# Institute of Education Sciences National Center for Education Statistics

## CLEAR DATA DESCRIPTIONS IN NCES REPORTS

NISS Technical Expert Panel • February 2018

## **EXECUTIVE SUMMARY**

The National Center for Education Statistics (NCES) is most well known as a source for assessments of students' proficiency and their education trajectories. NCES also gathers information on other aspects of education including economics, adult education levels of attainment, post-secondary education completion, and contemporary issues such as crime in schools. NCES education data is collected variously from surveys and assessments originating at NCES, from internationally-generated assessments and surveys, from collaborations with other federal agencies, and from the assembly of states' administrative data with federal records and survey data. Therefore, achieving consistency and clarity in language usage across NCES reports is extremely challenging and not always possible.

This panel was charged to address both principles and processes and to set attainable goals for NCES in addressing this issue. To narrow the scope to an attainable objective, the panel excluded discussion of technical statistical terms and options for presentation of technical materials in tables, graphs and text.

The findings and recommendations are divided into three parts: characterizing effective writing in relation to the specific audience addressed, outlining the process of "harmonization" in the context of clarity and consistency, and addressing the practicalities of moving forward with a holistic process for writing and reviewing that can improve consistency and clarity among NCES reports and data products.

The panel met at an in-person meeting on 5-6 February 2018 with further closed teleconferences as this report was being prepared.

### Recommendations for Reports, Publications, Communications, and Audiences

NCES disseminates data and results using many different formats and products, including *First Look Reports, Statistics in Brief* publications, two-page *Data Point Reports* and NCES blog posts. The goal is to clearly articulate the audience of each NCES published work product and to use content and language appropriate for each target audience.

- 1. NCES needs to produce unique work products aimed at the different audiences they serve.
- 2. To develop audience-appropriate resources, NCES should invest in understanding their stakeholders, for example, policymakers, educators, researchers, journalists, data users, and parents.
- 3. NCES needs to articulate its clear vision of what can be accomplished through its electronic media.
- 4. NCES should use the affordances of their website and other digital media to produce work products aimed at different audiences.
- 5. NCES needs a user-centric website with a useful structure that allows stakeholders from various communities to rapidly access information and NCES reports relevant to them.

#### **Recommendations for Clarity, Consistency and Harmonization**

Transparency and accuracy of meaning is an even greater challenge when the readerships are diverse, the writers are many, and the data collections have been gathered for different purposes and according to different plans. "Harmonization" is used here to mean a deliberated agreement: 1) to apply one meaning to a particular word or phrase wherever it appears in NCES reports, documents, website or elsewhere; or 2) to select one word/phrase from multiple alternatives designating the same thing for universal usage in NCES reports, etc.

#### What to Harmonize

- 1. Harmonization efforts should focus on terms that identify classifiers or descriptors of populations and subgroups ("independent variables," or factors) with priority given to those that are used for establishing policy and those that are used by multiple surveys and/or data bases to provide crosscutting information or to examine information over time.
- 2. Harmonization efforts should focus on providing stable definitions for constructed measures, especially those used in policy-making.
- NCES should look to other federal agencies for standard terms in their purviews; simultaneously NCES
  needs to take the lead in defining standard (harmonized) terms relating to education and education
  constructs.
- 4. When harmonization is inappropriate or simply not possible, both report writers and NCES editors need to focus on using plain language insofar as possible and providing easy access to precise definitions.

#### Process, Construct, Review

- 1. The guidelines (statistical and stylistic) for each product, the process for review, and the standards for review for each product should be clear.
- 2. A checklist for authors would allow them to pre-review products before submitting for review by other staff.
- 3. A reviewer's checklist for external (within NCES) reviewers would specify components for review.
- 4. Adopt a style (e.g., APA style) for all products.

#### **Over Arching Recommendations**

Wherever harmonization is possible and retains accuracy of meaning, it is advantageous; and the harmonized usages should be institutionalized across NCES products. Further, an efficient review process aided by these tools is needed to ensure adherence to these standard usages and to encourage rather than inhibit production of NCES reports.

Additional specifically focused recommendations are included in this report.

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