Across industries, the complexity and dynamic nature of workplace operations, as well as the constant and rapid influx of information, requires employees to continuously acquire new skills and expertise. Formal training is undoubtedly an effective and common method for developing the capabilities of individuals1 and teams2 in military3 and corporate settings; across a variety of program types4; and for young and older learners5. Nonetheless, conventional training alone cannot prepare people for the full and often shifting scope of workplace demands6. Formal training is not designed to provide employees with the “on-demand” learning they need to maintain current knowledge and proficiency7. Informal, on-the-job learning (OJL) experiences are needed to maintain proficiency and develop new skills8. However, as you might have observed over the course of your own career, not everyone is naturally effective at learning on the job and as suggested in the following quote from an industry-wide ASTD study, not all workplaces are conducive to it.

“...while many organizations recognize the potential of both informal learning and social technologies for enhancing formal learning, most have yet to take steps to invest in or fully adopt either as components of learning and development.” – ASTD (2012)

In this paper we discuss the importance of OJL for employees and organizations, describe how individuals can accelerate their own OJL (see the text box on the Eight Habits of Fast On-the-Job Learners), and suggest ways leaders and learning professionals can enhance that type of learning. These recommendations are based on our 25 years of experience working with organizations and compelling evidence from the organizational learning literature. Importantly, our guidance is grounded by insights gathered during structured interviews with over 20 learning experts and fast on-the-job learners.

**Eight Habits of Fast On-the-Job Learners**

To accelerate learning on-the-job they...
1. Proactively **seek** OJL opportunities
2. **Admit** when they do not know something or could do something better
3. Take **calculated risks**, including taking on tasks that are a “stretch”
4. Find opportunities to watch, shadow, and talk with **experts**
5. Ask for **feedback** and “pointers”
6. Consciously make an effort to see the **big picture** and “connect the dots”
7. **Mentally rehearse** how to handle a situation
8. Take the time to **reflect** on their experiences

**What is On-the-Job Learning?**

**Definition: On-the-Job Learning**

We define **on-the-job learning (OJL)** as the outcome of intentional behaviors aimed at learning new, work-oriented, and organizationally valued content in a work setting. OJL results from behaviors such as watching or talking with an expert, taking on a new assignment, trying out a new idea, seeking advice/feedback, or being stretched or challenged in a way that requires new learning and expertise.

OJL is **not**:
- Learning that takes place in a classroom or formal training environment
- Simply applying, extending, or transferring skills learned in formal training
- Incidental or coincidental learning on the job (i.e., it is intentional)
Despite some depictions of continuous learning, OJL is primarily active (e.g., taking risks, seeking feedback, opting to try a new procedure, debriefing feedback, but could involve some passive or vicarious learning (e.g., observing others in action). While it is possible to isolate unique or specific OJL experiences, OJL is on-going and builds as a product of a variety of different experiences. For example, OJL can occur vicariously by observing others perform work or deal with challenges followed by trying out new ideas on the job. OJL is an iterative process whereby individuals gain feedback and learn from mistakes.

Why Does OJL Matter?

> “Every job requires OJL to some degree, and it is important in almost all of them.”
> – Learning Expert, Global Corporation

> “OJL is extraordinarily valuable. OJL is where real learning occurs; capability, theory, and beginning competence occurs in school settings, but advanced competence and expanded capability (critical thinking, capacity to be an advanced practitioner) comes through OJL.”
> – Learning Expert, Medical

> “In most of our positions learning happens on the job, not in the classroom, regardless of whether you are new or a transfer.”
> – Learning Expert, Bank

Despite the critical role of formal training, in most organizations it is not enough. Traditional training cannot adequately prepare people for all possible scenarios, and is typically not designed to equip individuals for on-going learning. Employees gain new knowledge and capabilities on a continual basis through informal, non-curricular, means. In fact, empirical research shows that the majority of learning and development during one’s career occurs outside of formal training settings and via more informal ways and as a result of experience, with estimates of informal learning ranging from 70% to over 90%. For instance, in a study of seven different US organizations, individuals consistently attributed less than 10% of their personal development to formal training. This finding was replicated in samples in Japan, Korea, and China.

