



Alignment with Enhancing Education Through Technology Criteria

The federal guidelines for *Enhancing Education Through Technology* (EETT) require that Local Education Agencies (LEAs) have technology plans that address thirteen criteria in order to qualify for formula or competitive funding. Being strongly aligned with the goals of that program, TechSteps is an ideal resource for projects seeking EETT funding. This chart shows how TechSteps can be incorporated into a complying technology plan.

| EETT Component | TechSteps - Features & Benefits |
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| <p>1. Strategies for improving academic achievement and teacher effectiveness:</p> <p>A description of how the applicant will use Ed Tech funds to improve the academic achievement, including technology literacy, of all students attending schools served by the LEA and to improve the capacity of all teachers in schools served by the LEA to integrate technology effectively into curriculum and instruction.</p> | <p>TechSteps is an integrated curriculum and assessment program that develops and reports K-8 student technology literacy. The TechSteps activities are incorporated into the core curriculum through standards-based lesson planning processes.</p> <p>To improve academic achievement, TechSteps:</p> <ul style="list-style-type: none"> • Builds technology literacy through developmentally sequenced experiences in which students use technology to find information, collect and organize data, analyze data, and present findings • Leverages the power of technology by integrating it into rigorous standards-based activities when and where it will contribute to student understanding and learning • Is mapped to the National Education Technology Standards for Students (NETS*S) • Requires that students generate learning artifacts to expose their understanding and inform instructional decision making • Scaffolds the development of authentic products that are valued by 21st century audiences • Reflects new models of active learning and higher-order thinking that are essential to student success • Provides developmentally appropriate learning experiences • Assists the needs of different learners by expanding the means of engagement, expression, and representation • Is underpinned by research into learning theory and pedagogy <p>To increase teacher capacity to integrate technology effectively into curriculum and instruction, TechSteps:</p> <ul style="list-style-type: none"> • Provides embedded professional development that “gives teachers a chance to experience for themselves new ways of learning.” (NEIRTEC) • Assists the transfer of professional development learning into classroom practice. (It allows teachers to immediately integrate technology into the curriculum.) • Increases the likelihood of teacher success which builds confidence |

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| | <p>and enthusiasm for change.</p> <ul style="list-style-type: none"> • When introduced as a resource for standards-based lesson planning, shows teachers how technology can support curriculum making these mandates complementary. • Facilitates common planning between curriculum and technology directors by providing models that combine subject-matter rigor with relevant technology. • Provides rubrics that define ‘good’ technology use and drive teacher planning to better student achievement. |
| <p>2. Goals:</p> <p>A description of the applicant’s specific goals, aligned with challenging State standards, for using advanced technology to improve student academic achievement.</p> | <p>TechSteps can help you to achieve specific, concrete, measurable goals related to curriculum development, technology integration, technology literacy, student achievement, or professional development, such as:</p> <ul style="list-style-type: none"> • Our students will develop technology literacy as defined by NETS*S by completing technology-infused curriculum activities. • Our students will learn to use technology systematically and creatively to think critically and solve problems related to core curriculum content. • Our students will exercise 21st century learning skills such as self-direction, strategic thinking, and information literacy. • Our students will use communication technologies to collaborate with peers and experts and to publish to global audiences. • Our students will use technology to inform decision making and to assist in the problem-solving process. • Our teachers will learn technology integration principals by replicating, extending, and eventually creating best and promising practices. • Our middle school teachers will use technology to further their differentiated learning practices. • Our elementary teachers will integrate open-ended software to have students select, develop, and combine media, messages, and formats to produce products that address an audience and purpose. • Our teachers will use assessment rubrics to gauge student progress towards the attainment of technology literacy standards. Once completed, the rubrics will provide the information necessary for teachers to reflect critically on their classroom practice. |
| <p>3. Steps to increase accessibility:</p> <p>A description of the steps the applicant will take to ensure that all students and teachers have increased access to technology. The description must include how the applicant will use Ed Tech funds to help students in</p> | <p>In situations where teachers have little technology experience or the technology is limited, TechSteps reduces technical hurdles, optimizing the available access to maximize curriculum-centric, hands-on student technology use. TechSteps further facilitates accessibility for all students and teachers in the following ways:</p> <ul style="list-style-type: none"> • The content employs a wealth of instructional strategies that engage students in relevant, active learning, so it can be used to differentiate instruction • TechSteps provides multiple deployment options and entry points |

