

EDU2011 Application for Learning Without Limits

EDU2011 Applicant Wireless Program

Required Information (schools only)

The applications filed by schools also must contain the following information:

1) The location of the school

Learning Without Limits
3948 Townsfair Way
Suite 235
Columbus, OH 43219
| <http://www.lwlademy.org/>

2) The name of the school applicant, along with a complete list of the individual schools that will be served, including their billed entity numbers

Learning Without Limits
Billed Entity Number: 16061720

3) A description of the school district or school, including the type of school, such as private, public, charter, or other special type of school

Learning Without Limits (LWL) is a non-traditional, public-supported charter school that focuses on the passion, learning style, and individualized instruction for every student. The students, parents, and learning facilitators customize a schedule for the student that allows time for flex credit options, internships, and the ability to pursue their passion without the interference of school. LWL provides a sense of community, academic support, club activities, differentiated learning, broad course offerings continuous feedback through assessments that are all built into the framework of the curriculum. The high quality educational experience and technology-based education will help the students to be successful today, tomorrow, and in the future.

4) A description of the Program's curriculum objectives, the grade levels included, and the number of students and teachers involved and/or being served as part of the program

The mission of LWL is to provide excellent and flexible educational options to support students in the learning process as they pursue their passions. LWL students are participating in the State's program of achievement testing, the curriculum core will follow the goals and objectives of the state-approved academic content standards (or such future content standards as mandated by the state). The learning opportunities provided to any given student are customized from among those offered by LWL in order to serve the individual student's needs. The curriculum development process and the training of teachers in the delivery of instruction through innovative means will be ongoing.

Student baseline levels of academic achievement are measured upon entry and students move forward from this point with recognition of individual learning styles. The curriculum, schedule and calendar are developed based on assessments and interviews and related to the student's selected area of passion.

LWL is a general-population school serving students aged 14 -18. Grades 9 and 10 are available in this first year (2010-11), with Grade 11 added in the second year and Grade 12 the following year (2011-12). The fall enrollment collected on October 8, 2010, indicated an LWL enrollment of 40 students. LWL provides a minimum of 920 hours of learning opportunities during the academic year in compliance with section 3314.03 (A)(II)(a) of the Ohio Revised Code.

LWL staff report to the chief instructional officer of Tri-Rivers Educational Computer Association (TRECA) and receive ongoing technical assistance from a consulting senior manager with front-line experience with the school start up process. The staff includes one full-time administrator, three part-time on-site teachers and access to 70 TRECA teachers supporting the on-line curriculum, as needed.

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All teachers are licensed as required by law. In instances where temporarily licensed teachers are used, those individuals must work toward appropriate licensure in order to continue teaching at LWL. Teachers are employed who have an interest in, and have the skills needed to serve the particular needs of the target; student population. Teachers must also have, or be willing to acquire, skills related to the educational program of LWL, including those related to specialized technologies employed in the educational program. The school leader holds the dual role of leader and learning facilitator. This valuable experience enables the leader to make daily improvements to the program and design the strong foundation of the program.

The educational program of LWL utilizes an approach that includes both Internet-based and non-Internet based coursework delivered in a combination of learning opportunities inside and outside the classroom of LWL, together with other curriculum and activities that will be expanded as LWL grows to meet the needs of its students. Although technology is one of the tools used by LWL in the delivery of learning opportunities to students, it is not the exclusive tool, and LWL does *not* operate as an Internet-or computer-based school within the meaning of section 3314.02(A)(7) of the Ohio Revised Code; otherwise stated, the learning opportunities provided by LWL will not primarily consist of "non classroom-based learning opportunities provided via an Internet-or other computer-based instructional method that does not rely on regular classroom instruction or via comprehensive instructional methods that include Internet-based, other computer-based, and non computer-based learning opportunities." (R.C. 3314.02(A)(7))

LWL strives to take students at their current academic levels, build upon that foundation, and increase achievement at developmentally appropriate rates and levels. LWL accomplishes this with the assistance of technology and other educational innovations, both within and outside the traditional classroom setting.