Our interviews with 21 Learning Experts and Fast Learners confirmed the critical role of OJL. We asked the Fast Learners (identified by their organization as individuals who learn new job-related knowledge and skills quickly and effectively) to estimate the percentage of job-related expertise a person new to their role would be expected to possess at the time they were hired, acquire via formal training, and learn on-the-job. As shown in the figure below, the average responses suggest that the majority of skills and expertise are learned on-the-job while the least amount is learned through formal training.

Our interviews suggest that individuals who are better at learning on the job are likely to find their work more engaging and be viewed more positively in their organization. And research has shown that informal learning practices are associated with increased individual, organizational, and market performance.

What Do Fast Learners Do Differently?

Research and our SME interviews suggest that Fast Learners take several actions that accelerate their on-the-job learning (see page 1, “Eight Habits of Fast On-the-Job Learners”). Yet, we know that not everyone is inherently good at maximizing learning from their on-the-job experiences and simply having an experience does not mean that a person will learn from it. Therefore, given the criticality and benefits of OJL, there is a vital need to
better understand how individuals effectively learn on the job and the environmental conditions that facilitate OJL so we can “promote and accelerate” OJL and help people get the most out of their on-the-job experiences.

Given the lack of guidance for accelerating OJL from the literature and the apparent inconsistency and uncertainty for doing so in practice, we have been working to crack the code on how to effectively promote on-the-job learning and specifically, how training can be used as a catalyst for doing so.

Training for Accelerating OJL

Overall, using training to accelerate OJL seems to be a different way of thinking. Trainers tend to be more familiar with traditional concepts such as transfer of trained skills to the job or formal on-the-job training. Yet the people we interviewed quickly grasped the potential of training to accelerate subsequent on-the-job learning. For instance, during our SME interviews we asked how valuable (1 = no value, 4 = very valuable) it would be to incorporate specific kinds of information into training to help new job incumbents accelerate their on-the-job learning. On average, Learning Experts and Fast Learners indicated that it would be quite valuable to train people about the overall importance of learning on the job, what to learn on the job, how to learn it, and who to learn from the job. Not only do these ratings reveal the perceived value of training for enhancing OJL, but they also begin to confirm the kinds of topics training for OJL should address. Collectively, we refer to this awareness of why, what, and how to learn on the job as “learning attunement.”

How Can We Promote OJL?

Despite research that has enhanced our understanding about related concepts such as continuous learning, OJL-related research to date has offered little guidance in terms of how organizations can ensure their members have the capabilities needed to maximize learning from work experiences. Also, in practice, although many organizations provide at least some opportunity for OJL, they seem to differ in terms of the extent to which they prepare their employees to recognize those opportunities, make the most of those experiences, and create their own OJL opportunities.

Most Learning Experts we talked with shared that even though their organization supports or offers on-the-job learning opportunities, they do not prepare people to make the most out of existing opportunities or to create their own learning experiences.

How else can we effectively use training to accelerate OJL capabilities? Like the SMEs we interviewed, it is likely you have observed that some people are naturally more proactive and effective at learning on the job than others.
and some workplaces and situations support and facilitate on-the-job learning better than others. This is because both personal and situational characteristics, and combinations of both types of characteristics, influence on-the-job learning. When properly developed to consider both personal and situational factors, formal training should be a powerful tool for promoting OJL behaviors and outcomes.

**Ideas for Enhancing OJL**

Although some people are inherently more driven to engage in OJL, with some guidance, support, and practice, most employees can become better, faster on-the-job learners. Below we provide tips for:

- **Employees** – to help them become faster on-the-job learners
- **Leaders** – to provide strategies for promoting and supporting OJL for employees
- **Learning and Development Professionals** – to share training and development techniques that can be implemented to help employees accelerate their OJL

**Tips for Employees**

Across a variety of job types and industries, almost everyone can become better, faster on-the-job learners. Based on what we know about fast on-the-job learners, here are several tips to help employees accelerate their learning on the job.

