# U.S. Department of Education Information Quality Guidelines

## Introduction

Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554) directed the U.S. Office of Management and Budget (OMB) to issue government-wide guidelines that "provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies." *Information*, as defined by OMB, includes any communication or representation of knowledge, such as facts or data, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual forms. *Dissemination* refers to any distribution of information to the public that is initiated or sponsored by a federal agency. (OMB, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, February 22, 2002, 67 FR 8452-8460).

In summary, OMB's guidelines, issued on February 22, 2002, direct agencies to:

- Develop and implement their own agency-specific information quality guidelines by October 1, 2002;
- Adopt a basic standard of quality (including objectivity, utility, and integrity) as a performance goal and incorporate the standard into the agency's operations;
- Develop a process for reviewing the quality of information to ensure quality before information is disseminated;
- Establish a process for affected persons to request correction of information that may not comply with OMB's or the agency's guidelines; and
- Report annually to the Director of OMB, beginning January 1, 2004, the number and nature of complaints received by the agency regarding the agency's compliance with its guidelines concerning the quality, objectivity, utility, and integrity of information, and how such complaints were resolved.

# **Background**

Information quality is important to the Department of Education because educators, researchers, policymakers, and the public use information that the Department disseminates for a variety of purposes. Thus, it is important that the information the Department disseminates be accurate and reliable.

The Department's Strategic Plan emphasizes the importance of information quality. For example, goal four of the six strategic goals is to "Transform Education into an Evidence-based Field." Under this goal, the Department seeks "to ensure that research funded or published by the Department is of the highest quality." The Department places priority on ensuring "... that high-quality research – whether or not it is funded by the Department – is synthesized, publicized, and disseminated widely."

The Department also relies on high quality information in the administration of its grant programs. For example, Objective 1.1 under the Strategic Plan requires the Department to "...link federal education funding to accountability for results." Consequently, programs that cannot demonstrate evidence of effectiveness will be candidates for reform or elimination. High quality information is required to demonstrate evidence of effective programs. To make sound decisions, the Department intends to accept and use only information that is accurate and reliable.

To serve the public, the Department of Education prepares and disseminates information products that describe the condition of American education and the Department's policies, programs, and services. The Department also disseminates profiles of the learner populations served by Department programs, evaluations of Department programs, and research products describing what works in American education. In addition, the Department reports statistical data describing the educational achievement, attainment, and the demographic and socioeconomic characteristics of America's students; the characteristics of the education labor force in the United States; the financing of education in the United States; and international comparisons of education systems and their students. The Department disseminates most of its information products in both printed and electronic formats, as well as in oral presentations. Many information products are announced on the Department's Web site (www.ed.gov), where they can be accessed and downloaded.

# **Purpose and Scope**

Consistent with the guidance from OMB, the Department of Education's Information Quality Guidelines (Guidelines) described below reflect the Department's policy and procedures for reviewing and substantiating the quality of information it disseminates, (e.g., reports, studies, and summaries), as well as provide an administrative mechanism allowing affected persons to seek and obtain, where appropriate, correction of information not complying with the Guidelines. These Guidelines, along with those issued by OMB, represent a performance goal for the Department and are intended only to improve the internal management of the Department. They do not create any private right of action to be used by any party against the government in a court of law or in an administrative hearing.

The Guidelines are applicable to information that the Department of Education disseminates on or after October 1, 2002, including the review of information to ensure quality before it is disseminated to the public. Some previously released information products continue to be used for decision-making or are relied upon by the Department and the public as official, authoritative, government information; this information is, in effect, constantly being redisseminated and are thus subject to these Guidelines. Previously released information products that do not meet these criteria are considered archived information and thus are not subject to these Guidelines.

In addition, individual offices within the Department of Education may have more detailed guidelines that are tailored to specific information needs. An example of program-specific guidelines are the National Center for Education Statistics (NCES) Statistical Standards, which may be accessed at the following url: <a href="http://nces.ed.gov/statprog/">http://nces.ed.gov/statprog/</a>. Other individual offices within the Department of Education also may develop guidelines tailored to their specific needs;

however, individual office guidelines would be consistent with the Department of Education Guidelines described below.