The educational offerings of LWL are refined and augmented on an ongoing basis. Throughout this process, the focus of enabling students to design and pursue their selected area of passion is being incorporated into all aspects of the learning environments. LWL also believes that effective education is a cooperative venture between students, teachers, support staff, primary caregivers, and the larger community. The Fordham Foundation and other educational and community organizations are important components of the educational experience provided by LWL.

LWL operates on the belief that the target student population can best be served through educational offerings that include traditional and non-traditional experiences that are selected on the basis of each particular student's educational needs and interests, and the student's past experiences and levels of academic achievement.

LWL is designed for students who have a desire for, and whose education can be optimized by, a customized program of instruction in a focused environment that is self-paced and begins at the level at which the student is assessed. The LWL enrollment includes students within the Columbus Public School District and contiguous districts who desire coursework not currently offered by the district but available through LWL and based on the emphasis placed on the area of passion selected by the student. The supportive environment and personalized attention from teachers and other staff provides the foundation for the success of these students. Instruction is individual or whole group depending on the needs of the students.

LWL is an innovative, site-based alternative for students who are seeking a customized and focused education that is not available in a conventional school environment. The program is not directed at one group of students, but is an attempt to enable a variety of students to pursue their passion while completing their high school diploma. LWL, which is a cooperative effort between the TRECA and the Fordham Foundation, uses technology and other innovative tools to reach students who have a desire for, and whose education can be optimized by, a customized educational program. The program is assembled from among the varied learning opportunities offered by LWL, based upon the individual student's needs and preferences. LWL offers a team approach that includes collaboration with parents, community resources, and the educational team.

5) A summary of any data collected by the school on Program outcomes and achievement of Program objectives

During its start up year, LWL is creating base line achievement and performance information based on student results measured by state-mandated achievement tests, diagnostic assessments, or other tests/assessments (including any that may be required to determine value-added progress) as required by law. Unless exempted by law, students are required to participate in tests and assessments applicable to them. Student results on required state assessments and traditional assessment tools determine achievement levels of individual students, independent of conventional grade-level designations.

State achievement and diagnostic tests are administered, and off-year assessments may be conducted through the use of other standardized tests. Other assessment tools are utilized in order to facilitate interventions, and modifications of instruction that will enhance the success of the students. The administrative team monitors the instructional process so that appropriate modifications occur.

Every student entering LWL participates in an intensive orientation process, which includes testing, interviews and a review of records. An individualized learning plan is created for each student including calendar, schedule and special needs. Those students identified to receive special education or gifted services are provided with those services as outlined in the individual education plan and agreed to by the student, parents and LWL.

Multiple assessments are used to determine student needs and measure progress. LWL accommodates students who may be currently functioning outside the regular public school setting, including those whose families have previously preferred a home schooling environment, using the following framework:

- **Goal** Advance each individual student to higher levels of performance, i.e., at least one year of academic growth in each subject area as measured by the Northwest Evaluation Association (NWEA) or similar assessment
 - **Measurement Target** LWL will see an annual increase in the number of students, on average 5 percent, demonstrating at least average growth until it achieves 100%.
 - **Metric** LWL will annually assess student growth using the NWEA or similar assessment.
- **Goal** The students will demonstrate average or above average progress toward their high school diploma, and/or post-high school career goals.
 - **Measurement Target** LWL will determine the number of credits necessary each year over the four years of high school to achieve a diploma. LWL will see an annual increase in the number of students, on average 5%, demonstrating at least average progress until it achieves 100%. The number of students progressing above (or faster) will be tracked the first year as a baseline.
 - **Metric** LWL determines the number of credits necessary each year to achieve a diploma over a time span of four years.

