The National Forum on Education Statistics

Levette Williams

Forum Member and Past Chair of the Forum Policies, Programs, and Implementation Committee

National Forum on Education Statistics

Presentation Outline

- National Forum on Education Statistics (Forum)
- Forum Resources
- Discussion / Q&A

Challenges to Comparable and Uniform K-12 Public Education Statistics

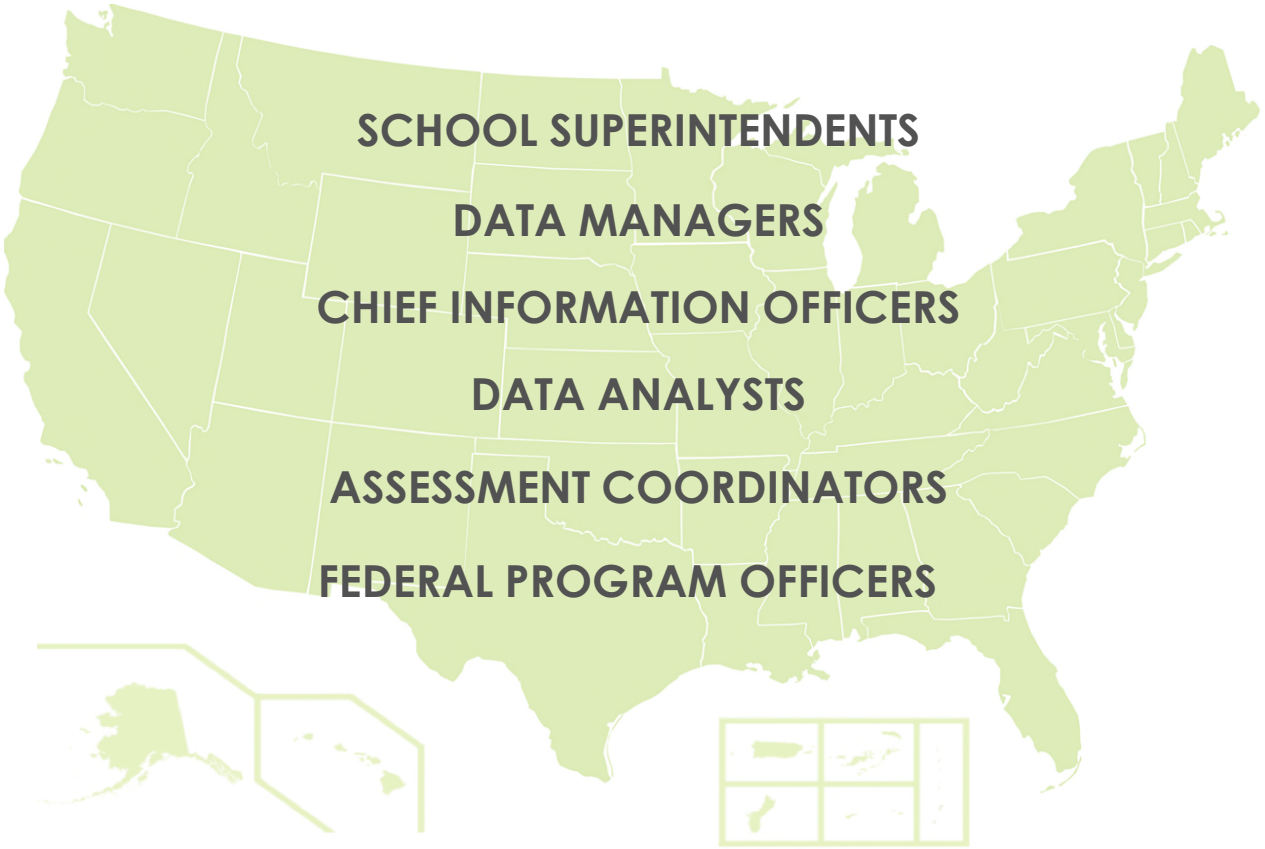
- Differences between states
  - Laws
  - Student Information Systems (SIS)
  - Policies
  - Data collection methods
  - One versus many SIS vendors
  - Data element definitions
- Local control

National Forum on Education Statistics (Forum)

- Established in 1989
- Known as the "Forum"
- Purpose: To assist in improving the collection, reporting, and use of elementary and secondary education statistics.
- The Forum provides an arena for local, state, and national leaders in the education data community to discuss issues, address problems, develop resources, and consider new approaches to improving data collection and utility.