Under these Guidelines, information disseminated by the Department of Education is divided into four categories:

- *General Information about Education Programs*, such as fact sheets, descriptions of programs and services and guidance on who is eligible and how and where to apply for services or assistance. General information might also include public service reports on evaluations of specific programs and services, and descriptions of findings.
- Research Studies and Program Evaluation Information, such as detailed reports of
  research findings and methodologies and technical reports describing the procedures
  employed and the results of program evaluations.
- Administrative and Program Data, such as aggregates of records from schools, school districts, and states.
- *Statistical Data*, such as data collections of nonadministrative data and special purpose surveys that are designed to fill data gaps or information needs.

These Guidelines, however, do not govern all information of the Department, nor do they cover all information disseminated by the Department. For example, the Guidelines generally **do not cover**:

- Internal information such as employee records;
- Internal procedural, operational, or policy manuals prepared for the management and operations of the Department of Education that are not primarily intended for public dissemination;
- Information collected or developed by the Department that is not disseminated to the public, including documents intended only for inter-agency or intra-agency communications;
- Research findings and other information published by grantees, unless the Department –
  - o Represents, uses, or relies upon the information as the official position of the Department, or in support of the official position of the Department;
  - o Has authority to review and approve the information before release; or
  - o Directs that the information be disseminated;
- Opinions that are clearly identified as such, and that do not represent facts or the agency's views;
- Electronic links to information on other Web sites;
- Correspondence with individuals;
- Responses to requests for information under the Freedom of Information Act, the Federal Advisory Committee Act, and the Privacy Act;
- Press releases, unless they contain new substantive information that was not previously released;
- Congressional testimony that includes data that has previously been disseminated;
- Comments received from the public in response to Federal Register notices;
- Distributions intended to be limited to subpoenas or adjudicative processes, *i.e.*, the findings and determinations made in the course of adjudications;

- Information collected during the course of a Departmental investigation that is not intended to be disseminated to the public, *e.g.*, data collected through resolution of an OCR or OIG investigation; and
- Archival records, including previously released information products that are not being relied upon, used for decision-making, or held out as authoritative data.

# **Information Quality**

These Guidelines assess information quality using three factors: utility, objectivity, and integrity. These elements are intended to ensure that information the Department disseminates is useful, accurate, reliable, unbiased, and secure. Department staff will treat information quality as integral to the creation, collection, maintenance, and dissemination of information, and will review products before they are disseminated to ensure that they are consistent with these Guidelines. In particular, information products from the Department will follow the *Guide to Publishing at the U.S. Department of Education*, and all clearance submissions under the Paperwork Reduction Act will explain how the proposed collection of information will yield high quality, objective, and useful data, consistent with OMB's guidelines. Furthermore, the Guidelines provide that the level of quality assurance for information must be tied to its level of importance. *Influential Information*, that is information that will or does have a clear and substantial impact on public policies or private sector decisions, must meet a higher level of quality as described on page 9 of these Guidelines.

## **Utility**

Utility refers to the usefulness of the information to its intended users. Utility is achieved by staying informed of information needs and developing new products and services where appropriate. To maximize the utility of influential information, care must be taken in the review stage to ensure that the information can be clearly understood and, where appropriate and to the extent practical, an external user of the information can reproduce the steps involved in producing the information.

Ultimately, the Department intends to ensure that the information it disseminates meets the needs of intended users. All information products should be grammatically correct and clearly written in plain English. The target audience should be clearly identified, and the product should be understandable to that audience.

To ensure the usefulness of Department products, all information products should provide information that will help the Department fulfill its mission "to ensure equal access to education and to promote educational excellence throughout the nation." When appropriate, Department products should include contact information for users who seek clarification or further information, or who want to provide feedback.

#### In particular—

General Information should provide clear and readable descriptions of the
Department's programs and services and, where applicable, guidance and assistance,
including who is eligible and how and where to apply for services or assistance. It
also may include information pertaining to evaluations of specific programs and
services, and descriptions of findings.

