JOB CLASSIFICATION: A BENEFIT TO ASSESSMENT DEVELOPMENT

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A job classification study distinguishes between jobs within a series by identifying differences between the jobs' duties and responsibilities, as well as its knowledge, skills, and abilities (KSAs). A job classification study may be needed to establish a new classification in a series, abolish a classification in a series, or collapse multiple classifications. It also may be required to formulate job classification guidelines to classify positions within a series. There may be a need for a job classification study when there are outdated or otherwise inadequate position descriptions, a new classification, or an inadequate job series structure. In these instances, it is a benefit to perform a job classification study prior to assessment development. By performing a job classification study prior to assessment development, an organization may avoid developing unneeded or inappropriate assessment tools. This can save an organization time and money in assessment development costs. Not only is it a benefit in terms of assessment development, but also is beneficial to the organization in that having an appropriate classification structure allows for a logical grouping of jobs and ensures a better "fit" of individuals within these jobs (Campbell & Knapp, 2001). This better fit leads to a more effective, efficient, and equitable personnel system.

The purpose of this paper is to discuss some factors for a practitioner to consider when designing and performing a job classification study. We will share our experiences, strategies, challenges, and lessons learned that resulted from conducting job classification studies and will provide examples from two studies conducted for different purposes. The first study (Case 1), a multi-grade job classification project that was conducted for a state personnel agency, involved evaluating the extent to which individual positions or groups of positions were responsible for performing the same duties or functions. This study was conducted prior to assessment development. The second job classification project (Case 2), conducted for a federal agency, involved redesigning the current job classification system to make it more justifiable by clarifying the differences between existing job levels. This study was conducted after test development for the entry-level classification. There were no plans of implementing a selection procedure for the two higher classifications. The next section describes the factors to consider, as illustrated by the two classification studies.

FACTORS TO CONSIDER

Practitioners should consider a variety of factors when designing a classification study. We have organized this paper around four primary factors:

- The purpose of the study
- The setting of the study
- The characteristics of the job classes
- The sources of data utilized for the study.

Each of these factors will be discussed below by briefly describing our experiences and strategies as they relate to the Case 1 and Case 2 classification studies. The challenges and lessons learned from these studies will also be discussed in relation to each factor. We offer these challenges and lessons learned to provide guidance in situations that are often prevalent in public sector classification work. By offering these, we hope to stimulate thought and discussion on issues that many practitioners face every day.

Purpose of the study

As with any research project, the first factor to consider in designing a classification study is the purpose of the study. In many cases, the purpose of a classification study is to examine the usability of the existing classification structure. For example, this purpose of this type of study might be to determine whether jobs in a series are sufficiently different to justify their separation as different jobs. This was the purpose of Case 1, which was to examine the duties and KSAs needed to perform the work of a series of job classes to determine if any of the job classes should be combined. We performed the classification study prior to assessment development to determine what classes could be combined. With the combination of several job classes, due to overlap in duties and KSAs, we eliminated the need to develop one or more assessment instruments.

In other situations, the purpose of the study might be to establish an entirely new classification system to better distinguish between job classes. This is similar to the purpose of Case 2, where currently in place was a classification system based on one classification factor that had been developed about 10 years prior without a formal classification study. This study involved creating new classification guidelines for a position with three legally mandated pay grades. The goal of this classification study was to develop a justifiable, defensible, and valid classification system that distinguished between the three existing pay grades. For this position, there were minimum qualifications and a previously developed selection test for entry-level candidates to the class.

As is illustrated through Case 1 and Case 2, there are a variety of purposes for a classification study, and identifying the purpose is the first step in designing a classification study to meet your objectives. The purpose of each of these studies influenced the steps we took to complete them. In Case 1, we wanted to determine the number of classes within a given job series, whereas in Case 2, our goal was to determine factors that distinguished between job classes. Therefore, for Case 1, we had to develop a plan for determining the appropriate number of job classes needed in a series (e.g., gather information regarding the duties and KSAs used to perform the jobs) and in Case 2 we had to establish a way to collect information to determine the distinguishing factors among the levels of a job class (e.g., reviewing job descriptions and hosting workshops with subject matter experts (SMEs) to discuss differences).

Setting of the study

After the purpose of a classification study is determined, the setting of the study is important to consider. The setting of a classification project involves the elements that may have an effect on the manner in which the work for the study is performed. Specifically, the setting of a study could include:

- The amount of time and money allotted to the study
- The presence of a political environment
- Amount of time available to spend with SMEs.