National Forum on Education Statistics (Forum)

Forum Membership



SCHOOL SUPERINTENDENTS

DATA MANAGERS

CHIEF INFORMATION OFFICERS

DATA ANALYSTS

ASSESSMENT COORDINATORS

FEDERAL PROGRAM OFFICERS

Forum Organization

Full Forum

Steering Committee

National Education Statistics Agenda Committee

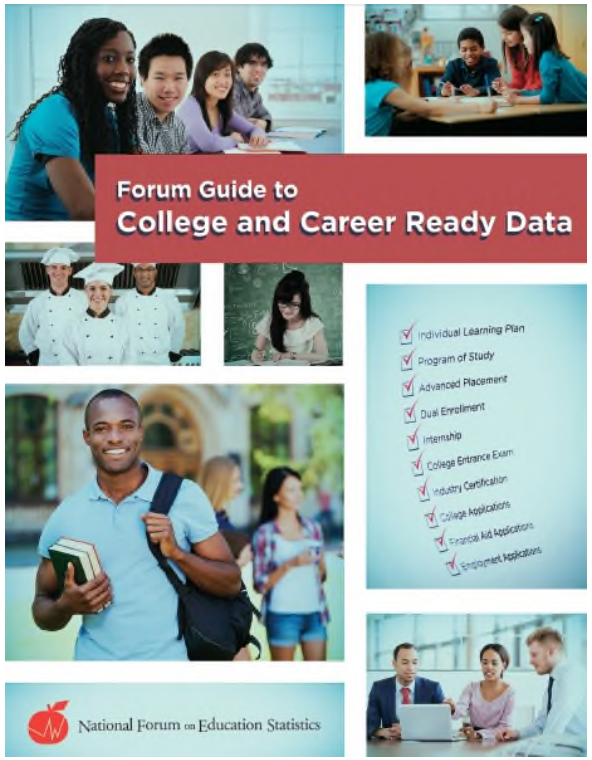
Policies, Programs, and Implementation Committee

Technology Committee

Working Groups

Forum Resources

Forum Guide to College & Career Ready Data



Forum Guide to College & Career Ready Data

- Chapter 1: Overview of College and Career Readiness
- Chapter 2. Using Data to Support College and Career Ready Goals
- Chapter 3. Overarching Issues for the Use of College and Career Ready Data
- Chapter 4. Key Points and Emerging Needs
- Appendices

College and Career Ready Data Use Cases

- Tools to Support Individualized Learning
- Educator Support Systems to Address Student-Specific Needs
- Metrics, Accountability, and Continuous Improvement
- Postsecondary Feedback Loops
- Maximizing Career Opportunities for All Students

College and Career Ready Data Use Case: Postsecondary Feedback Loops

- Postsecondary feedback loops provide information on student CCR outcomes
- Feedback loops have traditionally included only postsecondary enrollment data; some states are working on including workforce outcome data as well
- Barriers continue to exist in obtaining postsecondary outcomes or workforce data for students who leave their state to pursue college or work

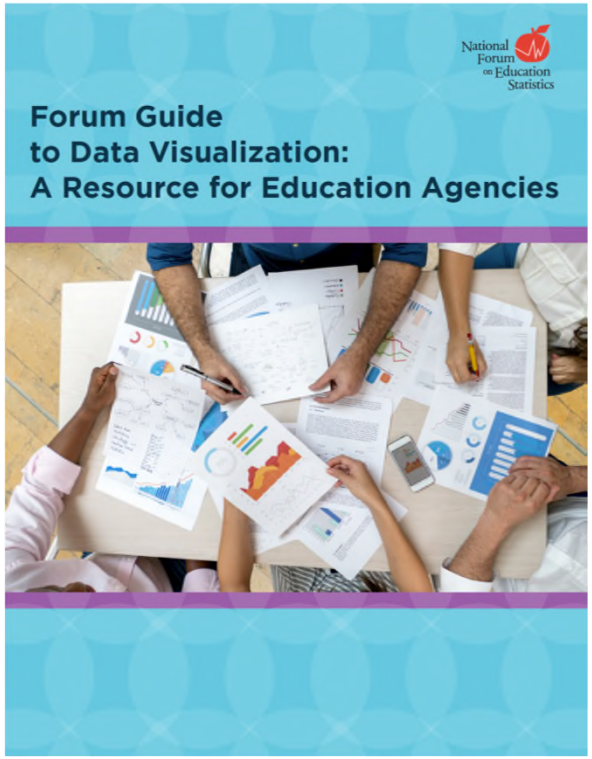
Example: Montana High School Follow Up Report

College and Career Ready Data Use Case: Maximizing Career Opportunities for Students

- Career and Technical Education (CTE) Career Pathways or Program of Studies provide a model for K-12, Postsecondary, and Workforce cooperation
- CTE plays an important role in preparing students for whom less than a bachelor's degree is needed for future employment; CTE programs should be held to the same standard of academic rigor as general education programs
- Workforce agencies can provide data on students who are employed in-state in non-federal, non-military industries

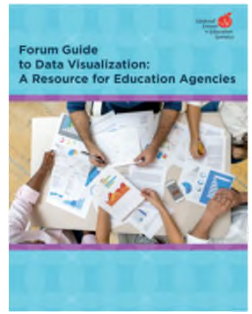
Example: Washington State's Education Research and Data Center

Forum Guide to Data Visualization: A Resource for Education Agencies



Forum Guide to Data Visualization: A Resource for Education Agencies

- Chapter 1: Data Visualization in Education Organizations
- Chapter 2: Data Visualization to Advance Data Analysis
- Chapter 3. Data Visualization to Improve Communications
- Chapter 4: Implementing the Data Visualization Process
- Appendices

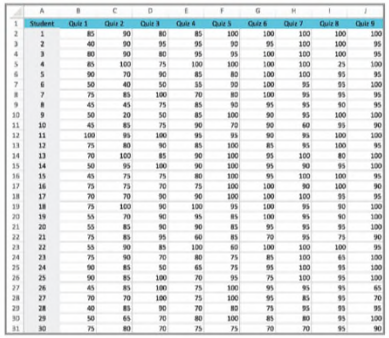


What is Data Visualization, and Why is it Important?