- **Research Studies and Program Evaluations** should be designed and reviewed to fill the information needs that are identified through internal review, legislative mandates, or input from data users outside the Department.
- Administrative and Program Data, e.g., aggregate data (or information) derived from records at the school, school district, and state levels, should be carefully described and documented in all reports and products released by the Department.
- *Statistical Data*, *e.g.*, data collections of non-administrative data and special purpose surveys should be designed to fill data gaps or information needs that are identified through internal review, legislative mandates, or input from data users outside the Department, and should be reviewed for how well they fulfill that purpose.

The usefulness of information the Department disseminates will be evaluated from the perspective of the Department, educators, education researchers, policymakers, and the public. The Department relies upon internal reviews and analyses, along with feedback from advisory committees, educators, education researchers, policymakers, and the public to achieve this. Consistent with OMB's guidance, the Department's goal is to maximize the usefulness of the information and minimize the cost to the government and the public. When disseminating its information products, the Department will utilize varied dissemination channels so that the public, education researchers, and policymakers can locate Department information in an equitable and timely fashion.

## **Objectivity**

Objectivity refers to the accuracy, reliability, and unbiased nature of information. It is achieved by using reliable information sources and appropriate techniques to prepare information products. Objectivity involves both the content and the presentation of the information. Content should be complete, include documentation of the source of any information used, as well as, when appropriate, a description of the sources of any errors in the data that may affect the quality of the information product. The presentation of the information should be clear and in a proper context so that users can easily understand its meaning.

The Department strives to present information to the public in an accurate, clear, complete, and unbiased manner. In keeping with the OMB Information Quality Guidelines, all information products should undergo editorial and technical peer review to assist the Department in meeting this performance goal.

#### General Information

Department of Education information products should be appropriate for the target audience. Each product should:

- 1. Clearly state the goals or purpose of the information product;
- 2. Include an unbiased presentation of the topic in question;
- 3. If applicable, draw upon peer-reviewed, scientific evidence-based research that is appropriately documented;
- 4. Clearly identify data sources, if applicable; and
- 5. Confirm and document the reliability of the data, and acknowledge any shortcomings or explicit errors in any data that is included.

#### Research and Evaluation Information

Department of Education research and evaluation information products should, at a minimum:

- 1. Clearly state the goals or purpose of the topic in question;
- 2. Pose the research or evaluation question in a balanced and unbiased manner;
- 3. Provide an unbiased test of the question;
- 4. Have a research study approach or data collection technique that is well thought out, designed to use state of the art methodologies in the data collection, and be clearly described in the study documentation;
- 5. Present conclusions that are strongly supported by the data;
- 6. Clearly identify data sources, if applicable;
- 7. Confirm and document the reliability of the data, and acknowledge any shortcomings or explicit errors in any data that is included; and
- 8. Undergo peer review.

Department of Education research and evaluation information products documenting cause and effect relationships or evidence of effectiveness should meet the quality standards that will be developed as part of the *What Works Clearinghouse*.

#### Administrative and Program Data

These data draw upon aggregates from student record systems or other administrative data (*e.g.*, universe studies, including censuses, and other reports based on aggregate administrative data). These data rely upon information provided by third parties. Because of this, the Department does not have full control over the quality of the reported data; the Department intends to, however, identify the source of the information and any shortcomings or limitations of the data if we rely upon it for decision-making purposes. This will facilitate the public's understanding of the strengths and potential weaknesses of these data. Furthermore, as an additional assurance of quality, these data should meet the criteria that are being developed as part of an ongoing Department-wide data standardization and coordination initiative. At a minimum, these standards will require the following:

- 1. In formulating a data collection plan the goals of the study should be clearly described;
- 2. The subjects to be studied and the data to be collected should be clearly defined, using broadly understood concepts and definitions that are consistent with Department data definition handbooks;
- 3. The research study approach or data collection techniques should be well thought out and designed to use state-of-the-art methodologies in the data collection, and should be clearly described in the study documentation;
- 4. In designing the work, every effort should be made to minimize the amount of time required for responding institutions;

