in meaningful STEM experiences.

In 2010, seniors Kevin Ellis and Yale Fan were two of the top three winners (\$50,000 each) in the Intel International Science and Engineering Fair. In 2011 senior Vighnesh Shiv won (Novel Algorithms for Automatic Music Transcription) first place in the computer science category at the Intel NW Science Expo. He also won the Excellence in Computer Science Award and a special award from the IEEE. Senior Rohan Jhunjunwala (Road Detection via Computer Vision & Laser Scanning) took second place in the Engineering Electrical and Mechanical category, winning the Outstanding Project Award from the U.S. Air Force and a special award from the IEEE. Sophomore terrance Sun and Freshman Lawrence Sun entered a team project (Using formal verification techniques to find contradictions in laws concerning police use of force) and won Third Place in the computer science category. In 2012, alumnus Vighnesh Shiv, class of 2011, a freshman at Caltech, won the \$25,000 top prize in the college's invention competition.

Element 3C: Apply Civic Engagement Knowledge and Skills to Sustainability Issues in the Community 10 points

Quantify and describe how your school's students apply civic engagement knowledge and skills to sustainability issues in your community.

Curriculum and Instruction (6 points possible)

The Fifth grade selects an annual community action project. Middle School students participate in real world service learning one Wednesday each month in the Portland Metro area. Service is community involvement and action through experience. Examples include Head Start, Oregon Food Bank and senior centers. Student life includes the Middle School Student

Association, Science Olympiad, Sports and Robotics (stimulates science & engineering).

The Elana Gold Memorial Environmental Restoration Project links curriculum and student life for 100% of the upper school students. This project was established in the Barlow Ranger District on the Mt. Hood National Forest in 1991 and has provided over 15,000 hours of volunteer restoration labor. Freshman spend their first day together on this project and seniors spend three days on the project just before graduation. Some students use the project for their week-long Winterim project. Many return to the project for four days in the summer after the end of the school year. The curriculum includes an honors program involving environmental science and politics.

The Urban Studies PLACE curriculum (Planning and Leadership across City Environments) is focused entirely on social and environmental sustainability.

Upper school student life offers a variety of experiences that connect the classroom learning with the natural world and the world of adult decisions. The CGSA is the upper school's student government. The CGSA president is a full voting member of the school's board of trustees. Student life also includes options for athletics, diversity conference, student newspaper, robotics, student newspaper, mock trial, and model UN.

Professional Development (2 points possible)

This information has not been gathered in a central location. The Business Office is investigating database upgrades.

Demonstration of Skills (2 points possible)

See description of Elana Gold Restoration Project above. Upper School students are required to complete 15 hours of community service each year, with 12 hours required off campus. This faculty monitored written process includes school-sponsored projects as well as a project suitable to the student's own schedule and interests. One full community service day is set aside each year for service to the Portland community. One campus day is set aside for campus maintenance projects. Holiday giving and Project Second Wind are optional activities. In 2010-11 students provided over 8,000 hours of service. Mock Trial and Model UN are extra-curricular options.

On January 30, 2012, Upper School students organized and hosted a majorial debate among candidates running to become mayor of Portland.

Total response for PILLAR THREE may not exceed TWO pages

Oregon Sustainable Schools Awards Application

PILLAR FOUR: Social Sustainability

30 points total

Utilize the 4 following Elements to demonstrate progress toward the goal of a healthy, just, sustainable school and local community.

Select metrics from Award Framework that are relevant for your school, or provide other evidence of progress.

Element 4A: Social Responsibility, Justice and Equity

10 points

Quantify and describe how your school is socially responsible, just and equitable.

Select metrics from Award Framework that are relevant for your school, or provide other evidence of progress.

Community Needs (4 points possible)

The school provides financial aid to 26% of the student body based on economic need. Food Service purchases beef from Highland Oak Farm (Scio, Oregon), lamb from SuDan Farm (Canby, Oregon) and Longbottom Coffee from Hillsboro, Oregon. Organic potatoes and squash comes from Rainy Way Farm (Hillsboro, Oregon.) Pears, apples and plums come from Hirata's Orchards (Parkdale, Oregon.) The school food service delivers unused food to the Blanchet House and Sisters of the Road Café. The Upper School organizes efforts to support the less fortunate during the holiday season and participates in Project Second Wind (food drive with area schools through the Washington County Food Bank). The parent-faculty association (PFA) has a Care Committee which coordinates efforts for supporting members of the school community in crisis.