The transformation of data into information through visual presentation and analysis.

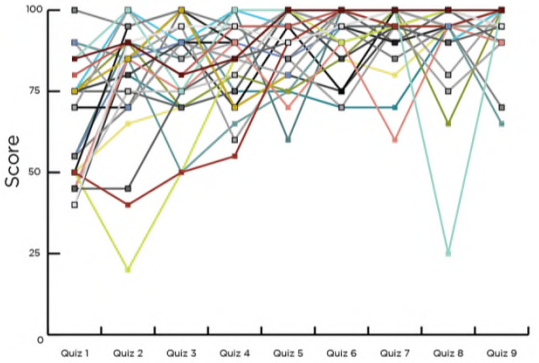
How many words is that picture worth?

Quiz Performance, Class 3B



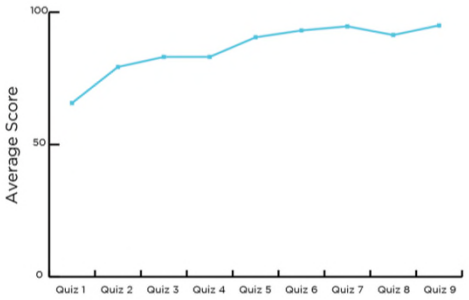
(1) Raw Tabular Data

Quiz Performance, Class 3B



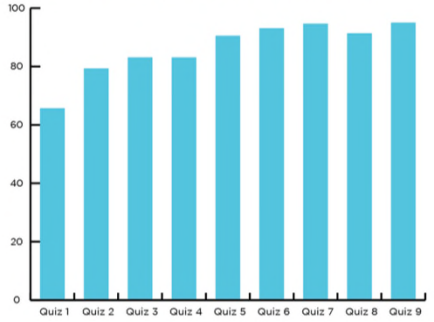
(2) Complex Data Presentation

Quiz Performance, Class 3B

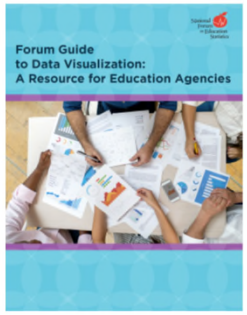


(3) Effective Data Presentation

Quiz Performance, Class 3B



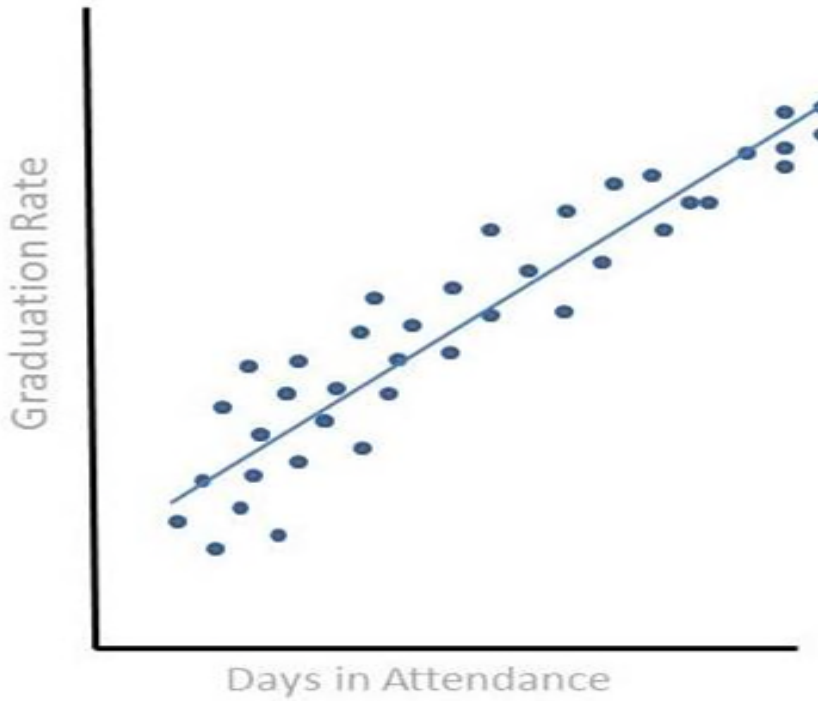
(4) Accurate Data Presentation

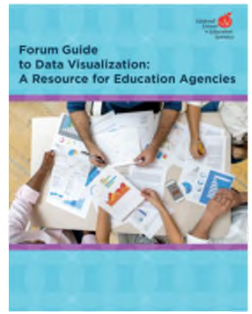


Key Principles for Effective Data Visualization

1. Show the data
2. Reduce the clutter
3. Integrate text and ima
4. Portray data meaning accurately and ethica

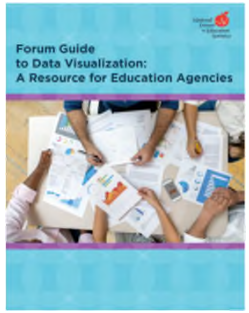
High school attendance is the most important predictor of student graduation in the Hypothetical Public Schools, 2009-2012.