LWL aspires to meet the following rigorous performance standards:

- At least 75% of 10th-grade students and 85% of 11th-grade students will pass the Ohio Graduation Tests or alternate assessments, as applicable for certain students with disabilities as determined by the Individualized Educational Program (IEP) team.
- LWL will achieve an overall attendance rate (i.e., compliance with participation requirements) of at least 95% or above and a graduation rate of at least 95% or above.

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- LWL expects its students to be competent in basic skills, to be able to apply them to real life situations, to be intelligent decision makers, and ultimately, to be contributing members of society.
- To enhance students' readiness for the working world and for contributing to a democratic society, LWL has established the following Exit Goals for Learning Without Limits graduates:
 - Graduates will:
 - Have the requisite academic skills;
 - Understand and be able to use extensive teaming and problem solving skills both in the workforce and in life;
 - Be trained in skills necessary to become lifelong learners;
 - Have a thorough knowledge of computer skills and the processes that allow for their real-life application;
 - Have demonstrated high ethical standards in the submission of work;
 - Have demonstrated work-readiness skills including a strong work ethic, punctuality and timeliness, excellent attendance, and reliability.

In order to graduate, students must have completed a minimum of 20 units of instruction, have passed all parts of the Ohio Graduation Test (unless excused from passing the Ohio Graduation Test through an IEP), and have satisfied any other applicable requirements (including but not limited to those specified in R.C. 3314.03(A)(11)(f)).

The following course work must also be completed: English 4 units, Mathematics 3 units, Science 3 units, Social Studies 3 units with 1/2 unit of U.S. History and 1/2 unit of U.S Government, Physical Education 1/2 unit, Health 1/2 unit, and Electives 6 units.

Required Information (all applicants)

A full description of the current or planned Applicant Wireless Program, including but not limited to:

a) The nature of the Applicant Wireless Program, including the extent to which the use of connectivity is interactive and utilizes the Internet

Each student is assigned mobile equipment based on the requirements of the courses which the student is enrolled. This equipment is used as the primary portal to the curriculum both inside and outside the classroom. These devices connect to the inter-network using wireless local area networks (802.11) in the classroom and wireless broadband (802.16) metropolitan area networks when engaged in field activities.

b) How long the Applicant Wireless Program has been in operation and the mobile wireless device(s) being used

Learning Without Limits began operation in September 2010. Borrowing from the knowledge gained from nine-years operation of TRECA Digital Academy (a 100% virtual charter school). LWL launched its program utilizing Netbooks with wireless local area networks (802.11) and wireless broadband (802.16) technologies.

c) A description of any technical issues associated with implementing the Applicant Wireless Program, including an analysis of any problems with the availability of wireless access to students or patrons off the school premises and how those issues are being or will be addressed by the school

Students enrolled in LWL are from an urban area and thus within the coverage area of several 802.16 service providers. Devices have the capability to be switched into 802.11 mode when 802.16 service is not available. Students are able to work on assignments in offline mode.

d) What training has been or will be provided to teachers, librarians, students or parents to implement the Applicant Wireless Program

The learning facilitators hired by LWL are early adopters. They have proven themselves as technology leaders and instructors in the TRECA Professional Development Department, TRECA Digital Academy, and traditional classrooms. The qualifications of the facilitator are not be limited to traditional educational certifications; rather the applicants will be evaluated on their past experience, as well as their vision for the school and their willingness to participate in targeted professional development.

e) The extent to which the Applicant Wireless Program is integrated with federal, Tribal, state, regional or local governmental or non-profit initiatives to achieve educational or community access outcomes

LWL is a TRECA Academy. Tri-Rivers Educational Computer Association (TRECA) is a political subdivision of the State of Ohio by reason of being a regional council of government organization under Section 167.01 of the Ohio Revised Code. TRECA provides professional development and technical support to the schools it services. TRECA provides content delivery and content filtering for TRECA Digital Academies (virtual charter schools) and “brick and mortar” schools in Ohio. Schools and students serviced are located in urban areas and rural areas throughout the state. Several of these schools are located in the Appalachia regions in southeast Ohio. Currently 80,000 students utilize TRECA’s networks, firewalls and content filtering. [<http://www.treca.org>]

