

DOCUMENT RESUME

ED 478 218

CG 032 446

AUTHOR Sabella, Russell A.  
TITLE How School Counselors Could Benefit from E-Government Solutions: The Case of Paperwork.  
PUB DATE 2004-00-00  
NOTE 6p.; In: CyberBytes: Highlighting Compelling Uses of Technology in Counseling; see CG 032 440.  
PUB TYPE Reports - Descriptive (141)  
EDRS PRICE EDRS Price MF01/PC01 Plus Postage.  
DESCRIPTORS Access to Information; Federal Government; Government Publications; \*Information Technology; \*Internet; \*Partnerships in Education; \*School Counseling; School Counselors; \*Technological Advancement

ABSTRACT

The U.S. government has tackled many problems which have plagued its effectiveness and efficiency to serve its citizens with technology solutions. Electronic government, or e-Government, is the expression used to describe how the U.S. government attempts to increase productivity and reduce costs by using Internet-based technology. More specifically, e-Government tries to enhance the citizen's access to government information and services, and attempts to provide new ways to increase citizen participation in the democratic process. If government also made available to schools some of the technology solutions used for themselves, valuable benefits to school counselors would result. This article briefly describes one e-Government initiative and the potentially positive impact on school counseling if it were implemented in schools. (Author)

Reproductions supplied by EDRS are the best that can be made  
from the original document.

*How School Counselors Could Benefit  
from E-Government Solutions:  
The Case of Paperwork*

by  
Russell A. Sabella

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- 
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

---

## *Chapter Ten*

### **How School Counselors Could Benefit From E-Government Solutions: The Case of Paperwork**

*by Russell A. Sabella*

---

The United States (U.S.) government has tackled many problems which have plagued its effectiveness and efficiency to serve its citizens with technology solutions. Electronic government, or e-Government, is the expression used to describe how the U.S. government attempts to increase productivity and reduce costs by using Internet-based technology. More specifically, e-Government tries to enhance the citizen's access to government information and services, and attempts to provide new ways to increase citizen participation in the democratic process. If government also made available to schools some of the technology solutions used for themselves, valuable benefits to school counselors would result. This article briefly describes one e-Government initiative and the potentially positive impact on school counseling if it were implemented in schools.

#### **The Problem**

Historically, governments have required their citizens to interact with them using paper forms, documents and letters. Applying for licenses and permits, filing tax and information returns and requesting government services all require citizens to fill out standard government forms. It is estimated that the U.S. federal government alone has over 6,000 different paper forms that generate over 20 billion responses every year (Jetform, 2000). Governments at all levels are under constant pressure to improve the efficiency of their internal operations. Tightening budgets mean agencies cannot simply staff with additional resources to meet their increased volume of work. Instead, they are forced to become more efficient using new technology.

#### **The Technology Solution**

At the federal level, legislation was enacted to eliminate paperwork, mandating that agencies across the board develop procedures to accept electronic documents as they would paper. The Government Paperwork Elimination Act (GPEA, 1998) aims to improve citizen service through the use of information technology and to automate processes that will save government time and money. The GPEA directs government agencies to provide public access to government services and documents and the option to submit government forms electronically. This legislation provides the need and impetus for finding innovative solutions to the challenge of reducing paperwork and accessing data.

To meet this challenge, e-Government requires technology that can easily create electronic forms out of existing paper forms, compliant with all regulatory requirements about layout and data-element validation (i.e., providing security and protecting privacy). It also needs technology that can take data extracted from e-forms as well as from external sources and use it to generate documents in multiple formats — such as print, fax, e-mail or Web — to suit the user's particular needs and preferred channel of communication. For example, software is needed to eliminate manual and paper-based processes by capturing, routing and tracking information electronically. One solution, intelligent e-forms, helps people save money, improves service and increases productivity by reducing printing costs, storage costs and time spent processing data - all of which increase "time-to-market."

With the help of various companies (e.g., Jetform Corporation), many federal and state agencies converted multiple paper forms to e-forms and turned paper processes into e-processes within a standard and secure electronic environment. For example, the U.S. Social Security Administration is able to reduce turn-around times for beneficiaries while saving \$10 million in costs. By implementing automated e-processes in its child-support services, The Commonwealth of Pennsylvania is now able, for the first time, to share information effectively

between counties through a set of standard e-forms. And, in the state of Wisconsin, the Department of Forms Administration has developed a central Web-forms repository and 14 administrative e-processes, ranging from expense and time reporting to federal grant processing, touching over 40 agencies and 25,000 state employees (Jetform Corporation, 2000).

#### *About legal signatures*

As the world uses the Internet for an increasing number of communications and transactions that have until now required paper-based documentation, the legal community has raced to create the legal framework to facilitate this shift. The Electronic Signatures in Global and National Commerce Act signed on June 30, 2000 eliminates legal barriers to using electronic technology to form and sign contracts, collect and store documents, and send and receive notices and disclosures. The Act provides that no contract, signature, or record shall be denied legal effect solely because it is in electronic form.

