The Consistent Naming of Elements

This document describes the principles used in naming CEDS data elements and entities. These naming conventions provide consistency within the standards. Conventions used within CEDS need not restrict how education agencies and system developers implement the standards. Comparability of meaning is most critical for implementation; however, consistent and clear naming can make it easier to compare data across systems and domains of systems.

Standard Name

The standard name of a data element in CEDS is refined for human readability and understandability, to avoid possible confusion when using an element in a different context or across domains. CEDS elements may also be assigned a “Technical Name,” often the standard name with spaces removed, and/or an alternative name reflecting a commonly used alternative name for the same concept.

Based on the ISO 11-179 guidelines, element names have name parts that consist of discrete terms.

The name parts are entity terms, property terms, representation terms (optional), and qualifier terms (optional). Consider how these name parts function in the following illustration:

Entity Terms

Entity terms provide the context for an element. In the following data element names, the terms Person, Accountability Report, Dental Insurance Coverage, and Advance Placement are entity terms:

- Person Middle Name
- Accountability Report Title
- Dental Insurance Coverage Type
- Advance Placement Credits Awarded
Property Terms
A property is an attribute common to all members of an entity. For example, all persons have a date of birth. In the following data element names, the terms *Name*, *Title*, and *Credits Awarded* are property terms:

- Person Middle Name
- Accountability Report Title
- Dental Insurance Coverage Type
- Advance Placement Credits Awarded

In this list, three of the element names have an Entity – Property structure. One of the element names (“Dental Insurance Coverage Type”) has an Entity – Representation structure.

Representation Terms (Optional)
Representation terms describe the form of representation. For example, this document defines these representation terms and their uses:

- “Indicator”
- “Status”
- “Identifier”
- “Descriptor”
- “Description”
- “Type”

In “Dental Insurance Coverage Type,” *Type* is a representation term.

Qualifier Terms (Optional)
Entity terms define a context for an element. If the context is narrow, the entity terms may include a qualifier to make it clear that the element is for a specific domain. For example, in the element name “Postsecondary Enrollment Type,” it is clear that this enrollment type element is defined for use in the postsecondary domain—i.e., its options set may not be compatible with K12 uses.

Another use of a qualifier term is to indicate a scope or time frame of a metric. In the following data element name, the term *Budget Period* is a qualifier term:

- Cost Budget Period Total Amount

Qualifier terms may appear before or after an entity term, as appropriate to convey meaning.

Rules for CEDS Element Naming

**Rule #1:** CEDS element names ALWAYS contain a property term.

**Rule #2:** CEDS element names are ALWAYS prefixed by an entity term, UNLESS the element is a *common* element defined for universally consistent application, regardless of context.

**Rule #3:** CEDS element names may contain qualifier and representation terms, as needed to represent the scope and context of the element.

*Common elements include “Entry Date,” “Exit Date,” “First Name,” “Last or Surname,” and “Middle Name.” CEDS does not define separate context-specific elements for these concepts. For example, CEDS does not define “Student First Name.” The rationale is that a person’s name elements have universally consistent application. Any person regardless of role (e.g., child or parent) or domain (e.g., early learning, K12, postsecondary, or workforce) may have name attributes that fit within these commonly defined elements. A single element definition supports all the possible contexts in which a common element is used.*

A note about adoption: The latest version of CEDS generally reflects the naming conventions, but there may be exceptions. Some elements adopted prior to this naming convention may not have been changed. Instances in which the CEDS elements do not follow these conventions may be reviewed, and appropriate changes may be made to the element names and/or naming rules through the open participation of various stakeholder communities.