Charter school governing authorities in Ohio are required to have contracts (also called “charters”) with a sponsor. Sponsors (also called an “authorizers”) are responsible for issuing charters, monitoring their charter schools, and taking action in the form of probation, suspension, termination, or non-renewal as necessary. The governing authority is a non-profit entity that governs the charter school. This governance role is the same as that of boards which govern school districts. The Thomas B. Fordham Institute is the nation’s leader in advancing educational excellence for every child through quality research, analysis, and commentary, as well as on-the-ground action and advocacy in Ohio. Fordham engages in monitoring and oversight of LWL and other charter schools. Fordham’s sponsorship staff executes its sponsorship duties by conducting site visits, reviewing compliance documents, weekly (or more) contact with personnel in school buildings regarding outstanding issues, provision of information on issues relevant to schools, including but not limited to attendance, fiscal, food service, CCIP, new school start-up, transportation, special education, funding, governance. Fordham staff also provide customized support for each school in the form of specific research requests about operational or policy issues that could affect the school. [<http://www.edexcellence.net/template/index.cfm>]

2) The poverty level based on the percentage of students eligible for a free or reduced price lunch under the national school lunch program (NSLP) or a federally approved alternative mechanism, and the current discount rate of the school

LWL has 40 students enrolled; of which, 32 students qualify as Economically Disadvantaged. This means that LWL has at 80% disadvantaged students who are eligible for free or reduced price lunch.

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3) The financial need of the school, including any additional budgetary hardships, notwithstanding the school's current discount rate

School funding in Ohio is complicated. Currently, schools are funded by a combination of federal, state, and local funds. Ohio's evidence-based budget was underfunded for the current fiscal year. Further shortfalls are anticipated in these economic hard times. The state education budget is expected to experience a 10-15% cut in the upcoming fiscal year.

LWL is a charter school. Ohio Revised Code 3314.08 provides the basis for which charter schools are funded. Charter schools receive funding from the state through the per-pupil foundation allocation. Unlike city, local, exempted village and joint vocational school districts, charter schools have no tax base from which to draw funds for buildings and investment in infrastructure. As with all public schools, charter schools may seek additional funds through grants, as well as other government and private sources. LWL continues to pursue grant opportunities to fund its school operations.

4) All costs, including those eligible for E-rate support and those not eligible for E-rate support, associated with implementing the Applicant Wireless Program, including but not limited to costs for equipment such as e-readers or laptops, access and connection charges, teacher training, librarian training, or student/parent training

Fiscal Budget for 2011 is \$150,000 including the following categories and amounts:

Purchase Services - \$106,500

Supplies and Materials - \$34,500

Capital Outlay - \$9,000

Other - \$17,925. (anticipated Federal Fiscal Stabilization /Ed Jobs Grant dollars)

5) The committed school resources available to implement the entire Applicant Wireless Program, including whether those funds are from the school or library's general budget or from an outside funding source

LWL is funded on a state per pupil foundation allocation of \$5,703 per student, which is part of the TRECA general budget. LWL continues to seek additional funding to support the wireless program which is an integral part of the LWL school model.

6) The effect EDU2011 support for off-premise connectivity is likely to have upon the school's projects

The new internet technology 4G wireless has taken the US by storm. High performance schools are switching over from old 3G connectivity to the new, faster network to take advantage of state-of-the-art learning technologies. There are various functions that will be very much improved including better quality, faster video calls and conferencing. Streaming video and high definition images will all improve with the new service. The speed of mobile communication and computers using email and browsing the web will be much more efficient.

The core concept of schooling at LWL requires it to take advantage of the most progressive technological resources by connecting to the metropolitan network, thus removing the limits of current educational technology. To keep up with the speed of technology, LWL plans to progress from 3G Internet to 4G Internet speed to increase reliability in the delivery of its educational program by creating better and faster wireless networks. LWL aims to expand learning opportunities beyond the limits of the typical classroom and out in the community at large.