- 5. The source of research information or data should be reliable. Data should be collected with survey instruments that have been properly developed and tested;
- 6. Response rates should be monitored during data collection. When necessary, appropriate steps should be taken to ensure the respondents are representative of the population;
- 7. When applicable, care should be taken to ensure the confidentiality of personally identifiable data, as required by law, during the collection, processing, and analysis of the data;
- 8. Upon completion of the work, the findings and data should be processed in a manner sufficient to ensure that the data are edited to help ensure that the data are accurate and reliable:
- 9. The findings and data collection should be properly documented and stored, and the documentation should include an evaluation of the quality of the data with a description of any limitations of the data. In particular, any known limitations of the information should be documented (*e.g.*, missing values, amount of nonresponse);
- 10. The analysis should be selected and implemented to ensure that the data are correctly analyzed using modern statistical techniques suitable for hypothesis testing. Techniques may vary from simple tabulations and descriptive analysis to multivariate analysis of complex interrelationships. Care should be taken to ensure that the techniques are appropriate for the data and the questions under inquiry;
- 11. All work should be conducted and released in a timely manner;
- 12. Reports using these data should identify the source(s) of the information, including a citation. Reports should also include:
  - a) The reason the information is provided, its potential uses, and cautions as to inappropriate extractions or conclusions.
  - b) Descriptions of any statistical techniques or mathematical operations applied to the data.
  - c) The identification of other possible sources of potentially corroborating or conflicting information; and
- 13. Prior to dissemination, all reports, data, and documentation should undergo editorial and technical review to ensure accuracy and clarity.

#### Statistical Data

Department of Education reports and data collections that draw upon sample survey data should be clearly written, and should follow these Guidelines:

- 1. In formulating a data collection plan, the goals of the study should be clearly described;
- 2. The subjects to be studied and the data to be collected should be clearly defined, using broadly understood concepts and definitions that are consistent with Department data definition handbooks:
- 3. The research study approach or data collection techniques should be well thought out and designed to use state-of-the-art methodologies in the data collection and should also be clearly described in the study documentation;
- 4. In designing the work, every effort should be made to minimize the amount of time required for study participants;

- 5. The source of data should be reliable. The sample should be drawn from a complete list of items to be tested or evaluated, and the appropriate respondents should be identified, correctly sampled, and queried with survey instruments that have been properly developed and tested:
- 6. Response rates should be monitored during data collection. When necessary, appropriate steps should be taken to ensure that the respondents are a representative sample;
- 7. Care should be taken to ensure the confidentiality of personally identifiable data, as required by law, during research/data collection, processing, and analysis of the resulting data;
- 8. Upon completion of the work, the data should be processed in a manner sufficient to ensure that the data are cleaned and edited to help ensure that the data are accurate and reliable;
- 9. The findings and data collection should be properly documented and stored, and the documentation should include an evaluation of the quality of the data with a description of any limitations of the data. In particular, any known limitations of the information should be documented (*e.g.*, missing values, amount of nonresponse);
- 10. Data should be capable of being reproduced or replicated based on information included in the documentation, such as:
  - a) The source(s) of the information;
  - b) The date the information was current;
  - c) Any known limitations on the information;
  - d) The reason that the information is provided;
  - e) Descriptions of any statistical techniques or mathematical operations applied to source data: and
  - f) Identification of other sources of potentially corroborating or conflicting information.
- 11. If secondary analysis of data is employed, the source should be acknowledged, the reliability of the data should be confirmed and documented, and any shortcomings or explicit errors should be acknowledged (*e.g.*, the representativeness of the data, measurement error, data preparation error, processing error, sampling errors, and nonresponse errors);
- 12. The analysis should be selected and implemented to ensure that the data are correctly analyzed using modern statistical techniques suitable for hypothesis testing. Techniques may vary from simple tabulations and descriptive analysis to multivariate analysis of complex interrelationships. Care should be taken to ensure that the techniques are appropriate for the data and the questions under inquiry;
- 13. Reports should include the reason the information is provided, its potential uses, and cautions as to inappropriate extractions or conclusions, and the identification of other sources of potentially corroborating or conflicting information;
- 14. Descriptions of the data and all analytical work should be reported in sufficient detail to ensure that the findings could be reproduced using the same data and methods of analysis; this includes the preservation of the data set used to produce the work;
- 15. Prior to dissemination all reports, data, and documentation should undergo editorial and technical review to ensure accuracy and clarity. Qualified technical staff and peers both inside and outside the Department should do the technical review;
- 16. All work should be conducted and released in a timely manner; and

17. There should be established procedures to correct any identified errors. These procedures may include the publication of errata sheets, revised publications, or Web postings.