We discuss each of these issues in greater detail below.

Amount of time and money allotted to the study

The length of the project timeline and the budget allotted to the project can determine how to design a classification study. If the timeframe is short, this can become a major challenge. We were working with a short timeframe during both classification studies. For Case 1, we studied 30 job classes within a two-month time period. Eight researchers were on the project, working between 20-30 hours per week. Tasks for the project included gathering and reviewing background information, scheduling and conducting interviews and observations with incumbents, distributing and analyzing data from a survey to incumbents, and collecting additional interview data from supervisors. Finally, it involved researchers reviewing all of the sources of information, both quantitative and qualitative, to evaluate the similarity of the job classes in order to make classification determinations.

For Case 2, the timeline was equally as tight. In addition to the timeline, several factors restricted the hours we could work on the project and put some constraints on methodology that

could be employed. For this project, we studied a position with three pay grades within a two-month timeframe. Three researchers were assigned to the project, working between 10-30 hours per week on the project. Tasks for the project included reviewing background material, conducting half-day workshops, creating and distributing a mail-out questionnaire, and having multiple review processes with the contracting agency.

We offer several lessons learned from the projects about performing classification work within short timelines and with limited resources. The first lesson learned is to make the most out of your contact with SMEs and other stakeholders. This can be achieved by determining what you need and who will be the best to provide it to you. For example, in Case 1, the data we collected for the classification study (e.g., interviews, job observations, and Job Analysis Questionnaires) was not only used for classification reasons, but also for job analysis purposes. During Case 2, we developed activities for a workshop and then discovered our attendees had limited knowledge relevant to the planned activities. Since our timeframe was short, we were not able to hold another workshop with more knowledgeable participants, so that chance to gather information was lost. Another way to save time and money is to determine if there are any exercises that can be performed without the use of SMEs. For example, in Case 2, we had analysts perform an exercise prior to the workshop. By utilizing people in house, we did not have to coordinate a time and place for SMEs to complete this activity, which would have not fit into our tight schedule. A third lesson learned is to make a detailed timeline, complete with tasks and the individuals who will complete those tasks. If an agreed upon schedule is determined early on in the project, especially if it has a strict timeframe, then everyone involved can make the most of their time from the very beginning in order to complete the project on time.

Presence of a political environment

If the setting of a classification project involves a political environment, which is very likely, some aspects of the project could be challenging. It is important to consider how this will affect the study during the early stages of the project. Both of the job classification studies we conducted were carried out in an environment influenced by politics. Case 1 was the result of a consent decree, so we had to pay special attention to the demographics of the SMEs used for data collection. This meant that we needed to take extra time to ensure we had an equal representation of race, gender, and location as we observed, interviewed, and held workshops with the SMEs. In addition, our reports had to be meticulously written to reduce the chances that the statistics and task and KSA statements within them would be questioned. It was important to determine what questions could be asked of us and to eliminate as many areas as possible in the reports where discrepancies could occur. Finally, the plaintiff and defendant experts discussed the conclusions of the classification study and determined if they agreed on whether the jobs should be collapsed or kept separate. The political environment was felt in Case 2 because there was a title and

money at stake for many of our SMEs. Thus, the SMEs had a vested interest in particular outcomes. Further, the SME population was comprised of individuals who readily challenged classification decisions. The political environment also put constraints on what we could propose as the new classification structure in that the three levels were legally mandated.

A lesson learned about conducting a classification study in a political environment is to ensure the involvement of everyone affected by the classification decision in the data collection and feedback process. This reduces the chance of political issues hindering the progress of the study because all affected parties are fully involved throughout the entire process. It is also important to remain skeptical of the motives of particular SMEs and to build in opportunities to 'validate' their responses by collecting data from multiple sources (e.g., supervisors and human resource representatives).

Amount of time available to spend with SMEs

Considering the amount of time that is available to spend with SMEs is important when developing a plan for collecting data and other information needed to complete a classification study. For both Cases, we had to battle with limited SME contact. This was because of the tight timeframe and the structure the client had given to the projects, which did not include generous contact with SMEs. During Case 1, we were able to meet with some SMEs through job observations and interviews, as well as gather information from supervisors during interviews. However, the project was out of state, which limited the amount of contact we could have with SMEs. In Case 2, we only had a few opportunities, during workshops, to spend with SMEs and there was an expectation that the majority of information gathering would come from background research.

