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Evaluating productivity software training options

A White Paper

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Computers are ubiquitous. However, this ubiquity has snuck up without much training to ease the change. Some take to computing like fish to water. Others, however, find themselves immigrants in a land they didn't know they had adopted.

This issue should not stop computing novices. Just as newcomers to a strange land can break down language barriers through language learning, computing novices can overcome productivity hurdles through computer training.

To provide value, they must do so. They must become computer literate.

So they seek available options, but find them lacking. Often, they are ineffective, not interactive, and teach material that learners don't need.

Today's situation

The result: too many perfectly competent professionals, set to contribute substantial amounts of value to an enterprise, find themselves hobbled by the evolving tools of the trade.

The irony: these formidable tools are meant to help professionals increase their productivity, not befuddle them.

The challenge: to help the less computer-savvy achieve their potential through better learning solutions.

A note on computer proficiency tests

Many firms and recruiting agencies test job candidates for computer literacy before hiring or recommending them.

However, the tests suffer several shortcomings. Most tests, being generic in

nature, cannot account for the whole range of skills and overall computer literacy a position may call for. And since numerous jobs evolve as responsibilities change, the skills people need to meet the responsibilities of tomorrow are not always evaluated today.

Current Options

As evidence of the problem, an industry has formed to help solve it. Its practitioners deliver computer learning solutions in a variety of means.

Computer classes

Instructor-led workshops take place in classrooms that have been outfitted with PCs.

E-learning

Possibly the most heavily promoted learning solution today, e-learning is evolving from programs distributed on removable media such as CDs to web-based applications, requiring no more than a computer and a connection to a learning provider's server.

Computer books

Computer hardware and software vendors have long been perceived as poor teachers of their own products, so many books now purport to

Shifting Workplace Demographics and Delayed Retirement, an article on www.microsoft.com, claims:

Computer skills are playing an ever-increasing role in the employability of workers. As baby boomers work into their later years, they will need to continue to embrace and invest in new skills and technologies to remain employable.

The article concludes:

As workers delay retirement, the need for them to invest in technology-related skills will increase.... This research provides validation for offering supplemental computer training to older workers, to maximize their computer use and develop expertise with new applications.

better explain these products¹. Tutorials in book form are especially popular.

Analysis of current options

Each option offers a different set of advantages and disadvantages that learners must consider before making a choice.

Schedule (convenience)

Learners who expect to pick the time for learning often opt for books or e-learning.

Classroom learning suffers from the need to coordinate the schedules of the learners and instructors involved.

Place of learning

As with the schedule, computer books and e-learning offer the most flexibility.

Note: Although people can read books while not in front of their computers, this is not recommended since computing is a practical skill that is best learned by doing.

Classroom learning requires people to be at a certain place, thus making it less flexible in this regard.

Learning agenda

Comprehensive computer books offer the greatest flexibility in terms of offering learners exactly what they need to know. Navigational aids such as tables of contents and indices lead learners to the information they most need, allowing them to avoid what they already know or don't need to learn.

In comparison, e-learning offers a set route for each lesson. It resembles a DVD in which learners jump to specific learning scenes.

¹ In an implicit nod to the complexity of their products, even the publishing arms of software firms profitably produce such materials.

Somewhere between books and e-learning lies classroom training. The preset agenda an instructor brings to a class must be covered, but instructors can also take tangential learning trajectories if learners wish and time permits.

Note: Rarely do any of the three options allow learners to cover more than one software product.

Learning materials

Publishers often include CDs of sample files with modern computer books so that learners can do exercises in the books. These files serve the interests of learners who care to reverse-engineer them to further their own learning.

The quantity and quality of materials provided in classrooms varies widely. Learning guides rarely accompany e-learning, although some packages offer practice materials.

In all cases, though, these sample files do not apply to a learner's specific needs as well as that learner's current projects (white papers, proposals, reports, presentations, etc.)

Number of learners

Parents and university students the world over clamour for smaller class sizes in schools, since learners of all ages benefit from increased teacher-student interactivity.