## **Integrity**

Integrity refers to the security or protection of information from unauthorized access or revision. Integrity ensures that the information is not compromised through corruption or falsification.

The Department strives to protect the information it collects, uses, and disseminates to the public from unauthorized disclosure, alteration, loss, or destruction. Statutory and administrative guidelines to protect the integrity of Department information include the following:

- Privacy Act;
- Freedom of Information Act;
- OMB Circulars A-123, A-127, and A-130;
- Federal Policy for the Protection of Human Subjects;
- Family Educational Rights and Privacy Act;
- Computer Security Act of 1987;
- Government Information Security Reform Act; and
- National Education Statistics Act, as amended by the USA Patriot Act.

Under the Privacy Act, the Department safeguards personally identifiable information that it gathers and maintains about individuals in a system of records. The Department is also highly protective of administrative records and sample survey data that include personally identifiable information, especially survey data that are collected under pledges of confidentiality.

Under the Computer Security Act of 1987, the Department of Education has identified all federal computer systems that contain sensitive information and has implemented security plans to protect these systems, so as to protect sensitive information against loss, misuse, disclosure or modification. In this context, sensitive information includes data covered under the Privacy Act and information that could affect the conduct of federal programs.

#### **Influential Information**

Government information that is particularly influential needs to meet higher quality standards, and in particular must be reproducible. Per the OMB guidelines, information is designated as influential if the Department determines that the information is reasonably likely to have a clear and substantial impact on public policies or private sector decisions if disseminated. Scientific, financial, and statistical information all may be considered influential. Individual programs within the Department of Education may designate certain classes of scientific, financial, and statistical information as influential.

For example, institutional data on the total number of student borrowers who enter repayment on Stafford loans during a specific fiscal year, and related data on the subset of students who default before the end of the next fiscal year are used in the calculation of cohort loan default rates of Stafford loan borrowers at each postsecondary institution. These default rates are compared to established thresholds for high and low default rates, resulting in sanctions for institutions with high default rates and reduced administrative burden for institutions with low default rates.

Given this use, these data and the calculations used in computing the rates and in setting the thresholds are influential. Similarly, the data and formulas used in determining program allocation of funds in areas such as special education, adult education, and Title I are influential.

As specified in the OMB guidelines, influential information must be accompanied by supporting documentation that allows an external user to understand clearly the information and be able to reproduce it, or understand the steps involved in producing it. With respect to original and supporting data related thereto, the Department will assure reproducibility for such data according to commonly accepted scientific, financial, or statistical standards for that type of data, taking into account any ethical and confidentiality constraints. In the case of influential analytic results, the mathematical and statistical processes used to produce the report must be described in sufficient detail to allow an independent analyst to substantially reproduce the findings using the original data and identical methods. In situations where the public cannot access the data and methods due to other compelling interests such as privacy, intellectual property or other confidentiality protections, the Department will apply especially rigorous robustness checks to analytic results and document what checks were undertaken.

# **Information Correction Requests and Appeals**

Effective October 1, 2002, the Department of Education will allow any affected person to request the correction of information the Department disseminates that does not comply with applicable OMB and Department of Education information quality guidelines. An affected person is an individual or an entity that may use, benefit or be harmed by the disseminated information at issue.

Most Department information products include the names of knowledgeable staff that can assist users in understanding the information presented, and in determining whether there is an error that warrants action using the correction process described in this section. Users of the Department's information should consult with the contact person listed in the product before filing a formal request for correction.

