



# JOB SKILLS VALIDATION PROCESS

One of the most important tasks your Business and Industry Leadership Team (BILT) will perform is the validation of specific IT/convergence job knowledge areas and skills. The CTC often refers to this list as the “KSAs” – knowledge, skills, and abilities. The BILT ranking of these KSAs represents what they expect job-ready graduates to know 12-36 months into the future. Faculty will use these rankings to cross reference the list to coverage in existing curriculum for KSAs ranking high and to identify curriculum gaps.

*This KSA job skills validation process is just a formalized way to have a discussion.*

## Getting Started

Use the existing job skills “KSA” spreadsheet provided by the National Convergence Technology Center (CTC). This will be the base set of skills that your BILT will add to, subtract from, or modify.

*It's better to start with the CTC's baseline KSA list (see Attachment A). A standard DACUM (Design a Curriculum process) starts from scratch and asks each BILT member what an entry level person does. This process typically can take 2-3 8-hour days., The CTC process is a modified DACUM that starts with the baseline (or pro forma) list of KSAs and then adds or subtracts as directed by your BILT members.*

*The CTC originally started with a list of KSAs from two areas supported by the National Skills Standards, and eventually it had 450 lines of detail (in under 50 categories) after years of additions and a few deletions by BILT members. Recently, at the direction of the BILT, the CTC eliminated the detail and summarized what the detailed lines represented in the “Topics” column of the KSA spreadsheet. This shorter list provides broad topics for ranking and allows for more discussion time in the 4-6 hours allocated for the process. With 450 detailed topics to rank, the BILT spent too much time on the detail lines and not enough time on the bigger discussions.*

Contact your BILT to schedule a job skills validation meeting and explain how the process will work. BILT members will rank the IT/convergence KSAs from 1 to 4, with 1 being the least important and 4 being the most important. These are skills they are looking for in an entry-level employee coming out of your program 12-36 months into the future. This process will result in a better trained talent pool for their businesses to draw from when hiring new employees or training existing employees.

(Note: if you don't yet have a BILT, you'll need to assemble IT/convergence subject matter experts, also known as Subject Matter Experts (SMEs). The job skills validation meeting is a vital and mandatory function for your new BILT.

## Validating the KSAs

At the in-person job skills validation meeting you will work through the job skills “KSA” spreadsheet line by line. Your BILT will rate the skills which are related to performance indicators, technical knowledge, and employability skills.

*The point behind this process is to identify what KSAs the BILT desires in a new hire coming out of a two-year certificate or degree program. This is not about hiring someone with a lot of experience. In evaluating the list, the BILT has to assume that an employer who hires a new employee will do the more specific fine-tuning. Be clear on this. Colleges cannot create six*

*different ways to teach the same topic. For the purposes of the KSA list and your job skills validation, the BILT members have to agree on a generalized approach that can open as many job doors as possible for your graduates.*

*Focus only on technical skills. You can do a separate assessment later for soft skills. Soft skills are critical, but it's hard to map them to courses. Professionalism, of course, should be a part of every class and project. The hope is that faculty will integrate soft skills throughout the program. Having at least one major project per technical course allows students to build soft skills, and develop a nice portfolio for the student. So it may be better to work with the BILT to create a separate list of desired soft skill "characteristics," with the understanding that they cannot all be covered in just a single capstone class.*

Participants at the meeting should include:

**Business & Industry Subject Matter Experts (SMEs)**, who participate in validation ratings and discussion (i.e. your BILT members)

**Faculty Subject Matter Experts (SMEs)**, who attend as active listeners and can ask questions, but not participate in the ranking

**Facilitator**, who as the process expert and is responsible for the efficiency and effectiveness of the meeting. This person must keep the discussion focused.

**Recorder**, who records the rankings, records the discussion and prepares meeting minutes

*The "Recorder" tallies the votes and enters the results into a spreadsheet. The Recorder should be someone different from the "Facilitator." You want the Facilitator free to manage the discussion without worrying about entering everything into the spreadsheet.*

As an aside, faculty members are asked to actively listen during the meeting. They can ask some questions, but it is imperative that they not be active participants. It's important to have faculty in the room because they need to hear the BILT's rationale for rating the skills as they do. The discussion is often as important as the actual rankings.

*In general, ask the faculty to actively listen without talking. After the faculty hears the BILT talk about KSAs, then they will have their own meeting to map the existing courses to the KSAs to identify gaps. Specifically, you (and the faculty) will need to determine in which courses do those KSAs reside. That process should help illuminate the gaps.*

Note also that skills validating skills by email after the meeting is not efficient nor is it effective because the ranker does not hear the discussion.