1. **Actively seek opportunities for OJL.** Rather than waiting for new learning opportunities to surface, actively **look for and create opportunities to engage in new experiences.** For example, volunteer to work on tasks and take on roles or assignments that are different from what you normally do or ask to sit in on meetings that cover unfamiliar topics. Consider what you could learn from each opportunity. If you are unable to create your own learning opportunities, talk with your supervisor and ask for suggestions or guidance.

2. **Take calculated risks.** Some of the Fast Learners we interviewed explained that they often take calculated risks and try work activities that put them out of their comfort zone or stretched their capabilities. Examples include challenging assignments that require increased autonomy or require learning new skills.

3. **Be honest with yourself about your strengths and areas that could be improved.** OJL can be accelerated when you recognize and are willing to admit when you do not know something or cannot do something. Find a trusted partner (e.g., supervisor, colleague) to talk with about your developmental needs. Describe the areas you would like to develop and ask for guidance or feedback.

> "I figured out that I needed to be willing to put my shields down to admit when I don’t know."
> 
> - (Fast Learner) LTC, U.S. Army

4. **Identify, talk with, and observe experts.**
   - **Find and talk** with individuals with experience and expertise in the area you would like to learn. Also, talk to people who represent a variety of perspectives and range of experiences. For example, if you are interested in learning about a new/different role, talk with people currently in the role, those who were in the role, and even those who interact with or are affected by people in that role. When talking with experts, ask questions about **what** they do, **why**, and **how** they do it. It can also be helpful to ask experts to share best practices or “lessons learned.”
   - **Observe and shadow experts.** Seek opportunities to watch experts “in action.” For example, ask to attend meetings as an observer. Use tools such as journals to capture your reflections, questions, and ideas about what you observed.

> "I did a great deal of “right seat” driving where I spent hours observing the operators using the systems and controlling the airspace."
> 
> – (Fast Learner) Colonel, U.S. Army
5. **Do mental rehearsals.**
   - While observing someone else perform **imagine how you would handle the situation**. For example, ask yourself:
     - “How would I do that?”
     - “How does that compare to what they did?”
     - “How did/would that work?”
   - Before you engage in a new activity or situation, visualize how you will execute or handle it. Research shows that mental practice can boost performance.  
   - Try to imagine different challenging scenarios you might face in your current role or in another role you are interested in learning. Ask yourself how you would handle those challenges.

6. **Reflect on experience.** Take the time to **reflect on situations after they take place** to consider what went well and what did not go well. Pause and take time to ask yourself, “what happened, what went well, what could have gone better, and what can I learn from that experience and how could I use what I learned in the future?”

   **“When I am in a new role I constantly try to think about new scenarios. I often try to think about what can go wrong and how I would handle it.”**
   – (Fast Learner) Bank Branch Manager

7. **Ask for feedback** from others such as supervisors or coworkers, to discuss your strengths, weaknesses, lessons learned, and plans for future improvement.

**Tips for Leaders**
Supervisors and other leaders play a key role in encouraging employee OJL. As a leader you can use a number of strategies to help employees be fast on-the-job learners.

1. **Encourage employees to engage in OJL.**
   - Promote OJL activities and efforts. Emphasize the value of OJL for individual employees (e.g., professional growth, career benefits) and for the team (they become more effective and valuable).

   - **Make OJL the “norm”** and valued. Acknowledge when someone was proactive and took initiative to learn something new on the job.

   - **Help employees discover where the OJL opportunities might be.** Help them identify areas they want or need to develop and guide them to recognize situations where they can develop these areas. Also, provide guidance in terms of **what** they can do to learn or **how** they can learn in these situations.

   - **Suggest sources of information** employees can access for effective OJL over time.

2. **Model OJL.** Talk with employees about your own OJL experiences. Share what you learned on the job and how you learned it. Also, share any strategies you regularly use to learn new knowledge and skills on the job.

3. **Help create OJL opportunities**
   - Make your workplace a “richer” learning environment by connecting employees with “experts” or by putting them in a stretch assignment that is likely to offer OJL opportunities.

   - Provide employees with opportunities to try new things in situations where there is at least some tolerance for mistakes while learning.

   - Give them chance to watch and sit in – job shadowing or participating in a meeting where they don’t have an active role but could learn vicariously.