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| <p>high-poverty and high-needs schools, or schools identified for improvement or corrective action under section 1116 of Title I, and to help ensure that teachers are prepared to integrate technology effectively into curricula and instruction.</p> | <p>to meet the needs of different learners and classroom contexts</p> <ul style="list-style-type: none"> • TechSteps assists the needs of different learners by expanding the means of engagement, expression, and representation • The learning scaffolds are dynamic, allowing students who need more guidance to ‘pop-up’ additional support • The activities are flexible and open-ended allowing students to participate at their own levels of ability • The content presents balanced representations for gender, age, and cultural, ethnic, and racial groups, and bias-free viewpoints and images • The use of real-world, open-ended software applications means that over time, teachers as well as students become more skilled and confident (making this an investment in high-needs schools, not a stop-gap measure) • By using technology to amplify potential, students using TechSteps often discover talents and gain confidence, for example, the student with poor handwriting is proud of the story she can write using a word processor and writing scaffold |
| <p>4. Promotion of curricula and teaching strategies that integrate technology:</p> <p>A description of how the applicant will identify and promote curricula and teaching strategies that integrate technology effectively into curricula and instruction, based on a review of relevant research and leading to improvements in student academic achievement.</p> | <p>Identification of Effective Technology Integration Strategies</p> <p>TechSteps is built upon instructional strategies that have been shown to improve student academic performance by organizations such as the Center for Applied Research in Educational Technology (CARET). The application of each strategy is documented in the Edvation Research Base under the following headings:</p> <ul style="list-style-type: none"> • Learning and Context • Learning and Collaboration • Learning and Prior Knowledge • Learning and Reflection • Learning and Scaffolds • Learning and Higher -Order Thinking • Technology and Active Learning • Technology and Higher-Order Thinking • Technology and Problem Solving • Technology and Student Achievement • Technology and Student Attitudes • Technology Integration • Technology and Learner Productivity <p>Promotion of Strategies that Integrate Technology</p> <p>TechSteps’ curricula and teaching strategies that integrate technology are promoted in the following ways:</p> <ul style="list-style-type: none"> • Proven instructional strategies are inherent within the TechSteps product. Each activity scaffolds the effective integration of technology into curricula and instruction |