The charts in question 7 provide a cost effectiveness comparison of transitioning LWL wireless program from 3G Internet to 4G Internet.

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- 7) An analysis of the cost-effectiveness of the current or planned Applicant Wireless Program as compared to the use of other types of technology that would also meet the Program's objectives.

Content Filtering					
# of Devices	1	25	30	40	50
Annual Filtering Cost	\$ 2.50	\$ 62.50	\$ 75.00	\$ 100.00	\$ 125.00

Wireless Local Area Network / Wireless Metropolitan Area Network Hot Spot Device					
# of Devices	1	25	30	40	50
3G Device - Requires data plan	\$300.00	\$ 7,500.00	\$ 9,000.00	\$12,000.00	\$15,000.00
Dual-mode 3G/4G device - requires data plan	\$350.00	\$ 8,750.00	\$10,500.00	\$14,000.00	\$17,500.00

Wireless Local Area Network / Wireless Metropolitan Area Network Hot Spot - Data Plan					
Annual Cost Per Device					
# of Devices	1	25	30	40	50
3G Wireless MAN	\$200.00	\$ 5,000.00	\$ 6,000.00	\$ 8,000.00	\$10,000.00
4G Wireless MAN	\$200.00	\$ 5,000.00	\$ 6,000.00	\$ 8,000.00	\$10,000.00
Monthly Increase	\$ -	\$ -	\$ -	\$ -	\$ -

Wireless Local Area Network Devices					
# of Devices	1	25	30	40	50
iPod Touch - 8GB with Wi-Fi	\$230.00	\$ 5,750.00	\$ 6,900.00	\$ 9,200.00	\$11,500.00
iPod Touch - 16GB with Wi-Fi	\$300.00	\$ 7,500.00	\$ 9,000.00	\$12,000.00	\$15,000.00
iPod Touch - 32GB with Wi-Fi	\$400.00	\$10,000.00	\$12,000.00	\$16,000.00	\$20,000.00
iPad - 16GB	\$500.00	\$12,500.00	\$15,000.00	\$20,000.00	\$25,000.00
iPad - 32GB	\$600.00	\$15,000.00	\$18,000.00	\$24,000.00	\$30,000.00
iPad - 64GB	\$700.00	\$17,500.00	\$21,000.00	\$28,000.00	\$35,000.00
iPad - 16GB with Wi-Fi + 3G - Requires data plan	\$630.00	\$15,750.00	\$18,900.00	\$25,200.00	\$31,500.00
iPad - 32GB with Wi-Fi + 3G - Requires data plan	\$730.00	\$18,250.00	\$21,900.00	\$29,200.00	\$36,500.00
iPad - 64GB with Wi-Fi + 3G - Requires data plan	\$830.00	\$20,750.00	\$24,900.00	\$33,200.00	\$41,500.00
Netbook - Requires USB device with data plan	\$380.00	\$ 9,500.00	\$11,400.00	\$15,200.00	\$19,000.00

Wireless Metropolitan Area Network Data Plans					
Monthly Cost Per Device - includes USB devices for net books and laptop computers					
# of Devices	1	25	30	40	50
Unlimited 3G Wireless MAN	\$ 45.00	\$ 1,125.00	\$ 1,350.00	\$ 1,800.00	\$ 2,250.00
Unlimited 4G Wireless MAN	\$ 55.00	\$ 1,375.00	\$ 1,650.00	\$ 2,200.00	\$ 2,750.00
Monthly Increase	\$ 10.00	\$ 250.00	\$ 300.00	\$ 400.00	\$ 500.00

Annual Cost Per Device					
# of Devices	1	25	30	40	50
Unlimited 3G Wireless MAN	\$540.00	\$13,500.00	\$16,200.00	\$21,600.00	\$27,000.00
Unlimited 4G Wireless MAN	\$660.00	\$16,500.00	\$19,800.00	\$26,400.00	\$33,000.00
Annual Increase	\$120.00	\$ 3,000.00	\$ 3,600.00	\$ 4,800.00	\$ 6,000.00

8) Any relevant technology planning documents and, if applicable, a statement of long-term objectives for the Program

LWL's technology plan is attached.