4. **Seek to remove OJL obstacles.** To the extent possible, minimize resource and time restrictions that interfere with employees’ abilities to engage in OJL. For example, employees with an incessantly demanding workload might have little time or flexibility to engage in OJL. Also, employees who do not have access to experts may have fewer opportunities to learn on the job.

5. **Prepare employees to get the most out of OJL opportunities.** Advise individuals on the kinds of
things to look for when observing experts or the kinds of questions to ask. Coach employees to use effective OJL techniques, such as conducting mental rehearsals, reflecting on experiences, and asking for feedback.

6. **Close the loop.** Meet with individuals to hear about their experiences, answer their questions, and provide them with feedback. Help them “connect the dots,” for example, explain how what they learned from one experience could be applied in other situations.

7. **Create psychological safety or at least clarity about appropriate OJL.**
   - Individuals are typically more willing to try new things in “psychologically safe” environments where the consequences of making mistakes are minimized. It is important to send the message to employees that they will not get in trouble for trying something new **when they are in “learning mode.”** Explain that you recognize the difference between making mistakes while learning and making the same mistakes repeatedly.
   - Be clear about those situations where it is **not** safe to try and learn new things. Also, clarify situations/settings where there will **not** be a safety net, but learning is still possible. For instance, you could use a “stoplight” color coded scheme to help illustrate examples of this:
     - Green = safe place to try new things
     - Yellow = less safe, but a learning opportunity
     - Red = seek help, don’t try on your own
   - Be mindful that it can be highly demotivating when almost all situations are designated as “red.”

8. **Provide ample decision discretion.** While providing clarity on the kinds of situations that are fit for OJL helps, be sure you don’t create such a dependency that employees have to check with you for everything. Of course, the degree of discretion appropriate will vary by employee and work environment, but the amount of discretion allotted should be “ample” for the given person/situation. As appropriate, allow leeway for how an employee accomplishes work objectives.

   **“The most important condition for OJL is for leadership to give a significant amount of freedom to make mistakes. Leaders need to trust you to execute operations and put operations together. This is what allows you to take the leap to learn and apply new things.”**
   – (Fast Learner) LTC, U.S. Army

   **“The managers that facilitate on the job learning most are those who are willing to let go of the bike and let you skin your knees.”**
   – Manager of Clinical Systems, Hospital

9. **Conduct regular debriefs to discuss and learn from experience.** Provide individuals or teams with the opportunity to discuss what they learned from their work experiences. Structured debriefs, often lead by leaders, can be conducted periodically or after specific events and research shows they are quite effective. Debriefs provide feedback, encourage reflection, identify lessons learned, and clarify how activities should be carried out or can be improved. Setting aside time to debrief work experiences also signals that OJL is valued by you and your organization.

**Tips for Learning and Development Professionals**

Learning and Development Professionals can play a key role towards promoting and accelerating OJL for employees.

1. **Be alert for opportunities to promote and accelerate OJL.** There are likely to be more opportunities than you might think to help employees become better and faster on-the-job learners. These opportunities fall both inside and outside of formal training and can be appropriate for employees of any experience level. For example, employees participating in a “high potential” program or those about to embark on a temporary assignment could benefit from tools and techniques to help them learn new skills quickly. It is
easy to assume that employees in these kinds of programs are smart or experienced enough to succeed on their own and that simply dropping them into the new or stretch assignment is sufficient. Rather than taking this “hands off” approach with these employees, who often know little about the work environment they are entering, you could provide them with tools, advice, and knowledge to increase their “learning attunement.” The more they know about what, where, who, when and how they can learn on the job, the more they are likely to absorb from the experience.

2. In the same way, experienced hires are often expected to independently “hit the ground running” when they join their new employer, but could benefit from assistance to help them accelerate their OJL. An ideal place to share OJL tools and techniques with new hires is during their on-boarding process.

3. Provide formal training for accelerating OJL. Formal learning (e.g., training) and informal learning (e.g., OJL) do not need to be entirely separate and can be used to promote one another. In fact, to enhance workers’ abilities to learn on-the-job, training can be designed to take into account the trainees’ personal characteristics and the characteristics of the settings in which they will work after training.

