

Hiring the Best Qualified Technology Coordinator:
A Pennsylvania Perspective

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Abstract

Finding a competent technology leader to manage educational technology for a school district can be a daunting task. The technology director plays a vital role in the leadership of instructional technology and related services. This individual is in a position to frame out the vision and direction for how technology can be used in teaching and learning. Clearly, there are many responsibilities and talents required of this leader.

In order to defuse some of the uncertainty of identifying the role of the technology director and the scope of duties for this position, a single job title should be given to all technology leaders in education because the position entails similar responsibilities and duties. Some of the main duties of school technology experts include: develop a comprehensive K-12 instructional technology plan for the district; work with faculty and administration to integrate technology into the curriculum; routinely evaluate the instructional technology program; develop the yearly technology budget; review, evaluate and purchase instructional technology resources; and work with Principals and their staffs to effectively utilize all available resources that promote the use of technology. Sample job descriptions and interview questions are also included in the article.

Position descriptions and job responsibilities for technology leaders may vary from district to district depending on the needs of the organization. The technology leader's position in a small district may have to wear many hats from professional developer to troubleshooter to network administrator, while the technology expert in a larger organization may employ a handful of individuals to manage and maintain the equipment and resources. In any case, the job description and scope of duties for this individual must accurately reflect the needs of the district.

The results of a recent study by Lesisko (2004) revealed that out of 87 technology leaders across the eastern counties of Pennsylvania 45 had different position titles for technology experts in the public school system. In another study, Wagner (2004) found similar results in Ohio.

In order to defuse some of the uncertainty of identifying the role of the technology director and the scope of duties for this position, a single job title should be given to all technology leaders in education because the position entails similar responsibilities and duties. A plausible solution would be to give the title of Director of Instructional Technology position title to those individuals who hold a professional technology certificate offered by a State education agency (Lesisko, 2004). For example, the Instructional Technology Specialist credential is a professional certification offered by the Pennsylvania Department of Education. The holder of this certificate is eligible to work in a K-12 environment as the technology leader and is tasked with improving the learning process and instruction through the use of appropriate educational technology (Pennsylvania Department of Education, 2000). Those individuals who are not professionally certified can be offered the position title of Technology Coordinator.

The Director of Instructional Technology position must be considered a professional, certified position subject to tenure provisions. The Technology Coordinator position must be considered to be a non-certified position. This distinction will clearly define the focus of these individuals. The Director of Instructional Technology position must be involved in integrating technology into the curriculum, but the Technology Coordinator position may or may not be involved at this level. The Technology Coordinator duties should concentrate more on the installation, troubleshooting, maintenance, and support of technology resources.

Some individuals feel that technology leaders in education should not be professionally certified by a State education agency. For example, these individuals claim that the healthcare industry does not require their Chief Technology Officer to practice medicine, or that accounting firm technologists be CPAs. However, the concept is quite different in education because technology leaders not only support the software and hardware, but also educate teachers who in turn educate students.

Director of Instructional Technology

The Pennsylvania Department of Education (2000) requires any individual who is responsible for the overall planning, coordinating, evaluating, and implementation of instructional technology in a school district to be professionally certificated. This includes those individuals who provide leadership in the use of technological delivery for instruction. The Director of Instructional Technology should report to the Superintendent or Assistant Superintendent as his immediate supervisor.

The following list describes some of the most important duties and functions of the Director of Instructional Technology: (a) develop the comprehensive K-12

instructional technology plan for the district, (b) work with administration to integrate technology into curriculum delivery in the most logical and efficient manner possible, (c) evaluate the instructional technology program on an annual basis and make recommendations for improvement, (d) plan and oversee technology professional development, (e) develop the yearly budget for technology, (f) review and evaluate new software and communicate such evaluation to the instructional leaders of the district, (g) work with the “end user” in developing a manual and program documentation, (h) coordinate curriculum efforts to develop/procure technology resources to meet instructional needs, (i) develop strategies for the effective and efficient use of technological resources for both instructional and non-instructional use, (j) implement distance learning, media coordination, Internet services, and videoconferencing initiatives, (k) develop a training program for administrators and educators for the operation and utilization of all instructional technology, (l) present the district technology education program to the public through workshops and presentations, (m) develop and implement ways in which business and education can establish partnerships that enhance the use of technology for education, (n) provide advice for competitive grant applications to secure funding for technology initiatives, (o) establish technology policy, and (p) develop curriculum in the area of technological and media literacy (Lesisko, 2004).