For this reason, learners who choose classroom training need to know the upper limit of enrolment for a class. Lower limits help ensure quality instructor-learner interaction and learner comfort. A lack of limits, on the other hand, can result in tight, uncomfortably crowded classrooms in which learning bogs down while the instructor seeks to keep all learners progressing at the same rate.

Books and e-learning are, of course, solo activities, so learners do not suffer

distractions from fellow learners. However, the lack of an expert during learning can present problems for people who stumble over certain topics. E-learning providers tend to offer email, telephone and instant messaging support to mitigate this issue.

Understandability

Depending on the instructor, classroom training offers the greatest likelihood of learners understanding the material. Good instructors can avoid jargon and put concepts into terms that learners are more likely to understand.

Ongoing research and revision lead to continuous refinement of professionally produced books and e-learning. However, neither adapts as quickly or effectively as a human expert if learners do not find lessons clear.

Poorer-quality products, meanwhile, spout the same jargon that often confuses learners in the first place.

Note: A few novice computer users may not know enough to access e-learning. If it's inaccessible, it becomes the least understandable option.

Cost (money)

Classroom training tends to be most expensive. Books are cheapest. And e-learning usually sits between the two.

However, if e-learning for the software to be learned does not already exist, the order above can change. Few learners situated close

together can be served in a cost-effective manner by traditional classroom training. However, if a large number of learners are scattered far apart geographically, the development, setup, and maintenance of a custom e-learning platform can cost less per user than delivering classroom training in multiple locations².

Cost (time)

Busy, highly paid professionals can rarely afford to make time for day-long tasks that do not directly benefit their clients. Timelines and billable time are but two ways in which productivity visibly slips away.

Books and e-learning can be the fastest or the slowest learning methods available, depending on the pace at which learners can take in what they need to know.

Classroom learning often calls for a set amount of time, often a half-day or full day. Specialized training can demand more time, as can more intensive training or training on more than one application.

Current options: a recap

Classroom training, e-learning, and books each fail learners in the same ways.

The scourge of inaccessible technology is more widespread than the technology industry may care to admit.

On its website, the BBC speaks of an **E-Inclusion Charter**, a British initiative set to induce technology firms to make their products easier to learn and use.

"We recognise that technology can be both a cause of and a solution to exclusion," said Heidi Lloyd, spokeswoman for the Alliance for Digital Inclusion (ADI). "Through this charter, we hope to maximise the potential that technology has to offer everyone."

For more information, see <http://www.citizenonline.org.uk/adi>

² Classroom logistics may include instructor travel costs, classroom rental, and classroom setup. Also, once the instructor is gone, the training resource is no longer available to either learners who miss class or learners who need the skills after the instructor leaves. In this case, it's less costly to use e-learning than to bring the instructor back.

For example, they treat learning software as the primary goal. Most learners, meanwhile, use software as means to their ends. For example, consultants, lawyers and other professionals prepare reports, proposals, presentations, or other complex documents.

And often, people need to learn skills in more than one software package to attain their goals. To meet all those needs using a current learning option is, at best, a long, onerous, expensive process.

Also, people normally seek training at the very moment when they need the skills they seek. For such people, time is of the essence, and none of the three options guarantees accelerated learning.

One final, oft-overlooked disadvantage: once the learning experience is over, newfound knowledge must be translated to the work that awaits learners. By and large, this is how learning works, so few people consider potential time savings that could result from learning and working at the same time.

Another option: Computer coaching

There is another learning option, one that allows learners to combine skill attainment with progress on projects that matter to them. That option is known as *computer coaching*.

In a computer coaching engagement, coach and learner take three steps:

1. During a free consultation, the learner outlines immediate needs to the coach, who creates a custom learning agenda.
2. The coach delivers training to the learner according to the agenda.
3. The learner can contact the coach for a fixed number of business days after the coaching session for reminders of topics covered during the coaching session.