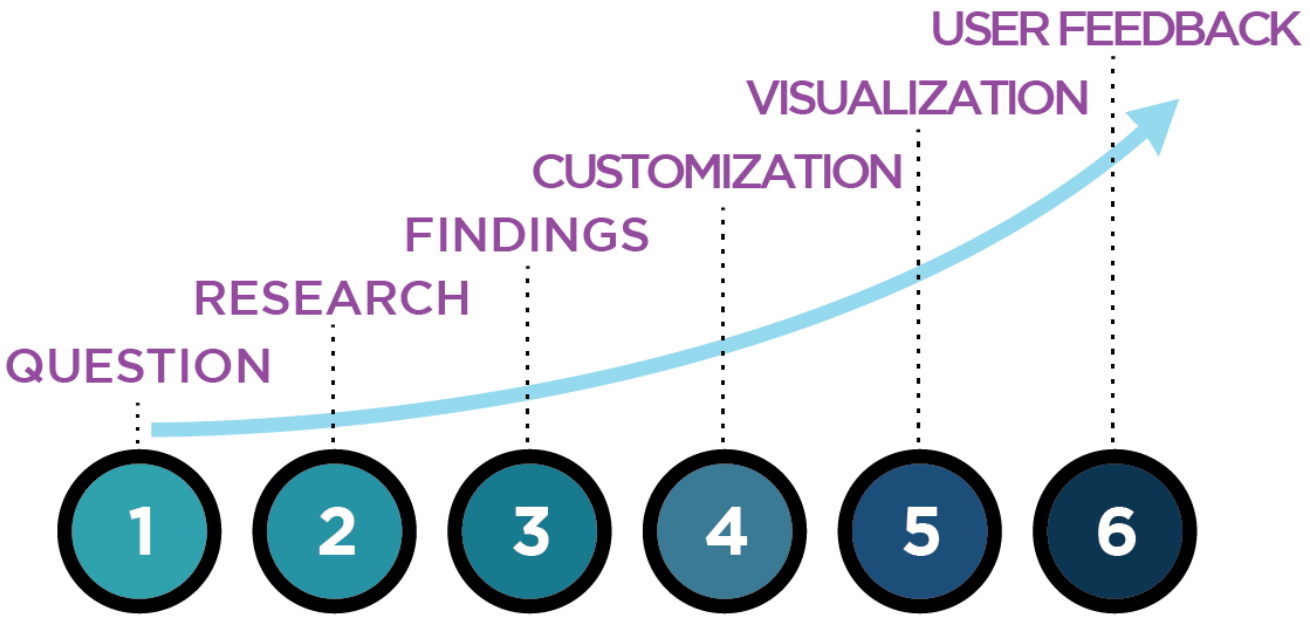


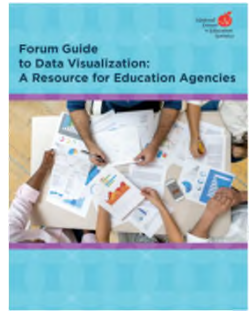
Recommended Practices for Data Visualization

1. Capitalize on consistency
2. Data that should not be compared should not be presented side by side
3. Don't limit your design choices to default graphing programs
4. Focus on the take-home message for the target audience
5. Minimize jargon, acronyms, and technical terms
6. Choose a font that is easy to read and will reproduce well
7. Recognize the importance of color and the benefits of Section 508 compliance