Wagner (2004) reported that hiring a district level technology expert from the education field may not be the best solution because this individual may lack the necessary technical skills for the position. Moursund (1992) affirmed that a classroom teacher may be able to understand technical concepts, but the responsibilities are quite

different between the duties of a technology director and those of a typical classroom teacher. Nevertheless, different qualifications are needed to satisfactorily teach and coordinate technology operations for any district.

Moursund (1992) also reported that a classroom teacher is directly responsible for the instruction of students. Every educator should be skilled in the development of curriculum and how it is to be properly taught. No matter if this individual teaches in a primary or secondary classroom, the format remains the same. The educator must concentrate on classroom management activities, develop lesson plans, maintain student progress records, and provide service to youngsters in both group and individual instruction. However, the duties of a technology director are quite different.

Technology Coordinator

Pennsylvania schools must recognize the need for a Technology Coordinator position to deal with the technical issues within the district. The Technology Coordinator must serve as a resource person to manage technology and technical support efforts. This individual will also provide technology acquisition assistance, installation services and ongoing user assistance within the district. The Division of Candidate Evaluation within the Pennsylvania Department of Education considers this post a paraprofessional, non-certified position. The qualifications of this individual include any special training including vendor certification such as Cisco, CompTIA, Microsoft, Novell, etc., education, experience, skills, and abilities required by the employing district. The Technology Coordinator should report to the Director of Instructional Technology, the Director of Curriculum and Instruction, or the Assistant Superintendent as her immediate supervisor.

The duties and functions of this individual include: (a) work with the Director of Instructional Technology, Director of Curriculum and Instruction or the district technology committee to assist with the following tasks: support the development of the district technology plan; provide advice regarding the purchase of technology for the implementation and improvement of educational technology for the district; assist in the preparation of the annual technology budget; coordinate the configuration and maintenance of computer hardware and software; advise and assist in the development of instructional programs and conduct basic “end-user” training for staff in the utilization of technology; provide technical input for the implementation of appropriate software applications; coordinate the design, implementation, utilization, and maintenance of the local/wide area networks, file servers, microcomputers, and networked devices; and coordinate the installation and set up of microcomputers and related technology. (b) responsible for inventory, service repair requests, location of equipment, maintaining a resource catalog of software, materials, and plans for replacement and/or upgrade of technology, (c) assume responsibility for networking and maintenance of hardware capabilities within the school system, (d) keep all hardware operational and develop a preventative maintenance program for all equipment, (e) serve as a liaison to the district’s administrative, financial and student management system, (f) establish physical security and backup procedures, (g) establish and monitor efficient procedures for the processing of requests for software and associated materials, (h) serve as a technical consultant to teachers, Principals and other staff members to develop skills, knowledge and experience in effective use of the equipment available, (i) serve as a technical consultant to curriculum personnel, (j) support and assist users in computer problem

determination, (k) provide telephone, electronic mail and onsite technical services to assist all personnel to utilize educational technology in the performance of their job responsibilities, and (l) serve as computer technology hardware and software troubleshooting expert for the district (Lesisko, 2004).

Hiring a qualified Technology Coordinator can be very difficult for school officials. School administrators must seek technology leaders who have a solid foundation in curriculum and are well grounded in the theory of instructional technologies. Technology individuals must have good interpersonal relations and excellent leadership skills. This individual must have the ability to remain focused, the ability to deal with difficult people, be a motivator of people, and one who welcomes change. The ability to analyze a problem situation, conduct relevant research to find a palatable solution, and to clearly present the best solution to administration are basic skills needed to be successful in this position (Bushweller, 1996; Frazier, 2003).

Research supports the notion that school technology experts must have a depth of knowledge and understanding of both education and technology to be successful as a technology leader. Supporting technology resources can be accomplished by most individuals who have experience working with hardware and software. On the other hand, assisting educators in utilizing technology so they can infuse it into the curriculum can be a challenge for the technology leader if the individual does not understand the curriculum and its integration process across all grade levels and departments. Nevertheless, in order to understand the needs of educators, technology leaders must understand that curriculum and technology go hand-in-hand and the curriculum must drive the technology used in the classroom (Lesisko, 2004).

