# Codes, Categories, Items, and Sets

## Codes and Categories in GSIM

GSIM v1.0 builds on Codes and Categories through the use of (types of) Nodes and Node Sets. There are three different types of Node Set (Category Set, Code List and Classification Scheme), each of which have a corresponding Node (Category Item, Code Item and Classification Item respectively). The purpose for which the Set is being created, will determine the combination of information that is included at the Node (ie, whether a Code, Category or Level is included).

*Figure 1: Nodes and Node Set in GSIM v1.0*



## Issues for Consideration

### Need for Category Item

The Category Item object is a type of Node which describes the use of a Category in a Category Set.

However, is this really needed? Does the use of Category Item to explain the relationship between a Category and the Category Set, that isn’t already described through a direct relationship between the Category and the Category Set?

**Suggested Resolution**: Remove the Category Item object, and change the relationship to “Category Set includes Category”. (See Figure 2)

### Need for Code

According to GSIM, the Code object is ‘A Designation for a Category’. All examples of Codes, particularly in the context of a Code List, relies on the references from the Code to the Category to give meaning to the Code value (ie – M is just M until it is given meaning from the Category ‘Male’.) The way a Code itself is defined, is that it is unlikely it will ever be used without the context of the Category for which it is a designation.

A Code List is defined as “A list of Categories where each Category has a predefined Code assigned to it”. The Code List is created through the use of Code Items, which describe the use of a Code/Category combination in a Code List.

Could the act of designating a Category with a code value occur within the Code Item itself, for the purposes of the Code List which is being created. Ie, Code Item contains the Code value and the reference to the category, for the purposes of the Code List which is being created.

To take this a step further, the Classification Item could then reference the Code Item itself (for the Code/Category combination), rather than the Code and Category separately.

**Suggested Resolution:** Remove the Code object, and add the attribute “Code Value” to the Code Item object (See Figure 2).

*Figure 2: Suggested Changes – remove Category Item and Code.*

