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Understanding the CIP Coding Process: Results of a Small-Scale Institutional Survey

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The Classification of Instructional Programs (CIP) system was developed by the US Department of Education in the 1980s to “assist in collecting, reporting, and interpreting data about instructional programs” to the federal government (Malitz 1987, pg. 1). But while the system was devised centrally by the federal government; states, college systems, and individual institutions are afforded relative autonomy in how they assign CIP codes to their instructional programs (pg. 3). The federal government certainly afforded this autonomy to institutions for practical reasons, but it means that CIP codes may not be a consistent guide to understanding the training students are receiving. Just as researchers often use Census data without problematizing its questions or sampling methods (Logan, 2018), CIP codes may also be used without an adequate understanding of how they are assigned and modified.

The potential inconsistency of CIP code accuracy across institutions may be compounded at colleges which offer programs in vocational and technical fields. To respond to labor market demands, new programs are founded and existing programs are substantially revised more frequently than in traditional academic disciplines (O’Banion, 2018). Thus, it is particularly important to understand the processes by which such institutions assign and make changes to their programs’ CIP codes.

To address this question, we fielded a small-scale survey to eight institutions which offered programs in advanced manufacturing, which asked three open-ended questions:

- How does your college assign CIP codes to programs? What guidelines does the college follow?
- Do CIP codes change for existing programs? If so, how and under what circumstance?
- When your college assigns a CIP code to a new program, or changes the CIP code for an existing program, who is involved in the process?

We coded these surveys to identify patterns and deviations among the responding institutions. We also conducted interviews with respondents from three of the participating institutions, and draw upon quotes from those interviews. Below we summarize our findings and draw tentative conclusions.

Findings

CIP code assignment: Who is involved? What processes are followed?

The programs themselves – faculty and program administrators – are primarily responsible for assigning CIP codes to new programs. Most departments reported doing so in consultation with college administration. Some also reported that departments engaged external stakeholders (e.g., state workforce boards) in the CIP code assignment process.

Two institutions reported more centralized procedures for assigning of CIP codes to programs. In these cases, each states Department of Higher Education would review new programs. A third case reported that an administrative team at the college played the central role in CIP code assignment, in consultation with department faculty.

One interview respondent summarized their procedure:

You know, the faculty in the division will review the CIP codes and identify them. [sic] but we also get feedback from Thomas, in our IR department, he's Director of Institutional Research. He is somebody...who looks closely at the CIP codes, and in terms of the question of consistency or the lack of consistency in CIP codes... And then, of course, it's submitted to the state for approval, and the CIP codes are required as a part of that approval process.

How do CIP Codes Change?

At responding institutions, CIP codes generally change under two circumstances. The first is when the federal government makes its periodic changes to the CIP system (as it did most recently in 2020). CIP codes also change when individual programs make substantial modifications to their learning goals/curriculum.

Another occasion for change, reported by a few respondents, was when state curriculum frameworks change. This was especially true in the colleges that reported that state-centralized processes for assigning CIP codes. One interview respondent discussed this occasion for CIP code changes:

We just updated our whole curriculum. And we as faculty, reviewed the CIP codes with our curriculum team... if you're developing a new course, or you're modifying courses, it has to go through a curriculum council... And then when you change CIP codes and stuff like that, too, they kind of do a review in the curriculum team. But we updated our CIP codes, a couple of them, when we...updated our whole class description.

Finally, as an exception to the patterns, one college reported only changing CIP codes when they appeared to be assigned erroneously.

Conclusion

This survey identified prevailing patterns in the assignment and modification of CIP program codes at colleges offering advanced manufacturing programs of study. In general, responsible departments (faculty and internal administrators) performed this function, though generally in consultation with college administration. Some states appear to have centralized the CIP code assignment process within their departments of education.

CIP codes tend to change with cyclical revisions to the CIP system at the federal level. Substantial changes to individual programs can also trigger a code change. Where state governments control initial CIP code assignment, they also control cyclical changes.

Our survey was exploratory in nature, and had a very limited number of responses. As such, we make no claim that our findings are representative, either of colleges within our sampling frame (those that offer advanced manufacturing programs) or of colleges in general. More extensive survey research would be needed to make conclusive judgments. Yet, these findings point to the notion that there is a set of judgements made by faculty and administrators in the assignment of CIP codes.

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