The ranking process uses the 1-4 ranking method, each skill is ranked according to importance, level of proficiency, time spent doing the skill, and how difficult the skill is to learn. The CTC earlier went through the KSAs with the BILT 4 times for each ranking purpose; however, since importance is ranked most heavily, the CTC asks the BILT to consider all 4 ranking purposes and give a ranking that best represents all 4.

*BILT members can vote with color-coded cards, numbered 1 to 4. Adding colors to the numbers can help the vote counting go faster. That is, you can count colors from across the room without having to always see the printed number on the card. Alternatively, the facilitator can ask for how many "4's", how many "3's", etc.*

The ranking purposes are defined as follows:

**Importance** - How important is it for entry-level employees to know or to do the performance criteria statement (i.e., job skill)?

**Level of Proficiency** - How good is good enough for entry-level employees to know or to do the performance criteria statement?

**Time Spent** - How frequently are entry-level employees expected to know or do the performance criteria statement?

**Difficulty** - How difficult is it for entry-level employees to know or to do the performance criteria statement?

Each rating ranges from 1 for the lowest to 4 the highest.

It is not necessary for the BILT to reach consensus on each rating. However, if there is a wide difference in ratings, the facilitator must ask for a discussion of the differences, which can be captured in the minutes of the meeting. Each person's rating of each skill is captured on the job skills "KSA" spreadsheet.

*The CTC keeps everything in the same spreadsheet to avoid confusion later.*

*This line-by-line discussion is key: the BILT is determining what stays, what goes, what's added. Most of the discussion will arise when there's a disagreement about a KSA's score, and that is often a matter of misunderstanding the category definitions. The facilitator should try to resolve the discrepancy (maybe big company has niche needs and small company wants a guy who can do everything) if it is a matter of misunderstanding; otherwise, the discrepancy stands are representative of what the BILT wants.*

Your first job skills validation meeting will likely last 4-6 hours. But once you established your baseline, reviewing skills at subsequent meetings likely won't require as much time. Plan for 4-6 hours every time; no one ever complained about a meeting that ends early.

A average rating of 3.0 or greater should generally be considered significant, based upon the 1 to 4 ratings.

However, some BILT groups may rank items lower or higher, so that 3.0 cut off if not firm.

### **Skills and Curriculum Crosswalk**

The next step in the process is to gather IT/convergence faculty representatives to conduct a "crosswalk" between the list of highly-ranked 3.0+ KSAs needed and existing courses in your program. The exception is when a new program is being created. If this is the case, the faculty will determine how to group the KSAs that are ranked high into courses..

The faculty SMEs should work through the job skills "KSA" spreadsheet and mark which skills appears in which courses. Columns on the right of the spreadsheet are available for notes.

(Please note that for the National CTC's job skills validation, we use Texas WECM courses because they are more pertinent to the skills required and cover more areas of skills trained. In Texas, "WECM" is the Workforce Education Course Manual, which are state-wide workforce education courses leading to certification and/or an applied associate degree.)

When working through the list, faculty should consider the following:

1. If there's insufficient time in the program; if the task was rated by the BILT as low; if targeted students are likely entering the program already possessing a skill, then that specific skill may be omitted.
2. Gaps in the curriculum may exist because a highly-ranked skill either has not been included in any course or module or has not yet been taught to the expected exit proficiency level.
3. Redundancies may exist where highly-ranked skills are taught in more than one course or module; or taught to the same level of proficiency in more than one course or module. Obviously, some degree of redundancies is okay.
4. If there are courses or modules that don't appear to cover enough highly-ranked skills, perhaps they should be deleted or combined with other courses or modules.
5. Some gaps in curriculum might be provided by on the job training. For this reason, you may want to alert your BILT to any gaps you discover. It could be that the BILT believes the gaps you found will be filled by

the hiring company. Otherwise, gaps will need to be filled by locating or creating curriculum to cover the KSAs that are important but not currently covered in any course.

After completing this exercise, the faculty group will ensure that designated highly-ranked skills are covered in at least one course. If gaps exist, the faculty determines if the gap can be filled by adding or updating a course or adding or updating a module.

### **Next Steps**

The final step in this validation process is to communicate the findings back to the BILT so BILT members know how the college plans to use the work they did on the KSAs. The BILT should confirm that the college approach is appropriate, especially with respect to plans to fill gaps. The college then starts the process of updating or adapting courseware as appropriate.

This process must be repeated yearly with your BILT to ensure that the program is current with business needs. It changes too rapidly to allow more than a year lapse between job skills analysis meetings.

*At the next meeting, you can report to the BILT all the KSA gaps you've found in the curriculum and present solutions for filling gaps.*



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