



How to Make Better Use of Experienced Staff

By Phillip C. Pierce, P.E., FASCE

“What are we going to do with Abcd? He’s not as up-to-date with design specifications as he used to be. He no longer wants to work long hours. He really doesn’t want to travel for work and is no longer able to do the more physically demanding field work. What ARE we going to do with Abcd?”

Chances are good that this scenario is familiar at your firm. If not, you are in the minority. For purposes of this discussion, it is assumed that Abcd retains respect in the firm and has been viewed as a valuable staff person to date. Furthermore, it is assumed that Abcd has been involved in the current line of work for a long period of time, and in most aspects of it. But it is clear that the end of his career is approaching.

So what are good ways to take advantage of the skill set of experienced staff? Consider these general ideas:

- Identifying winning strategies for chasing new projects is an important requirement for all firms. The experienced staff person can often offer insights into what techniques have worked well in the past on similar projects, or “think outside the box” and suggest a new approach for consideration, with sound justification for it. Accordingly, include the person in initial and early strategy sessions.
- An experienced staff person has often developed good relationships with a large number of clients, but may not be assigned an active role in marketing for the firm for whatever reason. Pressing the person into a more active marketing role may open new doors for the firm.
- Mentoring of younger staff may often be assigned to mid-level staff, but the experienced staff person may provide a more seasoned exposure for young staff, helping them focus on what is important and avoid what is unnecessary or irrelevant.
- An experienced staff person may be a good choice to conduct group training sessions on various topics.
- Initial review of design products, looking at overall aspects while leaving the checking of minutiae to younger

staff, is a good way to use senior experience and, at the same time, early reviews can avoid having a younger staff person moving down a misguided path.

- The experienced person can serve as an advisor to deal with technical and/or field problems and challenges. There are often unusual situations that require prompt and effective solutions. Many experienced staff perform admirably and enthusiastically when provided such challenges.
- Experienced staff often serve in a Quality Control (QC) or Quality Assurance (QA) role for the group.
- If not assigned a QC/QA role in general, the experienced person can do periodic, random reviews of designs or products with focus on assumptions, modeling, and accuracy.
- One of the more rewarding assignments may be to ask the experienced person to prepare articles or histories about various aspects of the work – background information that may not be known to younger staff or contained in current codes and specifications.

The above list can be true of experienced staff in any engineering discipline. Focusing on more specific issues for experienced staff involved in structural engineering:

- Experienced staff may be able to suggest alternatives to default assumptions; e.g., when the yield strength of existing elements is not known, instead of relying on tables based on the age of the structure (which are generally conservative), coupon tests might indicate higher actual values.
- Experienced staff usually have more/older/unusual reference materials and/or knowledge of the same that can become a rich resource at times; e.g., when determining allowable stresses for cast-iron elements, which are not typically provided in modern specifications.
- Experienced staff often have more knowledge of the intent of design specifications or the evolution thereof, which helps when there is a need to “bend the rules” a bit.

- Experienced staff often look for conservative assumptions that can indicate problems, and then find solutions to represent the situation better; e.g., concrete decks on steel beams without shear connectors act as composite elements until loss of bond along the interface is evident.
- Experienced staff usually have had more exposure to different situations or unusual structure types.
- Experienced staff can more readily find opportunities to use past experience in new ways; e.g., trussed floor beams, steel sheet pile abutments, retention and rehabilitation of existing foundations rather than automatic replacement, etc.
- Experienced staff almost always have more experience with estimating costs, and know where to focus attention during value engineering reviews or how to prepare quick initial estimates.
- Experienced staff have more knowledge of the total project picture; e.g., right-of-way, permitting, fabrication, and construction limitations and costs.
- Experienced staff are geared to look for simplification and not start automatically looking for software.
- Experienced staff have a better knowledge base of what is practical.

This use of experienced staff and their broader knowledge base benefits the firm, as well as the employee. New opportunities to contribute may renew enthusiasm and boost spirits, thereby yielding a more productive staff person. The firm also benefits by enhanced direct and indirect training of younger staff, improved product quality and more successful marketing efforts.

Returning to the initial question – what ARE we going to do with Abcd? We’re going to get him excited again, with renewed energy, by taking full advantage of the storehouse of experience that he has gained over the years. ■

Phillip C. Pierce (ppierce2@gmail.com), is a Senior Principal Structural Engineer in Upstate New York, working in both the public and private sectors over his career of more than 40 years.

Abcd is a fictitious staff person. The masculine gender was used for convenience.