Computer coaches

People who deliver such a service are computer coaches. They bring several attributes to learners, including:

- A thorough practical knowledge of computer software
- Pedagogical experience
- The ability to design custom learning agendas
- Primary focus on a learner's project or work, talking about the software only in terms of what it can do for the learner.

Andragogy is a theory of adult education proposed by the American educator Malcolm Knowles.

Andragogy (Greek: "man-leading") is different from pedagogy (Greek: "child-leading") in that adults should direct their own learning to the greatest extent possible.

Knowles based his theory on four claims:

1. Adults need to be involved in the planning and evaluation of their instruction.
2. Experience (including mistakes) provides the basis for learning activities.
3. Adults are most interested in learning subjects that have immediate relevance to their job or personal life.
4. Adult learning is problem-centered rather than content-oriented.

Advantages of computer coaching

Consider how coaching compares to the three traditional options.

Schedule

Since coaching is a one-on-one experience, scheduling is much easier than fitting a class

into a busy schedule. Coaching can be almost as flexible as e-learning or reading a computer book, with the added responsiveness of a human expert.

Place of learning

Rather than travel to a classroom, a learner can host a coach in the place where the learner's work is normally done, or another equally convenient place.

Learning agenda

A computer coach can custom-design an agenda based on a learner's specific needs. In this way, the coach removes all uncertainty for learners who may not know exactly what they need.

Learning materials

Learning materials take time away from "performing" learning. An attentive coach looks over the learner's shoulder, observing progress and giving instruction where it's needed. Learning materials can never be so interactive.

Number of learners

Since computer coaching is a one-on-one process, the only priority a computer coach has is the sole learner's needs.³ Thus the learner gets the most possible interaction, when necessary, from a computer coach.

Understandability

Learning with a coach is the best option for people who need technical terms translated to what they are working on.

³ Two or three people can benefit from a single coaching session, but learners must have highly similar sets of questions and use the same projects or software. Otherwise, coaching sessions become classroom instruction, with its attendant limits.

Cost (money)

Coaching sessions tend to be more expensive than the three options mentioned previously.

However, computer coaching may be less expensive under the following conditions:

- the learner needs to understand two or more software packages
- the learner needs to understand skills taught in more than one level for a software package (for example, introduction, advanced, power user)

Cost (time)

Not everybody can easily afford days off work for training.

Consider a time-is-money example: a consultant bills clients \$300.00 per hour. The opportunity cost of an eight-hour day spent in training is \$2,400.00 in lost billings. The same consultant may be able to learn every demanded skill in an hour or two, thus greatly reducing the opportunity cost.

Summary

Choosing a computer training method is an exercise in compromise. Learners must decide what matters – time or money spent, number of tools to learn, or others – and seek the option that meets their highest priorities.

In making this choice, busy professionals often measure value for time spent, and training options must do more to measure up in this respect.

Implementation

For a free productivity software coaching consultation in the Greater Toronto Area, contact Luigi Benetton.

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About the author

Luigi Benetton is a technical writer, learning designer, workshop facilitator and freelance writer. Owing to his extensive document

publishing and computer experience, he now uses only no-fuss formatting and plenty of automation features to quickly create stylish documents and complete other computer-based work.

Summary chart of productivity software learning options

Criteria	Computer classes	e-Learning	Computer books	Computer coaching
Schedule	Inflexible	Very flexible	Very flexible	Fairly flexible
Place	Inflexible	Very flexible	Very flexible	Somewhat flexible
Agenda	Somewhat flexible	Inflexible	Flexible	Very flexible
Materials	Quality varies	Doesn't rely on materials	Both tutorials and sample files.	Not needed – learning applied to specific job
Number of learners and instructors	Varies – if high, the learning may bog down with questions	One learner No instructor	One learner No instructor	One learner One instructor
Understandability	Often good	Depends on learner	Depends on learner	Best
Cost (money)	Expensive	Moderate	Cheapest	Expensive unless learning two or more programs
Cost (time)	Fixed – high	Varies	Varies	Shortest