We offer several lessons learned relating to limited SME contact. If contact with SMEs is limited, determine exactly what you want to gather from them for the time you do have with them (e.g., workshop, questionnaire) and plan your approach accordingly. In addition, access phone and electronic communication whenever possible to gather information when it is not possible to hold a workshop and also to reach a group of individuals quickly and efficiently. It is also very important in these situations to keep in close contact with your client organization, using this entity as a resource where possible in the absence of SME contact. Finally, keep good documentation of all meetings and conversations to support your decision process.

Characteristics of the job classes

A third set of factors that may influence the design of a classification study is the characteristics of the job classes. One type of class characteristic that may limit the analytic

approach is the number of incumbents in each class. In Case 1, there were 30 job classes that were divided into six series across numerous state agencies. In most cases, the number of incumbents in each job class was small, ranging from 0 to 30. There were also a very small number of supervisors who were familiar with the job classes. In Case 2, the position was a professional position at three different pay grades where an overwhelming majority (e.g., 90%) was in the lowest pay grade. At the time this study was conducted, there were approximately 1,350 incumbents in this position across 29 agencies. The difference in pay between the three pay grades was minimal (i.e., less than ten thousand dollars between all three levels).

A second type of class characteristic to consider is study participants' knowledge of the purpose of the study. If incumbents are aware of (1) purpose of the study, (2) the extent to which specific outcomes may benefit them, and (3) the relationship between the data they provide and the outcomes they desire, relying solely on incumbent data is unadvisable. In Case 1, the job incumbents had participated in previous job classification or job analysis studies, so many of them were aware of how their responses could affect the outcome of their job class structure. We collected interview data from supervisors in addition to the incumbents as a way to handle this situation. During a workshop with job incumbents for Case 2, it was evident that most of the participants realized how their input could effect overall classification decisions relating to their job class. It was important for us to determine the motivation behind their input, realizing that some of their comments may not have been made for the right reasons, or were not relevant to the purpose of our study, so we asked a lot of probing questions.

A third type of class characteristic that should be considered is the presence of within-class variation in work functions or KSAs. When faced with within-class variation, examining tasks or KSAs may present an inaccurate picture of the classification structure. This was a challenge in both projects. For Case 1, we discovered there was within-class variation across positions in various agencies. That is, the KSAs used or tasks performed by a classification in an agency often did not transfer to that classification in another agency. Similarly, in Case 2, we discovered that there was variation in positions based on the agency. This made it very difficult to establish classification guidelines that would be appropriate for all agencies.

We offer several lessons learned from performing a classification study on job classes that span multiple agencies. The first is to collect information from SMEs at all agencies that employ the classification. If you have a large sample size, implement a sampling strategy that will ensure that you have SMEs representing various demographics (i.e., age, race, number of years in the position, etc.), as well as agencies. By obtaining information from a representative sample of SMEs, you can determine if the job classifications are similar, whether they should be different classifications, or identify how they are different. A second lesson learned is to look for general KSAs that are common across agencies and avoid making decisions on specific KSAs.

In Case 2, we discovered that people at the same level in different agencies were actually performing work at very different levels, so we made recommendations to create classification guidelines that could reclassify positions to a higher classification because there was variation in scope, complexity, and responsibility across a position in multiple agencies. In Case 1, we took advantage of the common work activities and skills and abilities described in O*NET (Peterson, Mumford, Borman, Jeanneret, & Fleishman, 1999) for a questionnaire we administered to all job incumbents to accommodate this issue. These higher-order descriptors reduced the amount of within-class variation.

Sources of data utilized for the study

A final class of factors to consider is the type of data to collect in order to make the most informed classification decisions. There are many sources of data that can be collected for a classification study, most of which can be classified along two intersecting continua: quantitative-qualitative and archival-new. Quantitative-new data are collected explicitly for the classification study, such as job analysis surveys or other quantitative ratings. Quantitative-archival data are collected for a purpose other than the classification study, such as results from a previous job analysis or classification study. Qualitative-new data include interview responses or other data that are collected explicitly for the classification study. Qualitative-archival data are existing sources of qualitative data that were collected for a purpose other than the classification study, such as existing job descriptions or performance appraisal forms. It is likely that each source of data will provide a slightly unique perspective on the classification structure.