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| | <ul style="list-style-type: none"> • Support materials for each activity – including extensions and adaptations - are provided for teachers via the TechSteps Web site – or in the case of K- 2 – in the book itself • Schools and districts are encouraged to integrate TechSteps activities as they select appropriate content and strategies during regular core curriculum revision cycles • Guided by TechSteps Integration Models, district leaders discuss how to integrate technology effectively with their local curriculum |
| <p>5. Professional development:</p> <p>A description of how the applicant will provide ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel to further the effective use of technology in the classroom or library media center.</p> | <p>Districts and schools are encouraged to incorporate TechSteps into ongoing staff development plans that are linked to curriculum programs, teaching strategies, and student performance. This way, TechSteps serves as a bank of promising practices, and product related skills are learned in a context that is relevant to teachers. To support the implementation of TechSteps, a variety of professional development options:</p> <ul style="list-style-type: none"> • In-person, hands-on teacher product training delivered by TechSteps professional services • Materials to support in-person, hands-on teacher product training (including train-the-trainer) delivered by the school or district • In-person workshops during which teams plan for technology integration using standards-based processes (UBD & 5E) • Principal leadership seminars delivered by TechSteps professional services • Web-based and in-person implementation consultations for curriculum, technology, and assessment coordinators <p>Professional development is embedded within the TechSteps product.</p> <ul style="list-style-type: none"> • Each book is a complete, practical lesson package that can be used immediately in the classroom regardless of a teacher’s technology background. As teachers work with their students to complete projects they learn technology skills and see how these may be applied to assist learning in the classroom. <p>In effect, teachers see what is possible. The activities fuel creativity, and encourage customization and extension. In this way technology integration – focused on student learning - becomes part of teachers’ ongoing practice.</p> <ul style="list-style-type: none"> • By replicating TechSteps activities, teachers learn technology integration principals that inform best and promising practices. |
| <p>6. Technology type and costs:</p> <p>A description of the type and costs of technology to be acquired with Ed Tech funds, including provisions for</p> | <p>TechSteps activities are usually deployed via a district WAN or school-based LANs. Teachers may also access the content from home directly from the TechSteps Web site. Depending on their technology infrastructure and policies, schools may choose to make the TechSteps activities available to students using portable or home computers.</p> <p>To leverage the value of existing hardware, and reduce the total cost of</p> |

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| <p>interoperability of components.</p> | <p>ownership, the TechSteps software is designed to:</p> <ul style="list-style-type: none"> • Be easily deployed and maintained • Run efficiently on older computers and over limited bandwidth • Require file serving only (no service runs on servers) • Support a variety of learning environments, including situations where students may work in small collaborative groups sharing computer access <p>To maximize the impact of a district / state’s investment, TechSteps:</p> <ul style="list-style-type: none"> • Is versatile It is valuable across subject areas and grade levels (K-8). • Is time-saving The activities contain everything a teacher needs – instructions, templates, graphics, model projects, links to optional Web resources, and assessment rubrics. • Is comprehensive It is a complete package for K-8 tech literacy. • Is cohesive <ul style="list-style-type: none"> • It uses a consistent suite of tools. • It can be used effectively across a district or state. • Enables teachers to use the hardware provided It increases worthwhile technology use, thereby maximizing the district or state’s investments in hardware and connectivity. |
| <p>7. Coordination with other resources:</p> <p>A description of how the applicant will coordinate activities funded through the Ed Tech program with technology-related activities supported with funds from other sources.</p> | <p>TechSteps can be used to support a variety of district-wide curricula and technology-related transformation agendas that use combined funds from state, local, foundation, and other sources. The federal funding programs for which TechSteps meets selected criteria include:</p> <ul style="list-style-type: none"> • Title I, Part A – Improving Basic Programs • Title II, Part D – Enhancing Education Through Technology • Title IV, Part B – 21st Century Community Learning Centers • Title V, Part A – Innovative Programs <p>Many districts already fund teams of curriculum specialists and/or technology integration specialists. TechSteps provides resources that allow these team member to spend more more time working with teachers, and less time ‘re-inventing the wheel.’</p> |
| <p>8. Integration of technology with curricula and instruction:</p> <p>A description of how the applicant will integrate technology (including software and electronically delivered learning materials) into curricula and instruction, and a timeline</p> | <p>TechSteps is a complete technology literacy curriculum that lets you teach, and assess K-8 technology literacy in an integrated 21st century context. It includes six rigorous activities at each grade level – K- 8 - that simultaneously address curriculum and technology literacy standards.</p> <p>The content is presented as a set of electronic activity books. Using these guides, students are launched into real world applications where they learn new technology skills as they work through meaningful mathematics, science, language arts, and social studies activities. By</p> |