According to Jetform Corporation (2000), there are three independent types of document or transaction security: user authentication (the signer is who he says he is), document authentication (the document has not been modified since it was authored or signed) and non-repudiation (the signer indicates intent or agreement with the document). The relative importance of each of these depends on the transaction or document in question. In a paper world, a signature both authenticates the signer's identity and establishes his intent or agreement. It is also considered very secure because it is hard to forge a handwritten signature, and it is hard to "edit" a signed paper document. In the electronic world, different security approaches offer varying levels of support for these three types. For example, personal information numbers (PINs) and passwords offer a basic level of user authentication, but little in the way of document authentication or non-repudiation. Electronic signature pads can capture a handwritten signature electronically. Fingerprint and retina scans are biometric approaches which provide the highest levels of user authentication and signal intent, supporting non-repudiation as well. Digital signature technology based on public key cryptography (e.g., see [www.verisign.com](http://www.verisign.com)) is a very secure method of both user authentication and document authentication. The public key method uses two keys – one is a public key that you disseminate to anyone from whom you want to receive a message or document. The other is a private key that you use to decrypt messages or documents that you receive.

### **E-Government Solutions and the School Counselor**

School counselors are of great value in serving special education students by providing scheduled counseling and other guidance efforts as part of an individualized educational plan (IEP). However, because of limited resources and the counselor's unique flexible time schedule, many school counselors have been assigned to oversee the entire process which typically includes identification, IEP meeting coordination, evaluation, counseling, re-evaluation, inclusion efforts, and continued parent consultation. This process includes a documentation trail which would humble even a professional archivist. The problem is that the time required for effectively fulfilling such responsibilities is time not spent providing direct services such as individual counseling, group counseling, coordination, and consulting.

If technology were available to automate and streamline these processes, more time could be spent meeting the special needs of all students through face-to-face interventions in the classroom instead of processing forms in the office. As a result, schools would enjoy a cost savings benefit stemming from reduced paper; reduced copying and storage space; and saved time for creating, routing, and searching for records. Further, schools could better afford to pay someone to oversee the processes – someone who does not have, nor need, the advanced training and credentials of school counselors. A special assistant to the counselor (or administration) could, for instance:

1. Provide a teacher or appropriate other with an electronic receipt acknowledging submission of a form which identifies a student who may need special education interventions.
2. Complete repetitive parts of a form such as demographic data by automatically importing such data from a relational database.
3. Route the form based on its content to the appropriate person for processing.
4. Obtain legally binding electronic signatures.
5. Access or update data in databases at the district level.
6. Track the status of requests or processes with real-time reports.

7. Receive automated reports containing "ticklers" or reminders for pending tasks or documentation.

Ultimately, the school counselor could concentrate better on his or her primary responsibilities of advancing personal, social, career, and academic growth among students via direct service while resting assured that appropriate documentation is complete in a secure and confidential manner.

Similar to the deluge of paperwork problems included in the special education process, the paperwork involved in scheduling, tracking, and helping all students to graduate and successfully transition from school to career can also be daunting. Electronic forms processing such as used by various government agencies could conceivably solve for school counselors the problem of managing a great deal of information among a large number of educational stake holders. Further, if a system were in place at the national level, transferring of documentation to other schools for when students move can be completed more quickly and accurately.

### **Challenges to Incorporating E-forms in Schools**

The reality of using E-forms technology in schools is precluded by several realities which will eventually be overcome only by both money and training. For instance, schools would need to:

1. Create the technological infrastructure for the secure routing and processing of forms.
2. Make certain that all necessary users (e.g., school psychologist, nurse, and parents) of an e-forms system have secure access to the system.
3. Accurately import or convert existing records to correctly operate in a new e-forms system.
4. Train counselors, designated support staff, and relevant others to use the e-forms system to process forms and create new ones.
5. At the state or national level, standards of documentation and electronic storage would have to be consistent. One viable solution is to use Electronic Data Interchange or EDI which is best known for the transfer of data between different companies using networks, such as the Internet. The U.S. Department of Education's National Center for Education Statistics (NCES) is already exploring how to make available the use of EDI with a world-wide web server, nicknamed CHARLOTTE, that is designed to efficiently transfer such educational information as student records. According to the Center (NCES, 1999), "CHARLOTTE is planned as a cost effective means to make EDI available to public and private schools and school districts throughout the nation, without requiring those schools to expend great amounts of money for programming, special software, technical support, and other maintenance costs. The server can potentially make the speed, convenience, accuracy, and efficiency of electronic trading available to a vast majority of school districts in the United States, regardless of their financial and technical resources."

Because one or more hurdles to e-form processing may not be overcome very quickly, current reality dictates that parts of the documentation process may not be completed by electronic means. Documents which may still be completed manually or transmitted by other means such as fax and postal mail may need to be entered or scanned into the system. However, there exists enough volume of documentation within today's school systems to make electronic processing a viable and sorely needed alternative to current methods. School counselors and especially the professional associations that represent them need to focus their lobbying efforts to make electronic data interchange and the use of e-forms as useful to educators as it has been to business and government.

### References

- Government Paperwork Elimination Act (1998). XVII of P.L. 105-277.[Online]. <http://www.cdt.org/legislation/105th/digsig/govnopaper.html>.
- Jetform Corporation (2000). *E-Process for e-government white paper*. Falls Church, VA: Jetform Corporation. [Online]. <http://www.jetform.com/industrysolutions/formtest/whitepaper.html>.
- NCES (1999). *Status report and draft business plan for building and maintaining electronic data interchange (EDI) processes used for transmitting student transcript information and other education-related processes*. [Online]. <http://nces.ed.gov/edi/EDIBusinessPlan.asp>.
- The Electronic Signatures in Global and National Commerce Act ( June 30, 2000). S.761.[Online]. <http://www.ftc.gov/os/2001/02/esignworkshopfrn.htm>.



*U.S. Department of Education  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)*



## **NOTICE**

### **Reproduction Basis**

- This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
- This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").