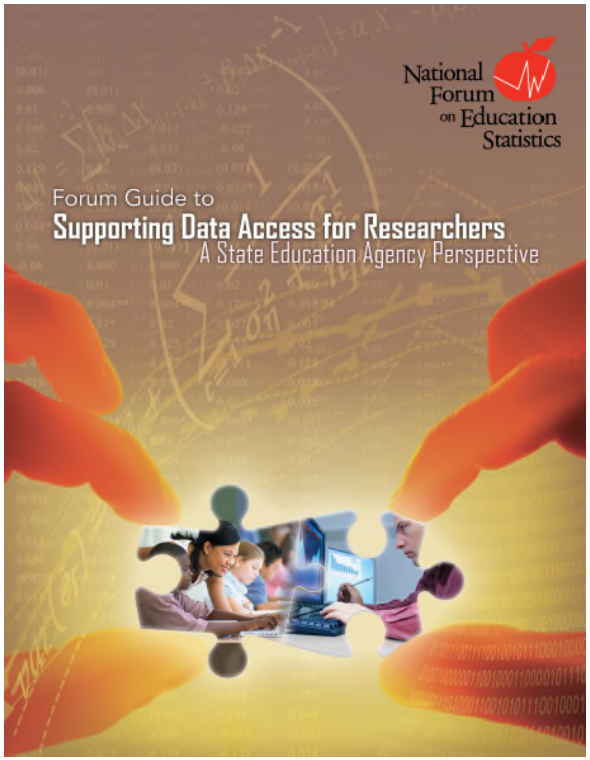


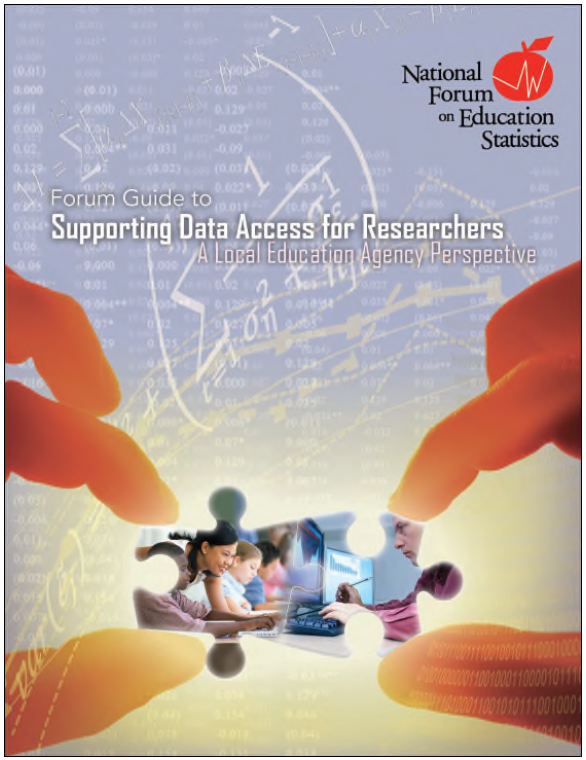
Six-Step Process for Data Visualization





Forum Guides to Supporting Data Access for Researchers





Forum Guides to Supporting Data Access for Researchers

SEA Perspective

- Chapter 1: Data Partnerships: An Opportunity to Benefit Education Agencies and the Research Community
- Chapter 2: Core Practices for Effectively Managing Data Access Requests
- Appendices

LEA Perspective

- Chapter 1: Effectively Managing Requests for Data Access
- Chapter 2: Core Practices For Effectively Managing Data Access Requests
- Appendices

Data Partnership Benefits

- Encouraging research projects that reflect an education agency's information needs and priorities
- Supporting data-driven decisionmaking by educators and policymakers
- Providing an SEA or LEA with access to additional research, statistical, and program expertise
- Building the research skills of staff who will work with members of the research community while reviewing and servicing data requests

Challenges to Sharing Data

- *Staff Time*: reviewing and responding to data requests
- *Resource Allocation*: establishing an infrastructure, implementing core data sharing practices, and managing and monitoring requests
- *Data Limitations*: data collected are intended for specific purposes and may not meet the precise needs of researchers
- *Privacy and Security*: much of the data in SEA or LEA systems will be protected by FERPA and other federal, state, and local laws and regulations

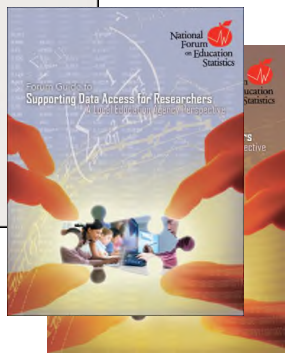
Core Practices for Effectively Managing Data Requests

1. Help Researchers Understand Agency Data and the Data Request Process
2. Create Effective Data Request Forms for Researchers
3. Review Data Requests Strategically
4. Manage the Data Request Process Efficiently
5. Release Data Appropriately
6. Monitor Data Use
7. Use Research Findings

Core Practice 1: Action Items

Help Researchers Understand Agency Data and the Data Request Process: Action Items

- ✓ Create, promote, and use a research agenda. Post the agenda on the reference landing page, introduce the agenda to researchers upon first point of contact, and share the agenda with local colleges of education.
- ✓ Develop policies about training topics and requirements for researchers; identify those topics that are optional and those that are mandatory.
- ✓ Identify or develop resources (e.g., training materials) to help researchers better understand, request, and access new and existing data.
- ✓ Determine when communications would be most useful to researchers during the data request/access/use timeline.



