Hands On Technology Transfer, Inc.

White Paper

An Idea Whose Time Has Come: Facilitated On-Demand Technical Training

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Abstract

We know that instructor-led training is the gold standard for technical training. We also know that now more than ever, there are serious reasons why face-to-face instructor-led training is not a practical option. Furthermore, remote-live instruction fails to offer the necessary scheduling flexibility that many professionals require. **Hands On Technology Transfer is proud to be the only technical training provider in the business to offer the option of personally facilitated on-demand training***.*

WE KNOW WHAT WORKS

It is well established that, all things being equal, instructor-led training (ILT) is the best and most effective way for technical professionals to augment their technical knowledge and develop their technical skills. As we've stated before, and as supported in the references below and in previous papers,[1] instructor-led training is measurably far more effective than non-human-based training modalities for complex technical material. The technical professionals agree, and it is significant that the more experienced the professional, the more they agree.[2] Upon closer examination, it makes perfect sense. Those who have been around the block understand:

- There is much to be gained from formal classroom or pseudo-classroom instruction that is simply not to be found in quickie micro-courses or cheap videos. Only in traditional ILT environments does the learner benefit not only from the expertise of experienced instructors but also from that of professional colleagues from other enterprises.
- Learning that takes place away from the day-to-day production environment yields conspicuously more understanding and retention than learning that is delivered in small batches or in isolated moments stolen from a packed schedule.

Also, ILT offers obvious advantages over self-moderated training:

- A controlled learning environment: students are not only isolated and protected from work distractions, they work in a setting in which they necessarily focus on learning. There is no choice, short of running away.
- Truly interactive Q&A: there is no substitute for the ability to asked specific, focused questions to both the experienced, expert instructor and a classroom of colleagues.
- Accountability (the instructor): in many university settings, if the student fails to learn, the student has failed. In the corporate training world, if the student fails to learn, the instructor has failed. The instructors dare not fail at doing their jobs any more than the programmers dare to write flawed code. In neither case will the employee last long.
- Competition (peer pressure): while it is true that some professionals enjoy competition while others shun it, the presence in the classroom of colleagues pushes all to perform.

THERE'S A *BUT*

There are, unfortunately, some real drawbacks to instructor-led training. You know them:

- Travel can be costly.
- Scheduling can be difficult, and it may be next to impossible to schedule large blocks of time away from the office (and from project work).
- ILT can appear to be costly, especially when compared to appearance-based training.[3]
- Conventional classroom training does not allow students to work at their own pace.

Some of these challenges are addressed when classroom instruction morphs into remote-live instruction: travel can be avoided, and scheduling is easier when the student does not have to limit their search to classes that are nearby. Indeed, for many, the remote-live option is almost ideal.

But not *entirely* ideal. For some technical professionals, the only real option for career development is training that offers a flexible schedule, perhaps one or two days a week, perhaps more as time allows. So, quite reasonably, many managers tend to push staff towards *on-demand* or *self-paced* training. By whatever name, the dream of effective technical development at greater convenience, and sometimes at a lower cost, is all but irresistible.

THERE'S ANOTHER *BUT*

Of course, self-paced, on-demand training brings with it another set of problems.

- Even proponents of self-paced training admit that studies show that as few as 15% of learners complete self-directed e-learning courses.[4]
- Students who get stuck have nowhere to turn. Enterprises that offer only ILT and remote-live solutions routinely point out that "the lack of expert interaction and inability to tailor content to your needs gives virtual training a significant advantage

[over on-demand training] when you need to build critical skills,"[5] and imply that there is no solution to the problem.

- The inclusion of comprehensive, challenging, in-depth learning activities presents an additional roadblock: students routinely need help, which is best provided by an instructor, subject matter expert, or other easily available expert facilitator. Most providers of self-paced training treat such facilitation as an additional or unjustifiable cost or inconvenience. Because students who get stuck have nowhere to turn, lab exercises tend to be trivial, educationally ineffective, and of little value.
- To make it possible for students to complete lab exercises at all, most self-paced courses have the students work in a virtual environment, rather than with the actual software, languages, compilers and tools they will use on the job. This assures that students can complete exercises, and also assures that they cannot go off on the wrong track. By so doing, students are prevented from benefiting by making authentic errors of the sort they are likely to make in the real world, and a great many opportunities to learn are thus scrupulously avoided.

THERE IS A SOLUTION: PERSONAL FACILITATION

All of the problems with self-paced training that are discussed above arise from a single factor: the lack of an instructor or facilitator. Students abandon self-paced courses in large part because there is no one who checks in to make sure they are getting all they can from the course. Students give up when they get stuck and have nowhere to turn for help. Students fail to learn or learn not nearly enough when lab exercises are limited and designed to be absolutely fail-proof rather than challenging. Students miss out on gaining valuable software experience when they perform lab exercises that only pretend to use the software in question.

All of these problems are solved if the on-demand, self-paced or e-learning course includes the involvement of an experienced technical expert whose job is to see to it that the student succeeds and that their questions are answered in a timely fashion. You know -- an instructor.