Most paints for the school facilities are zero VOC paints purchased from Miller Paint Co. (founded in 1890 in Portland, Oregon and employee owned) and Rhodda Paint Co. (founded in 1932 in Portland.) Chown Hardware - founded in 1879 in Portland, Oregon - provides locksmithing services. Reimers & Jolivette (founded in Portland in 1922) provides general contracting services.

Equity (6 points possible)

The school teaches and practices multicultural perspectives throughout the curriculum and in the administration. The school teaches cross-generational respect. Students serve on the board of trustees and on board committees. The school philosophy for early childhood education is posted on the Beginning School pages of the website.

The Teaching and Learning Center administers learning style assessments and screens for learning difficulties and disabilities. This helps parents, teachers and students understand a student's learning style, processing strengths and weaknesses and leads to developing strategies and techniques for optimal learning and instruction.

"The Brain Series Part 1: Parenting Teens" was published on the school website by Middle School Counselor, Kristin Ogard.

Student government has a role in student discipline.

In 2011 the Upper School robotics team (the Flaming Chickens) hosted the first annual Girl's Generation robotics competition at Catlin Gabel School. Organized by a female senior this event provides an opportunity for girls to play a significant role in the engineering side of a team. Only girls were allowed on the robot drive teams and only girls could work on robots in the pits. Fourteen Oregon and Washington team attended.

In the PLACE program, all classes focus on catalyzing conversation and action that promotes equal access to resources and opportunities as the foundation for strong communities.

Technology is integrated in all classrooms and the school is a dual-platform campus (Mac & Windows). Computer instruction begins in the 3rd grade. Lower School (grades 1-5) classrooms are equipped with desktop and laptop computers for student use. The 4th and 5th grades share a computer lab of 20 machines. There are three Middle School laptop carts and one Upper School lab. High-speed computer technology is accessible to every student. The student/computer ratio is about two-to-one in the Middle School and one-to-one in grades 9-12.

Element 4B: Community Partnerships and Family Involvement

5 points

Quantify and describe your school's community partnerships and family involvement.	
Community (2 points possible)	The school's primary partnership is with parents and students. The Catlin Gabel Service Corp. has partnerships with the Oregon Food Bank, Friends of Trees, El Centro Cultural, Un Lugar Para Ninos, the Virginia Garcia Clinic and Bienestear. Seventeen current community partners for the Urban Studies PLACE program are posted on the school website. Parent involvement includes Before and after school care, Parent/faculty Association, carpool map, Parentnet resources and parent conferences.
Volunteerism (2 points possible)	Eleven categories of volunteer opportunities are posted in the parent section of the school website. In 2009 CGS transitioned from the 65-year history of Rummage (15 semi-trailers/year) to the Catlin Gabel Service Corp: family-friendly service work, multigenerations working together, student leadership, coordinating and sustaining relationships between CGS and community agencies and nonprofits and involving all members of the school community - past and present - in outreach to the Portland community.
Communication (1 point possible)	Regular forms of communication include website, e-mail, printed publications, letters, division newsletters, phone calls and personal visits. Every student from 4th through 12th grade has a school email account. Every parent, student, faculty and staff member has access to the internal and external school websites.
Element 4C: Diversity (socioeconomic, sexual orientation, learning styles, cultural, race/ethnic, etc.)	10 points
Quantify and describe how your school addresses diversity.	
Services and Programs (6 points possible)	Student applicants are accepted with the intention of approximating the demographics of the Portland Metro area. Staff and programs support all demographics. Programs and initiatives reflect the diverse interests of the community. The Teaching and Learning Center supports the cornerstone of Catlin Gabel's educational approach, which is understanding individual learning styles.
Respect (4 point possible)	Diversity conference - Ujima - Speed - The US student code of conduct and the annual Diversity Conference are posted on the website. Respect for others is an explicit fundamental standard articulated in the code of conduct. SAFE (Students and Friends for Equality), SPEED (Students Promoting Equity and Ethnic Diversity) and UJIMA (Kishwahili word meaning collective work and responsibility) are student organizations. SAFE provides support and education about issues of gay, lesbian, bisexual, questioning and transgender people. SPEED/UJIMA merged and promotes learning and issues of diversity, multiculturalism and inclusion through discussions, readings, conferences and workshops. Cultural diversity is integrated into the curriculum. Sixth graders study traditional music of Japan. All English reading selections are chosen with an eye on issues of gender, ethnicity and diversity, as they exist in our contemporary world. Seventh graders study medieval and Renaissance Europe, the rise of Islam, medieval China and feudal Japan. Middle School students select one of three languages to study during Middle School years: Spanish, French or Chinese. Language study includes cultural studies, geography and history. Many students participate in language-based trips to Taiwan, Costa Rica and Martinique.
Element 4D: Personal Behaviors and Choices	5 points
Quantify and describe how your school supports positive student behaviors and choices.	
Self Empowerment and Relationships (3 points possible)	Student-led conferences are an opportunity for students to be in the position to be an active participant in the reporting of his or her progress. Education about bullying, abuse, drugs and sexual harassment is integrated into the curriculum and parent communications (website). Counselors are present in each division. Fifth graders in the Lower School select an annual community action project and Upper School Agents of Change is part of the

English curriculum. The Upper School studentbody president is a voting member of the board of trustees.