We collected both qualitative and quantitative data and involved both incumbents and supervisors in data collection in Case 1. The qualitative data included information about the job classes through job observations and interviews with the incumbents. The interviews and job observations helped us to clarify aspects of the jobs there were not clear after an examination of background information (e.g., job description, position classification questionnaires), and to gain a further understanding of the jobs by being at the worksite. We collected interview data from supervisors as well. The supervisors answered questions for each job class including the work behaviors performed, the promotion process, job complexity, technical skill requirements, and others. The quantitative data we collected for Case 1 was through a survey, distributed to all job incumbents, which included the major duties of their positions and the skills and abilities required to perform those duties. Incumbents rated (i.e., frequency and importance ratings) the extent to which their position involved each of 41 generalized work activities as described in O*NET (Peterson et al., 1999), as well as each of 40 skills and abilities as important to their job performance and required at entry. As mentioned earlier, the decision to use these general work activities and common skills and abilities was because of the significant within-class variation in

the duties performed by job incumbents due to the positions within each class being distributed across multiple agencies.

For Case 2, we applied a content-oriented developmental approach that included input from stakeholders such as job incumbents and Human Resource Representatives from the agencies that employed the positions. Involving Human Resource Representatives and incumbents from various agencies, via workshops and questionnaires, helped to ensure that the classification guidelines and factors were understandable and applicable to the position. We also received feedback throughout the process from individuals in the Federal Office in charge of the study and from analysts. In addition, we heavily relied on background information. Gathering and reviewing published information about the job, position descriptions, and previous job analysis studies of the job helped build a foundation for the identification of potential classification factors. We also reviewed federal classification documents such as the Office of Personnel Management's *The Classifier's Handbook* (Workforce Compensation and Performance Service, 1999) and *Introduction to the Position Classification Standards* (Workforce Compensation and Performance Service, 1991) to assist in understanding the structure of similar classification standards.

Unfortunately, even though we were able to collect various types of data for both projects, we had a lack of quantitative data in both instances. Case 1 involved job classes with very small numbers of job incumbents, therefore, it was hard to rely solely on the ratings collected from these job classes to determine if the jobs should be collapsed. Even though there were a large number of job incumbents overall for Case 2, the response rate for the survey we administered was very low. This meant that we could not rely heavily on these ratings when developing our classification factors for the project. Instead, for both Cases, we relied more on the qualitative data. During Case 1, we conducted job observations and interviews with job incumbents, and we also conducted interviews with supervisors. Each of these types of qualitative data gave us a unique picture of the jobs and how they compared to the others within the same series. In Case 2, we held stakeholder workshops that proved to be very valuable to the process. The SMEs were very open about what they felt was needed to improve the current classification system and gave us a clearer picture of the differences between the job classes.

We offer two lessons learned concerning data collection during a classification study. The first lesson is to rely on all types of data, both quantitative and qualitative, collected from a variety of sources (e.g., supervisors, incumbents, and other SMEs) in various forms (e.g., questionnaires, observations, and workshops). Even when one source of data is minimal, it is still important to consider it as one part of the big picture. In both of the Cases, qualitative data was not the strongest or most abundant type of data collected, so it was vital that we consider other sources of data before making a decision. The second lesson is to develop an effective way to

synthesize the various sources of data that have been collected during the course of a project. In Case 1, we created an expert panel who considered each source of data and came to a consensus on each decision regarding each job series' classification status. This effort was a bit more time consuming than other methods we could have chosen, but proved to be very effective. During Case 2, we spent a large amount of time studying the data we collected and talking with each other and our client to determine the most appropriate way to structure the classification guidelines.

CONCLUSION

We hope that we have stimulated thought and discussion on issues related to job classification in this paper through our discussion of four factors to consider when designing and performing a job classification study. It is our hope that this paper helps practitioners recognize the relationship between classification and assessment development, and more particularly the benefits of a classification study prior to assessment development. Namely, by performing a job classification study prior to assessment development, an organization may prevent the development of unneeded or inappropriate assessment tools. This can save an organization time and money in assessment development costs and can lead to a more effective organizational structure.

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FACTORS TO CONSIDER WHEN DESIGNING A CLASSIFICATION STUDY

1. Purpose

- Determine whether jobs in a series are sufficiently different to justify their separation as different jobs
- Establish a classification system

2. Setting

- Amount of available time and money
- Influence of political environment
- Amount of available time to interact with SMEs

3. Characteristics of the Job Class

- Number of SMEs
- SME's knowledge of the purpose of the study
- Within-class variation in work functions or KSAs

4. Sources of Data

- Qualitative
- Quantitative

DISCUSSED IN TERMS OF:

A multi-grade study conducted for a state personnel agency as a result of a consent decree

or

A classification study conducted for a federal agency to redesign the current job classification system