This does not mean that educational institutions have to have thousands of technical experts available 24 hours a day, 7 days a week, to serve customers instantaneously. It simply means that each student who takes an on-demand technical course has to get an assigned facilitator who sticks with the student from the beginning to the end of the course, answers questions in a timely manner as they arise (typically, within a few hours), and checks in now and then, especially if a student seems to be distracted.

This solution checks all the boxes and addresses all the challenges. By starting with courses that have been refined over decades of presentation, carefully editing presentations to include valuable instructor-student interaction while removing repetition and digression, providing a remote lab environment that is available 24/7 and uses the real software (not simulations), and involving an instructor/facilitator to answer questions, solve problems, and guide and prod the student forward, **personally facilitated on-demand training** is a solution whose times has come.

ADVANTAGES OF ON-DEMAND TRAINING WITH PERSONAL FACILITATION

Besides the obvious advantage of offering a more flexible schedule, there are other major advantages to personally facilitated on-demand training.

- Lecture segments can be watched more than once if they are not fully and thoroughly digested the first time. This is tremendous advantage over live training, where a student who has difficulty with a given section may simply get left behind for want of a literal or figurative *rewind* button.
- Students can take as long as they need to complete hands-on exercises, which is especially important when studying complex technical topics. In a live class, if a student is unable to complete the assigned tasks before the class needs to move on, the class must nonetheless move on. Or, if the instructor is busy helping others and cannot get to a student who needs assistance before circumstances compel them to resume a lecture, the student does not get extra time to finish and may never figure out how to accomplish an important task.
- Because of the presence of the personal facilitator, the lab exercises can be truly challenging. In a live class, students work in pairs because doing so enables course designers to include truly challenging lab exercises, confident that the students, working together, will be able to solve even complex problems. Without a personal facilitator, on-demand courses cannot offer such labs with a realistic expectation of success. With a personal facilitator serving as the student's virtual lab partner, the labs can be as demanding as they need to be.

There is a solid argument that in some ways, on-demand training with personal facilitation is actually superior to conventional classroom training.

CONCLUSIONS

As I write, this topic is more relevant and important than ever, as the COVID-19 pandemic has made it essentially impossible to run conventional instructor-led courses for the foreseeable future. **Hands On Technology Transfer** is proud to be the only technical training provider in the business to offer the option of **personally facilitated on-demand training.** For more information: About HOTT's Personally Facilitated On-Demand Training.

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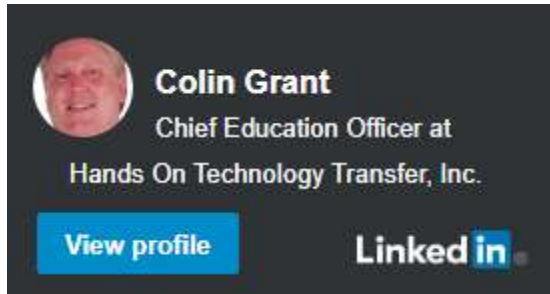
Colin Grant, the CEdO (Chief Education Officer) at *Hands On Technology Transfer, Inc.*, has worked in the field of technical education for almost 40 years as a technical trainer, programmer, course developer, media developer, manager, executive, entrepreneur, editor, and author. He welcomes your comments, criticism and input. Please contact him at Colin.Grant@traininghott.com.

ENDNOTES

Note: for WWW-based sources, we have included the dates on which we most recently accessed links so that should posts be deleted or links become inaccurate, readers can use the Internet Archive (https://archive.org/web/) to find sources.

[1]   Grant, Colin. (July, 2019). Do We Still Need Instructors for Complex Technical Training? *Hands On Technology Transfer, Inc.* [Online]. Available: https://www.traininghott.com/White-Papers/Do-We-Still-Need-Instructors-For-Complex-Technical-Training.htm, accessed March, 2020.

[2]   What/How/Why Do Software Developers Want to Learn in 2020? (January, 2020 [est.]). *DevelopIntelligence*. [Online]. Available: https://www.developintelligence.com/developer-survey/#executive-summary-10, accessed March, 2020.

[3]   Grant, Colin. (June, 2019). The Regrettable Evolution of Appearance-Based Training. *Hands On Technology Transfer, Inc.* [Online.] Available: https://www.traininghott.com/White-Papers/Regrettable-Evolution-of-Appearance-Based-Training.htm, accessed March, 2020.

[4]   Basu, Tyler. (2019). Why No One Finishes An Online Course—And Why It Doesn't Matter. *Influence*. [Online]. Available: https://www.influencive.com/why-no-one-finishes-online-courses, accessed March, 2020.

[5]   Day, Ryan. (March 17, 2020). 8 Virtual Training Myths Exposed. *Global Knowledge*. [Online]. Available: https://www.globalknowledge.com/us-en/resources/resource-library/articles/8-virtual-training-myths-exposed/, accessed March, 2020.