9) A description of the specific measures taken, or that will be taken, to ensure compliance with the Children's Internet Protection Act and measures to protect against waste, fraud, and abuse

As technology evolves new challenges arise in maintaining compliance with CIPA regulations. Mobile devices are becoming less expensive and more prevalent but use of mobile devices can expose both the user and the technology to harmful content as well as safety and security risks. When school computers leave the network, both the computers and the users can be exposed to harmful content and safety and security risks. Mobile Internet filtering ensures the safety of users and reduces the cost, downtime, and frustration associated with computers that have a tendency to be compromised while off the network.

Countermeasures are required to defend against the onslaught of threats and inappropriate content on the network. To address these issues TRECA, working with a security consultant company, installed a new system in December of 2010 to filter internet content. A product from Lightspeed Systems is deployed. The Lightspeed model includes a security appliance (Lightspeed Rocket), operating on top of a hardened and secured operating system, preinstalled with Internet filtering software. A web-based management software (Web Access Manager) and a client application (Lightspeed Guide Browser). This integrated solution provides the ability to handle traffic loads with up to 10Gbps. <http://www.lightspeedsystems.com>

The integrated hardware-software model for web filtering—offering intelligent features for customization, granular policy control, safe Web 2.0 access, and mobile filtering—to ensure safe web browsing for users and speed and reliability for the network. This model detects and/or blocks access to inappropriate material on the Internet based on an extensive, education-specific URL database, as well as custom “allow and block lists”. The web filtering appliance is placed inline in order to see, evaluate, and report on all network traffic. The application enables the school to protect users on and off the school network. The model gives access to comprehensive information about who is viewing what over the Internet. The Web Access Manager ensures that search results on Google and other popular search engines do not include inappropriate sites or images, such as pornography and sexual content.

The client application filter protects off-network computers from any location, with any type of Internet connection—without the need for a VPN connection. The client application filter communicates Internet-browser requests from the mobile computer to a security appliance at TRECA. In turn, the security appliance references the URL requests with its content database and either allows the request to be processed or sends a blocking and redirect message to the user. To use the client application filter on a mobile device, students login with their school network credentials. The browser transmits URL requests to the local a security appliance at TRECA. In turn, the security appliance, which checks the request against its content database, either allows it to be processed or sends a blocking and redirect message to the user. The client application filter detects and/or blocks access to inappropriate material on the Internet based on extensive, education-specific URL database, as well as custom allow and block lists, helping to ensure user safety and CIPA compliance.

10) A description of internal policies and enforcement procedures governing acceptable use of the wireless devices used in the Program off the school's premises

LWL makes available to students access to interconnected computer systems within the Academy and to the Internet. To monitor the student access to these resources, LWL requires that all students and parents of students under the age of 18 sign an Acceptable Computer and Internet Use Policy. Additionally, this policy is published in the *Learning Without Limits Student Handbook* http://www.lwlacademy.org/pdf/2010_lwl_handbook.pdf pages 9-12 which is provided to all students and parents.

The LWL Acceptable Computer and Internet Use policy includes the terms of personal responsibility, permitted use, acceptable and unacceptable uses, network etiquette, Internet safety, privacy and consequences for failure to follow the policy and warranties and indemnification.

The student handbook includes LWL's non-discrimination policy and description of the Student Assistance Family Engagement Program (SAFE). SAFE focus on on-line resources, face-to-face contacts and linkages to local community agencies for information, referrals and services to ensure that the school and the community are doing everything possible to increase positive student outcomes for students and parents by identifying and reducing barriers to learning.