Rather than attempting to teach employees everything they will need to know (which is often impossible), you could allocate some training time to preparing individuals to learn on the job. In essence, rather than designing training to only teach “this is what you need to know at the end of training” it can also cover “this is what you will need to learn on-the-job and this is how to learn it.” This kind of training could be offered as a module within an existing training program or designed as a standalone OJL training session.

4. Conduct FBLAs, not just TNAs. How can you identify what to train to accelerate OJL? OJL needs and opportunities can be uncovered by conducting a Field-Based Learning Analysis (FBLA). A FBLA is a new type of training needs analysis (TNA) that can be used to supplement the more traditional TNA approach. While a TNA identifies what trainees should know or be able to do at the end of training, a Field-Based Learning Analysis focuses on identifying what can be learned on-the-job and how it can be learned. It enables the translation of aspirational advice (“You should be a continuous learner”) into clearer job- and work place-relevant learning specifications (“When X happens, this is the chance to learn Y” or “Seek out this type of person and ask these questions”).

An FBLA can also gather information about trainees and the work context to determine the best strategy for training OJL. Two such types of information include the degree of familiarity with the work context and the situational malleability and richness.

Degree of familiarity with the work context. As shown in the figure that follows, trainers’ and trainees’ degree of familiarity with the work context should influence FBL training strategy. When the trainer or training designer is familiar with the work context the trainees will work in after training, but the trainees are not, then the training should provide specific advice to boost the trainees learning attunement. This might include information about the five most important things they will need to learn over the next two months, the types of people the trainees should observe or talk with, specific questions they should ask experts, and specific learning opportunities for which they should be alert.

When both the trainer and the trainees are familiar with the work context (e.g., trainees will be returning to their prior work assignment after training), the trainer can provide specific OJL advice supplemented
by trainees’ local knowledge of their work environment.

When the trainer is unfamiliar with the trainees’ work settings, but the trainees are familiar (e.g., a class of trainees who will be returning to their prior work setting, but across a wide range of work settings) then the training should employ techniques that help trainees self-discover their OJL needs and opportunities. For example, the trainer might suggest a set of common questions to ask any expert and the trainee can convert those into specific questions to ask an expert he expects to interact with in the work place.

<table>
<thead>
<tr>
<th>Trainee Familiarity with Work Context</th>
<th>Trainer Familiarity with Work Context</th>
</tr>
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<tbody>
<tr>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Use trainee self-discovery during training to uncover OJL opportunities</td>
</tr>
<tr>
<td></td>
<td>Fully generic OJL competencies trained</td>
</tr>
</tbody>
</table>

Finally, when neither the trainees or the trainer are familiar with the work setting (e.g., when work assignments haven’t been made yet), then the trainer can only teach more generic OJL-related competencies that trainees can use in any work setting – such as how to be a good observer, seek feedback, or ask useful questions.

**Situational malleability and richness.** Characteristics of the work context can also influence appropriate OJL training strategy\(^2\). For example, some work environments can be described as “learning rich,” containing many of the characteristics that tend to enable OJL learning. In contrast, “learning poor” environments contain few naturally occurring learning opportunities\(^23\). Work situations can also vary by whether they are, from the trainee’s point of view, malleable or fixed. Malleable situations are those where the trainee has discretion to intentionally encounter or even create certain learning opportunities (e.g., choosing assignments that require the use of certain equipment). In contrast, in fixed situations learners do not have the autonomy or ability to modify their learning opportunities\(^24\).

As shown in below figure, situational malleability and richness influence the potential strategies that learners should employ on the job, and therefore should drive what is taught during training.

<table>
<thead>
<tr>
<th>Situational Malleability</th>
<th>Situational Richness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>Learning Rich</td>
</tr>
<tr>
<td>Malleable</td>
<td>Capitalize</td>
</tr>
<tr>
<td></td>
<td>Capitalize and Create</td>
</tr>
<tr>
<td>Learning Poor</td>
<td>FBL at Risk</td>
</tr>
<tr>
<td></td>
<td>Create</td>
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</table>

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In a fixed situation characterized by richness of learning opportunities, the learner will need to capitalize on learning opportunities as they are encountered. If a situation is learning rich and malleable, the learner can capitalize on naturally occurring opportunities and can also create such opportunities. If the situation is learning poor but malleable, it may still be possible for the learner, by taking discretionary action, to create OJL opportunities. Trainees can be advised about the optimal strategies to take given the nature of their work environment. It is important for trainers to recognize that when the situation is both fixed and learning poor then the ability to engage in OJL is at risk and training should not place too much emphasis on learning on the job.