In order to hire the most qualified candidate, Smith (1997) recommends the individual have experience in four areas: technical knowledge, an understanding of technology in an academic environment, professional development, and a solid understanding of the Internet. Levinson and Surratt (1999) believe that the technology director must be in an authoritative position, one equivalent to an Assistant Superintendent. Furthermore, this individual must have a combination of talents in both technology and education because the responsibilities of the technology director are vast. They include all technology planning, daily system operation, design and maintenance of the network, approval of technology expenditures, oversight of instructional technology, and coordination of all technology activities in each department and school.

The Technology Coordinator is recognized as a formal position of technology leadership within the district. Evans-Andris (1995) reported that technology leaders routinely work under conditions of high visibility and pressure to perform, especially if technical expertise is a limited commodity. The author further stated that although the technology expert plays a vital role in technology integration, there have been few attempts to examine the nature and function of this position. Lastly, Evans-Andres reported that in order for technology to be effectively infused, the coordinator must have a full-time assignment, work under a clearly defined and delineated position description, and be expected to participate in formal communications between administration and the teaching staff.

When hiring a technology leader, Superintendents must seek individuals with the following traits: the ability to control and manage technology resources; promote

technology utilization within the district; the ability to develop and follow a technology plan; an understanding of emerging technologies that can be used in the classroom; a solid foundation of hardware, instructional software, and network infrastructures. The technology leader's position requires a person with a unique blend of skills and abilities that enables the person to work with both equipment and people (Lesisko, 2004).

When seeking a technology leader, school officials should focus on key areas of expertise to ensure this individual will be successful. For instance, technology experts must be able to interact and get along with others. Lesisko (2004) explained that technology directors must have the ability to deal with difficult people and a be motivator as well. Technology leaders must have adequate technical knowledge and understand the school system. Moursund (1992) reported that Technology Coordinators must have a broad education, strong work ethic, excellent interpersonal communication skills, and knowledge of curriculum and school assessment. Frazier (2003) asserted that a technology leader's job is to ensure that resources are being used as efficiently as possible.

In order to screen potential candidates for technology positions, the following interview questions are provided below. Besides the basic questions that deal with background information and knowledge of the school district, school officials must ask essential questions such as, what is your leadership philosophy? Covey (1992) suggested that leaders must be able to make decisions, radiate positive energy, be organized; be service oriented, and able to communicate. In an educational environment, technology leaders must be a developer of people and encourage the

effective use of educational technologies. These individuals must also be at times diplomatic, a facilitator, a coach, and be able to say no but look for ways to say yes.

How would you control technology resources in an educational environment?

The candidate should explain how equipment and software must be maintained within the district and the importance of having current technology inventory, policy and network security.

How would you promote technology resources? The candidate should explain how quarterly newsletters or emails and after school technology professional development hands-on workshops can be used to promote the effective use of educational technology resources in the classroom and laboratory.

What should a technology plan include? Understanding the candidate's thought process in planning for technology is critical to the success of the district. The candidate should respond by explaining the plan must include district goals and objectives, stakeholders and partnerships, current status and assessment, programs and initiatives, budget forecasts and plan evaluation. A well organized technology plan can keep a district properly focused on its goals and objectives, while remaining flexible in the midst of rapid technological change (Lesisko, 2004).

Ask the candidate what she feels are the most important aspects of a technology leader. An experienced individual will explain the ability to provide quick and efficient service, have excellent oral and written communication skills, ability to maintain good technology management for the district, the ability to remain current on emerging technologies, and to disseminate information as necessary.

What types of education technology are available for educators and students?

The individual should be able to explain what resources are currently available for classroom use. Some resources may include: handhelds, Classroom Performance System, electronic whiteboards, School Pad, streaming video, and videoconferencing systems. Technology programs may include: Project Lead The Way (pre-engineering), Cisco Academy, CompTIA (hardware and software) certification programs, Microsoft Office User Specialist, and productivity applications as well. These programs provide youngsters with hands-on experience utilizing state-of-the-art technologies leading to a national certification credential.

To ensure that equipment is used in a most effective manner, the district must embrace continuous teacher training and provide a great deal of technical support for students and teachers, as well as ongoing curriculum development and adequate financial resources to purchase the equipment and support.

Developing interview questions and a position description for a Director of Instructional Technology or Technology Coordinator position will vary depending on how the district intends to utilize this individual. A thorough and complete job description should be written with careful thought to match the scope of duties with the candidate qualifications. The following job descriptions may help in defining the responsibilities and scope of duties for a technology leader. They are generic descriptions compiled from a variety of school district technology positions. While these districts were diverse in nature, common elements have been extracted and essential skills, qualifications, and duties and functions have been identified and represent a typical district-wide technology leader.