Templates

Appendix B. Preliminary Research/Data Request Template

STATE DEPARTMENT OF EDUCATION

Mailing Address
Telephone

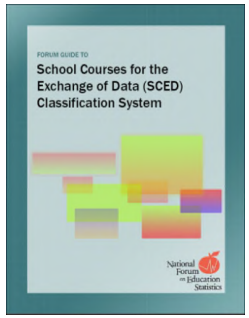
Date:	Control Number: (TBD - Assigned by Agency)

Section I - Transmittal Letter

a. Brief outline of proposed research
b. Brief outline of data to be requested
c. Benefit to the state education system and/or alignment with state education goals
d. Key timelines for research
e. Summary of qualifications

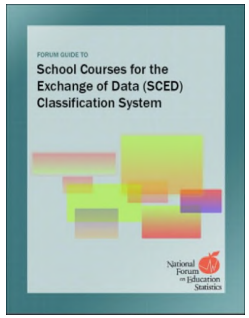
School Courses for the Exchange of Data (SCED)

- SCED is a voluntary, common classification system for prior-to-secondary and secondary school courses.
- It can be used to
  - compare course information;
  - maintain longitudinal data about student coursework; and
  - efficiently exchange course taking records.

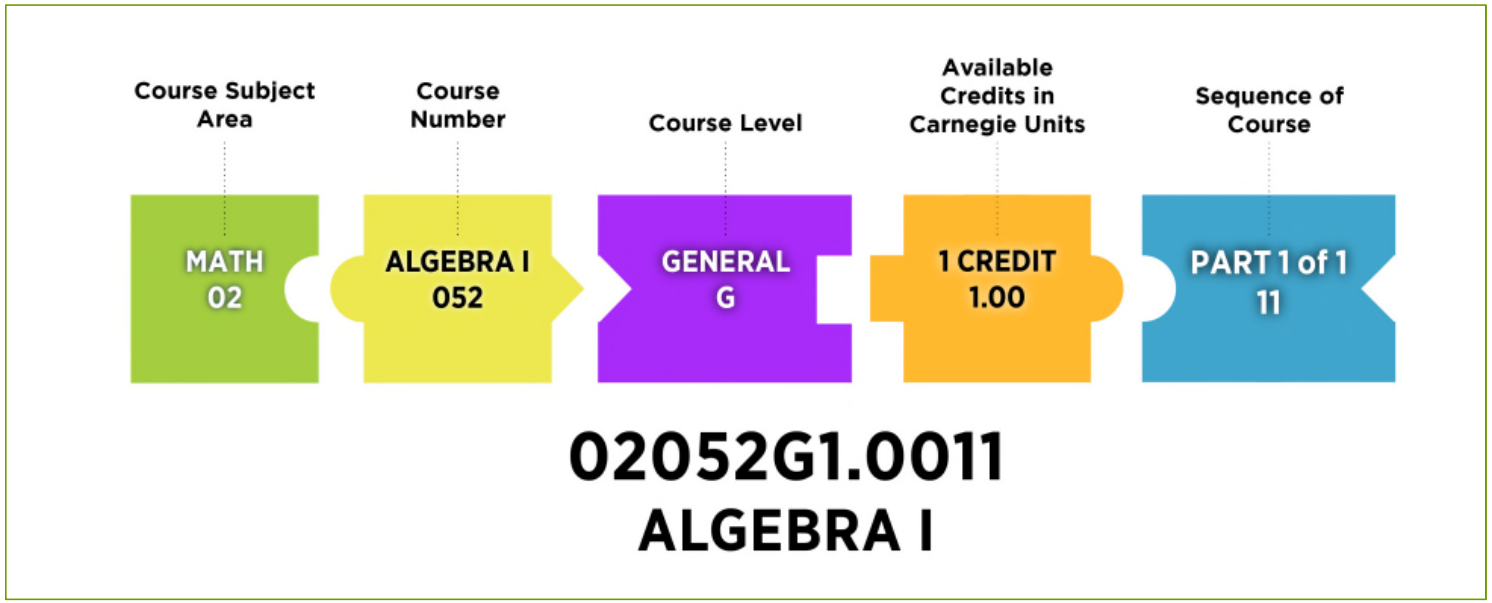


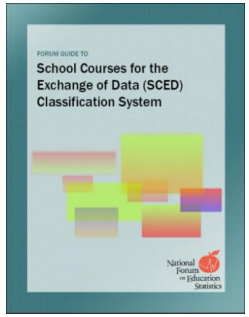
SCED History and Working Group

2007	Secondary SCED
2011	Prior-to-Secondary SCED
2014	SCED Version 2.0
2014	*Forum Guide to SCED*
2015	SCED Version 3.0
2015	SCED Finder
2016	SCED Version 4.0
2017	SCED Version 5.0