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| <p>for this integration.</p> | <p>providing content for all core subject areas that is consistent in instructional design and delivery, TechSteps supports a cohesive technology plan that maximizes return on investment.</p> <p>Note:</p> <ul style="list-style-type: none"> • Each set of six activities is to be completed within a school year. • If they wish, district planners may customize the content of the activities to address local curriculum needs. |
| <p>9. Innovative delivery strategies:</p> <p>A description of how the applicant will encourage the development and use of innovative strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance learning technologies, particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources.</p> | <p>TechSteps activities are innovative in the way they are delivered, and in the active learning strategies they facilitate. Presented as interactive electronic workbooks, each activity delivers a learning scaffold comprised of multi-dimensional content, guidance, templates, and additional media that students use to complete the learning task. The curriculum-based challenges require students use technology in generative ways. In most tasks, students use technology to gather information and opinions, analyze and evaluate, model, and conceptualize, as they build their own information products.</p> <p>While TechSteps includes its own delivery platform, the activities are portable so they can be delivered via other online platforms. Districts that offer online courses to extend their curriculum offerings may choose to selectively incorporate and deliver TechSteps activities as part of these courses.</p> |
| <p>10. Parental involvement:</p> <p>A description of how the applicant will use technology effectively to promote parental involvement and increase communication with parents, including a description of how parents will be informed of the technology used.</p> | <p>TechSteps provides a variety of ways to inform and involve parents:</p> <ul style="list-style-type: none"> • When shared via a classroom Web site, at a ‘Curriculum Night,’ or during parent conferences, the information products developed by students illustrate how the school is using technology to benefit student thinking, learning, and research • Students may work on or take their finished information products home, which often spurs parental interest and participation • A number of activities encourage the direct involvement of family, such as student interviewing parents for opinions, and students collaborating with parents to build a family tree • It can be used at ‘Family Technology’ events to provide parents with hands-on experience in the use of learning technologies • TechSteps assessment rubrics may be used to communicate with parents regarding the good use of technology and their child’s progress towards that goal |
| <p>12. Accountability measures:</p> <p>A description of the process and accountability measures that the applicant will use to evaluate</p> | <p>TechSteps is an excellent resource for programs that promote innovation and accountability – especially with regard to the NCLB requirements for the development of technology literacy. It provides the resources necessary to implement, manage, and assess K-8 technology</p> |

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| <p>the extent to which activities funded under the program are effective in integrating technology into curricula and instruction, increasing the ability of teachers to teach, and enabling students to reach challenging State academic standards.</p> | <p>literacy development.</p> <p>TechSteps is best positioned as a resource that teachers can employ to meet specific district or school accountability measures – in this case, equitable experiences across classrooms that lead to technology literacy for <u>all</u> students. The management tools show the projects that have been administered by each teacher so that school leaders can provide assistance where it is needed.</p> <ul style="list-style-type: none"> • For each TechSteps learning activity, teachers use a rubric to define task criteria for students before the project commences and then to give feedback to students and parents once the project is complete. • Data gathered via the assessment contributes to a student’s technology literacy profile. The profile shows progress towards the attainment of overall tech literacy (as defined by NETS*S) at two benchmark years – 5th and 8th grade. • Individual, school, district, and statewide technology literacy reports can be generated. <p>The TechSteps authentic assessment tools provide feedback and data that demonstrate the value of the instructional strategies being used and serve as an accountability measure for teachers and administrators. Analysis of the data may be used to evaluate the technology integration program and to inform programmatic improvement.</p> |
| <p>13. Supporting resources:</p> <p>A description of the supporting resources, such as services, software, other electronically delivered learning materials, and print resources, that will be acquired to ensure successful and effective uses of technology.</p> | <p>TechSteps is often selected to be the central supporting resource for technology integration initiatives. As such, it provides a practical and principled way for all teachers to meaningfully and immediately integrate technology. TechSteps includes the following additional support mechanisms:</p> <ul style="list-style-type: none"> • Toll-free phone and online technical support, and technical documentation • A comprehensive Web site that includes classroom implementation and standards information for teachers • Customized in-person or Web-mediated training and professional development for teachers and administrators |