5. **Where appropriate, allocate some time during training to promote subsequent OJL.** For a particular training program, a FBLA can be used to determine the right balance between the time dedicated to
building task/job-related skills versus time spent enhancing readiness for OJL (e.g., one program might be only 5% OJL focused, while another might be 60%) and help establish the right instructional design elements to meet those needs. In many cases, the majority of training time should focus on developing mastery of knowledge and skills to complete some core set of tasks on the job. But, to the extent that an organization needs its members to be able to engage in specific and effective OJL behaviors, some portion of training can be devoted to training of and preparation for OJL. A FBLA would make an explicit assessment of the need for, opportunities to enable, and ways to design training as a catalyst of FBL.

6. Teach fundamental OJL skills. Many important OJL skills are applicable to just about any job and work setting and can be developed with little to no knowledge of a specific work context. Some of these skills include observation, question asking, reflection, feedback seeking, honest self-appraisal, recognizing what OJL opportunities look like in general, managing appropriate risk taking, and conducting a debrief. Improvements in any of these areas carry over to most work contexts and jobs. Therefore, whether it is during an existing formal training program or during less formal learning experiences, find the right time to teach and reinforce these general skills.

7. Develop and provide OJL tools. Provide employees with techniques and tools to help them understand how to learn on the job, who to learn from, and key opportunities for OJL. Examples of these tools include:

- A listing of different types of learning opportunities.
- A worksheet of tips for how to observe others in order to learn from them.
- A “ride-along” guide with specific advice on what to look/listen for when accompanying a job incumbent while they are doing their job.
- A list of good questions to ask experts to help understand what they do.
- How to use a journal/diary to capture reflections and ideas about the job.

- A job specific debriefing guide – to help reflect on past experiences and capture lessons learned and plans for a specific job/situation
- A “learning from mistakes” tipsheet
- A “how to get feedback” tipsheet
- A “how to find an expert” tipsheet
- An overcoming obstacles to on-the-job learning tipsheet

Interested in Learning More?

Given the criticality and benefits of OJL, there is a vital need to understand better how individuals learn on-the-job as well as the environmental conditions and mechanisms that facilitate OJL. We must identify how we can “promote and accelerate” OJL to help people get the most out of their on-the-job experiences. The smarter we get about OJL and helping people become more effective and efficient at OJL, the better.

If you are interested in learning more, collaborating in future research, or seeking support to accelerate informal learning in your organization, contact us at info@groupe.com.

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We would also thank the learning experts and fast learners who generously gave their time and shared their experiences with us.
About gOE, Inc.

Since 1987, the Group for Organizational Effectiveness, Inc. (gOE) has provided consulting and research services to many well-known Fortune 1000 companies, mid-sized corporations, and government organizations including J&J, GE, BP, The Hartford, Credit Suisse, Crayola, St. Paul Travelers, Roche, Wells Fargo, HP, Carnival, Sears, Merck, McGraw-Hill, UBS, MetLife, Covidien, UnitedHealth Group, Medtronic, CNA, Tiffany & Co., Progressive Insurance, Honeywell, United Airlines, T-Mobile, the U.S Armed Services, the Swedish and Royal Air Forces, and NASA.

We have been studying and providing advice about learning and training for over 25 years. We collaborate with scholars and researchers from various universities to couple thought leadership with practical applications. Our team has published extensively and has received numerous awards for both our research and applied work.

We've provided tools and advice to approximately one-third of the Fortune 100, working with and studying leader and employee development in all major functions, including finance, customer service, manufacturing, R&D, sales, and IT. We’ve examined learning-related issues in such diverse settings as boardrooms, hospitals, cruise ships, oil rigs, and military environments.
Endnotes


15 Flynn, Eddy, & Tannenbaum. The impact of national culture, 85–107.