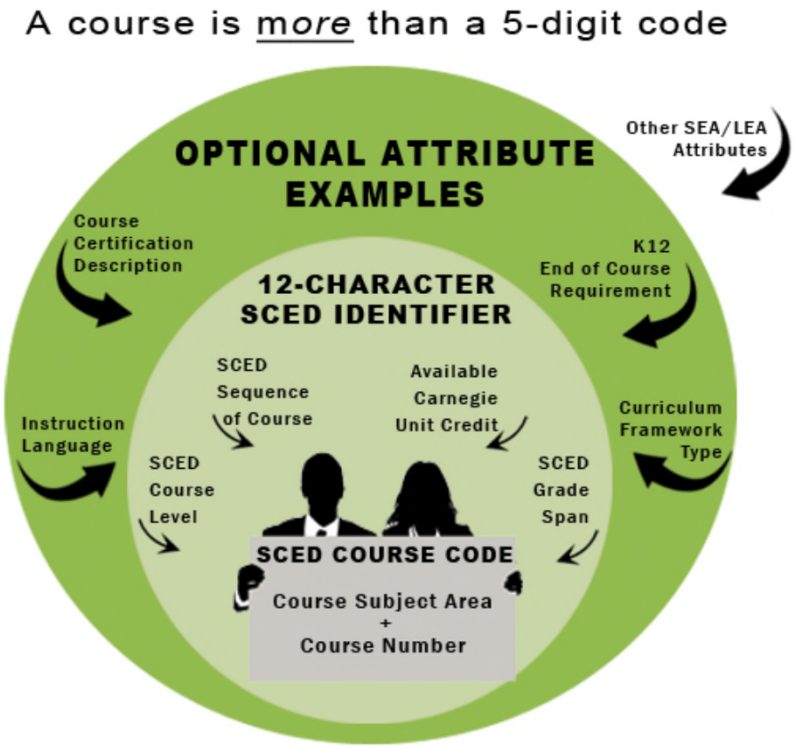


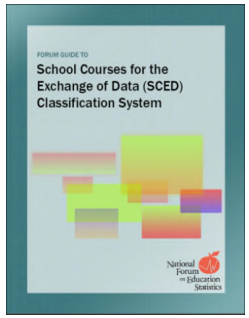
SCED Elements





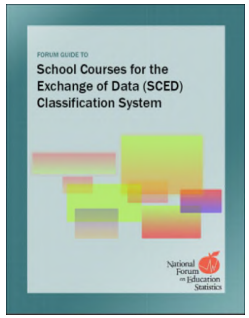
SCED Attributes





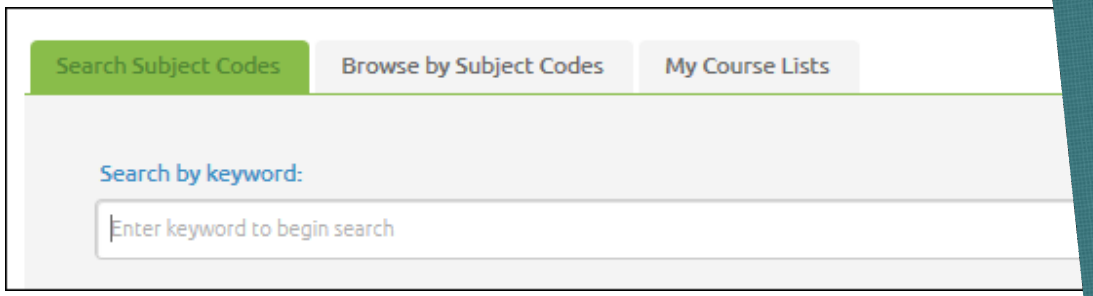
SCED Course Subject Area Codes

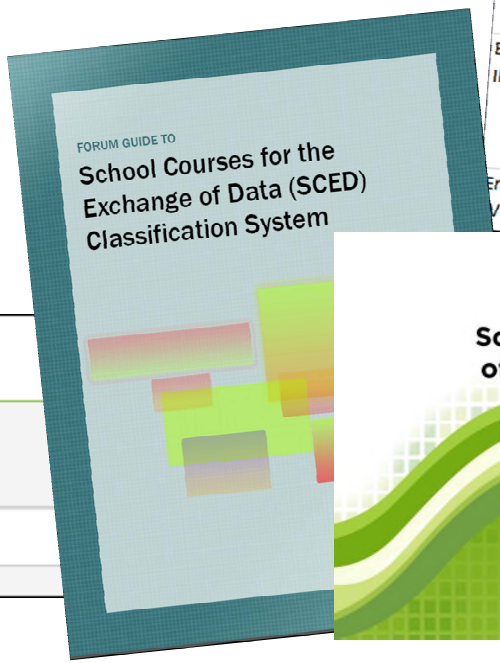
- 01 English Language and Literature
- 02 Mathematics
- 03 Life and Physical Sciences
- 04 Social Sciences and History
- 05 Visual and Performing Arts
- 07 Religious Education and Theology
- 08 Physical, Health, and Safety Education
- 09 Military Science
- 10 Information Technology
- 11 Communication and Audio/Visual Technology
- 12 Business and Marketing
- 13 Manufacturing
- 14 Health Care Sciences
- 15 Public, Protective, and Government Services
- 16 Hospitality and Tourism
- 17 Architecture and Construction
- 18 Agriculture, Food, and Natural Resources
- 19 Human Services
- 20 Transportation, Distribution and Logistics
- 21 Engineering and Technology
- 22 Miscellaneous
- 23 Non-Subject-Specific
- 24 World Languages