The Faculty-Staff Forum serves as an advocacy group facilitating communication among employees and providing a forum for an open exchange of ideas relating to school life. The Forum meets regularly with school leadership. The Parent Faculty Association facilitates communication between parents, teachers and administrators, encourages parent involvement in school activities and works cooperatively to strengthen the Catlin Gabel community.

Leadership and Collaboration (2 points possible)

Sixth grade teachers work together to teach a variety of interdisciplinary lessons on topics as seed collection, photosynthesis, pollination, the foundations of human civilization, wheat harvesting in Mesopotamia, pizza baking in the garden, and sweetness in apples. Students read and write across the curriculum, writing for history lessons and reading for science lessons while in English classes.

Veteran Upper School robotics students typically coach Middle School robotics teams of three to five students. At the beginning of the school year Middle School students design and program robots to compete in FIRST Lego League competitions held in December and January. In many ways Upper School robotics students operate like a small company as they create a robot for the nationwide FIRST robotics competition. Along the way, students are involved in mechanical, software and electronics design and fabrication, website development, animation, computer-aided design, video production, marketing, graphic design, and public relations. See the student-designed Upper School robotics website at www.team1540.org.

Many faculty members teach across divisions. For example the Arts department includes faculty who teach across 6th through 12th grades. The Health & Physical Education department includes faculty who teach across 1st through 12th grades. The Garden Club is an example of collaboration across the curriculum.

Parent and faculty volunteers coach Mock Trial Teams. The Catlin Gabel Mock Trial Blue and White Teams are two of the three teams going to state this year.

Eighth grade English, students conduct whole class inquiries in the course of learning to reason, marshaling evidence for arguments, defending ideas orally, learning to debate respectfully and engaging in problem solving. In eighth grade History, each student chooses an area of interest and does independent research in preparation for a class presentation.

Student led groups include Comunidad en Accion, SAFE, SPEED/UJIMA and CGSA (Catlin Gabel Student Association.) The president of the CGSA is a member of the school's board of trustees.

Total response for PILLAR FOUR may not exceed TWO pages

PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your state's highest achieving green school efforts in approximately 600-800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School. Be sure to note if students were actively involved in preparing the application.

This summary should be written as a stand-alone document. It will provide the ED review panel with an overview of the school's green activities that were detailed in the application to the state, DoDEA or BIE evaluators. If the school is awarded a U.S. Department of Education Green Ribbon, this information may be shared with other schools, candidates for next year, the press, and the public.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

For the pilot year, the Nominating Authority must review nominated schools for high achievement based on the schools' *documented achievement* toward reaching the goals of each of the three U.S. Department of Education Green School Pillars and elements. For each school being nominated by the Authority to ED, please attach state (or equivalent) evaluation materials (application) based on the Nominating Authority Evaluation Support Framework provided by ED to facilitate your evaluation of schools.

The Nominating Authority must review and sign the following certification for each school being nominated to ED.

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct.

1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school achieves or is one of those overseen by the Nominating Authority which comes the closest to achieving the goals of all three green Ribbon Pillars:
 - 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.
3. The Nominating Authority has evaluated the school and selected it for submission to the

U.S. Department of Education from among those schools overseen by the Nominating Authority which have applied for a Green Ribbon, based on *documented achievement* toward the three Green School Pillars and Elements.

4. The school meets all applicable federal civil rights and federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating

Agency: Oregon Department of Education

Name of Nominating

Authority: Mr. Ed Dennis, Deputy Superintendent

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application, including the award and eligibility requirements on pages 2-4, and certify, to the best of my knowledge through a documentary verification assessment, that the school meets the provisions in this Part of the Nominee Presentation Form.



Date 3/21/12

(Nominating Authority's Signature)

Note to Nominating Authority: The application, including the signed certifications and documentation of evaluation in the three pillars should be converted to a PDF file and emailed to Director, ED-Green Ribbon Schools at green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

ED-GRS (2011-2012)

Page 2 of 2