# **Information Correction Requests**

In the Department of Education's correction request process, the burden of proof rests with the requester. An affected person who believes that information the Department disseminates does not adhere to the information quality guidelines of OMB or the Department, or an office of the Department that has issued program-specific guidelines, and who would like to request correction of specific information, needs to provide the following information:

- Identification of the requester (*i.e.*, name, mailing address, telephone number, and organizational affiliation, if any);
- A detailed description of the information that the requester believes does not comply with the Department's or OMB's guidelines, including the exact name of the data collection or report, the disseminating office and author, if known, and a description of the specific item in question;
- Potential impacts on the requester from the information identified for correction (*i.e.*, describe the requestor's interest in the information and how the requestor is affected by the information in question); and

• An explanation of the reason(s) that the information should be corrected (*i.e.*, describe clearly and specifically the elements of the information quality guidelines that were not followed).

This information should be provided to the Deputy Chief Information Officer for Information Management at the following address:

Director, Information Management Office of the Chief Information Officer U.S. Department of Education RE: Information Quality Request Room 4060, ROB-3 400 Maryland Avenue, SW Washington, DC 20202

Alternatively, requesters may submit e-mail requests to the following address: "ocio.infoqualityrequest@ed.gov." Requesters should indicate that they are submitting an Information Quality Request in the subject line of the e-mail.

#### **Review**

The Director, Information Management, CIO (DIM/CIO) will review the request and determine whether it contains all the information required for a complaint. If the request is unclear or incomplete, the Department will seek clarification from the requester.

If the request is clear and complete, the DIM/CIO will forward it to the appropriate program office(s) for a response to the requester. The responsible office(s) will determine whether a correction is warranted, and if so, what corrective action it will take. Any corrective action will be determined based on the nature and timeliness of the information involved, as well as the significance of the error on the use of the information, the magnitude of the error, and the cost of undertaking a correction.

Comments about information on which the Department has sought public comment, such as rulemaking or studies cited in a rulemaking, will be responded to through the public comment process, or through an individual response if there was no published process for responding to all comments. The Department may choose to provide an earlier response, if doing so is appropriate, and will not delay issuance of the final action in the matter.

The Department is not required to change the content or status of information simply based on the receipt of a request for correction. The Department may reject a request that appears to be made in bad faith or without justification, and is only required to undertake the degree of correction that is appropriate for the nature and timeliness of the information involved. In addition, the Department need not respond substantively to requests that concern information not covered by the information quality guidelines.

## Response

The Department will respond to all requests for correction within 60 calendar days of the DIM/CIO's receipt of the request, including requests that the Department elects not to process further. For requests that merit review –

- If the request is clear and complete, the Department's response will explain the findings of the review, or will inform the requester if more time is needed to complete the review, the reason(s) for the additional time, and an estimate of the time it will take to respond. The appropriate program office will be responsible for determining what action is necessary and, if an error was made, it will determine the appropriate level of correction.
- If the request is incomplete or unclear, the DIM/CIO, will seek clarification from the requester. In the case of an unclear or incomplete request, the requester may submit additional clarifying information if he or she so chooses. However, the deadline for the Department's review and response will be based upon the date the clarifying information is received.

Once a decision is made, the response will explain to the requester that he or she has a right to appeal the decision. Copies of all Department correspondence related to Information Quality Requests will be maintained by the DIM/CIO.

## **Appeals**

If a requester is not satisfied with the Department's decision on the request (including the corrective action, if any), he or she may appeal to the Department's Chief Information Officer within thirty (30) calendar days of receipt of the Department's decision. This administrative appeal must include a copy of the initial request, a copy of the Department's decision, and a letter explaining why he or she believes the Department's decision was inadequate, incomplete, or in error.

This appeal information should be provided to the Department's Chief Information Officer (OCIO) at the following address:

The Chief Information Officer U.S. Department of Education RE: Information Quality Appeal Room 4082, ROB-3 400 Maryland Avenue, SW Washington, DC 20202

Alternatively, requesters may submit an appeal by e-mail to the following address: "ocio.infoqualityappeal@ed.gov."

Requesters should indicate that they are submitting an Information Quality Appeal in the subject line of the e-mail. Such e-mail requests must include all of the information specified for an appeal submitted by regular mail.

The Department will ensure that all appeals are subjected to an impartial review that is conducted by parties other than those who prepared the Department's decision. The Department will respond to all appeals within 60 calendar days of the CIO's receipt of the appeal, or will inform the requester if more time is needed to complete the review of the appeal, and the reason(s) for the additional time.