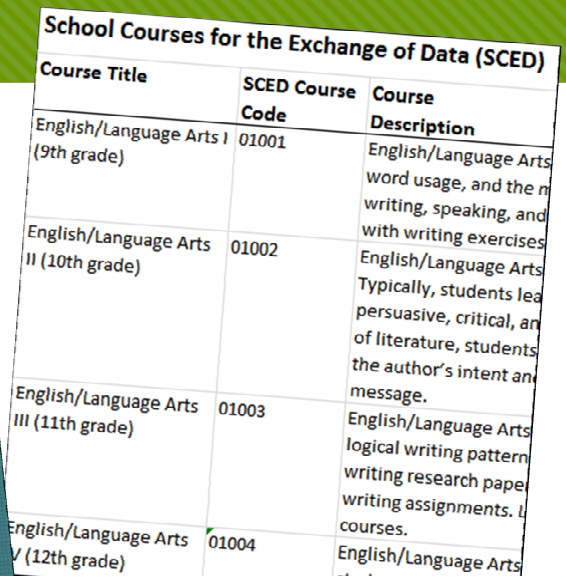


SCED Resources

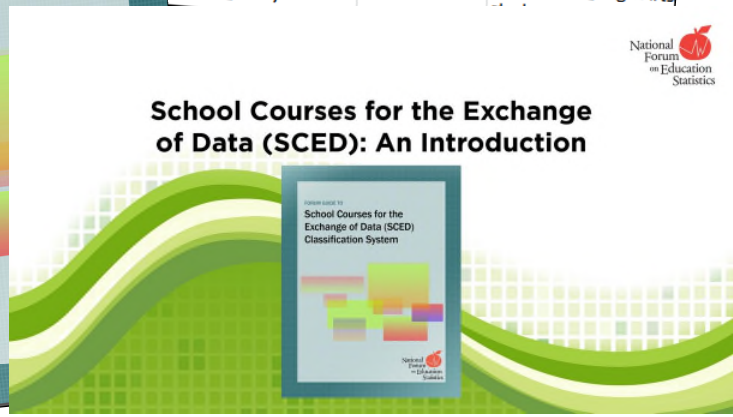
- SCED Finder
- *Forum Guide to SCED*
- SCED Master List
- SCED Video Series
- SCED Frequently Asked Questions






School Courses for the Exchange of Data (SCED)

Course Title	SCED Course Code	Course Description
English/Language Arts I (9th grade)	01001	English/Language Arts word usage, and the n writing, speaking, and with writing exercises
English/Language Arts II (10th grade)	01002	English/Language Arts Typically, students lea persuasive, critical, an of literature, students the author's intent an message.
English/Language Arts III (11th grade)	01003	English/Language Arts logical writing pattern writing research pape writing assignments. courses.
English/Language Arts V (12th grade)	01004	English/Language Arts



SCED Spotlight: Iowa

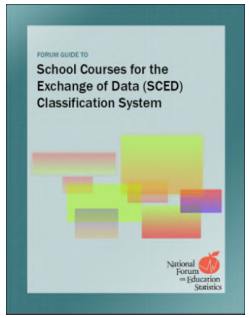
- Community College Courses
- Core Courses for University Admission

RAI-Approved SCED Codes 2017: Individual List

Below is a list of SCED codes that have been approved for the Regents Admission Index (RAI). The first five digits of the 11 digit SCED codes are included in the table below. Please note that the sixth digit of the SCED code, which represents the level of instruction, must be **G**, **H**, **E**, or **C** for the SCED code to be counted toward the RAI.

SCED	Course Name
01001	English/Language Arts I (9th grade)
01002	English/Language Arts II (10th grade)
01003	English/Language Arts III (11th grade)
01004	English/Language Arts IV (12th grade)
01005	AP English Language and Composition
01006	AP English Literature and Composition
01007	IB Language A (English)
01011	IB English A: Language & Literature

02056	Algebra II
02057	Algebra III
02061	Integrated Math - multi-year equivalent
02072	Geometry
02073	Analytic Geometry
02101	Number Theory
02102	Discrete Math
02103	Trigonometry
02104	Math Analysis



Action Items for PESC Members

- Visit the Forum website: https://nces.ed.gov/forum/
- Use Forum publications
- Provide feedback
- Send Michael to Forum meetings with suggestions

National Forum on Education Statistics

Questions?


Supporting Data Access for Researchers
Forum Guide to College and Career Ready
FORUM GUIDE TO METADATA
THE FORUM GUIDE TO DATA ETHICS
TRAVELING THROUGH TIME
EVERY SCHOOL DAY COUNTS
Forum Guide to Education Data Privacy
Forum Guide to Collecting and Using Disaggregated Data on Racial/Ethnic Subgroups
FORUM GUIDE TO Alternative Measures of Socioeconomic Status in Education Data Systems
Forum Guide to Taking Action with Education Data
CRISIS DATA MANAGEMENT:
ACCOUNTING FOR EVERY STUDENT

Thank You and Contact Information

- Ghedam Bairu, NCES: Ghedam.bairu@ed.gov
- Download free Forum resources at http://nces.ed.gov/forum/publications.asp