Position Title: Director of Instructional Technology

Qualifications:

1. Master's Degree and post graduate study
2. Instructional Technology Specialist Certificate
3. Experience with both Macintosh and PC platforms
4. Experience with telecommunications systems
5. Knowledge of Internet and Intranet technologies
6. Knowledge of multimedia systems
7. Knowledge of instructional design and assessments
8. Experience with supervision and management

Principal Functions:

The Director of Instructional Technology is responsible for the overall planning, coordinating, evaluation and implementation of instructional technology for the district, providing leadership in the use of technological delivery systems for instruction.

Role Relationships:

This individual will report to the Superintendent or Assistant Superintendent

Duties and Functions:

1. Develop a comprehensive K-12 instructional technology plan for the district.
2. Work with faculty and administration to integrate technology into the curriculum in the most logical and efficient manner possible.
3. Continue to evaluate the instructional technology program to reflect the strategic plan, technology plan, and local curricula.
4. Plan and oversee technology professional development.
5. Develop the yearly technology budget.
6. Work with educators to review, evaluate and purchase instructional software and communicate such evaluation with administration.
7. Work with Principals and their staffs to effectively utilize all the instructional resources that promote the use of technology.
8. Inform the school community about technology opportunities through e-mails, memos, newsletters, and meetings.
9. Coordinate curriculum efforts to meet the instructional needs of the district.
10. Develop strategies for the use of technological resources for both instructional and non-instructional areas.
11. Responsible for the implementation of distance learning, media coordination, Internet, and videoconferencing initiatives.
12. Develop in-service programs for administrators and educators for the operation and utilization of instructional technology.
13. Promote district technology initiatives to community members through town meetings, workshops, and presentations.
14. Develop and implement ways in which business and education can establish partnerships which enhance the use of technology in education.
15. Establish educational technology policy.

16. Provide basic “end-user” technical training for staff members on the utilization of technology.
17. Assist with grant writing and provide input as necessary.
18. Assist in the development of curriculum in the area of technology and media literacy.

Position Title: Technology Coordinator

Qualifications:

1. Bachelor's Degree and graduate study
2. Vendor certifications and experience
3. Experience with both Macintosh and PC platforms
4. Experience with hardware and software
5. Experience with telecommunications systems
6. Experience with networks and infrastructure design
7. Knowledge of Internet and Intranet technologies
8. Knowledge of multimedia systems

Principal Functions:

The Technology Coordinator works in collaboration with the Director of Instructional Technology as a resource person in managing technology and technical support services, providing computer acquisition assistance, network administration, installation and user information, and ongoing user assistance in the school district.

Role Relationships:

This individual will report to the Director of Instructional Technology, the Director of Curriculum and Instruction, or the Assistant Superintendent.

Duties and Functions:

1. Assist in the development of the district-wide technology plan.
2. Provide advice regarding the purchase of material for the implementation and improvement of instructional technology resources.
3. Assist in the preparation of the annual technology budget.
4. Coordinate the installation, configuration, service, and support for hardware, software, audiovisual, telephone system, and network infrastructure.
5. Advise and assist in the development and/or conduct training programs on the utilization of technology equipment.
6. Provide technical input for the implementation of instructional technology resources.
7. Coordinate the design, implementation, utilization, troubleshooting, and maintenance of the district network and infrastructure including LANs, WANs, servers, switches, routers, phone system, and other peripherals.
8. Provide advice for competitive grant applications to secure funding for district technology initiatives.
9. Responsible for technology inventory, repair records, maintaining a resource catalog of software, materials, and plans for replacement and/or upgrade of technology.
10. Assume responsibility for networking and maintenance of hardware capabilities with the school system.
11. Keep all hardware operational and develop a preventative maintenance program for all equipment.
12. Serve as a liaison to the district's financial and student management applications.

13. Maintain system physical security and data backups.
14. Establish and monitor efficient procedures for the processing of requests for software and associated materials.
15. Serve as a technical consultant to the school community to develop technology skills and new knowledge.
16. Serve as a technical consultant to administration and curriculum leaders.
17. Provide telephone, electronic mail and onsite technical services to assist all school personal to utilize technology in the performance of their job responsibilities.

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