Can EPSS (Electronic Performance Support Systems) really help in engaging learners?

EPSS has been around for almost 20 years but perhaps we've not fully recognised how much they can really help in engaging learners in the actual learning process. By increasing the level of participation and the quality of the learning experience, we stand to gain considerable benefit, both for the individual and for the organisation.

In *Electronic Performance Support Systems*, published in 1991, Gloria Gery gave us the original definition for EPSS, which we can now refine it to be *"Help, instruction, guidance and experiences, available electronically on-the-job at the point of need".*

There are stand alone EPSS's that provide workers with information they need to do specific tasks, and there are embedded EPSS's where there is no distinction between the performance support system and the software application. A couple of examples might be:

- A system used by customer support representatives that helps them take and track customer orders. The software supports the process by providing a road map of the key steps, with relevant advice and guidance for each step, and provides assistance with searching for answers to questions commonly asked by customers.
- A production management manufacturing system to help manufacturing engineers plan and schedule production. The system structures the planning system, providing background conceptual knowledge on key planning concepts integrated with step - by - step instructions for creating a manufacturing schedule.

EPSS is *not* instructor-led training, e-learning, workshops or other forms of formal instruction, although these can be supported by EPSS. Formal training can do a wonderful job of bringing learners to a common level and starting the learning process. EPSS focuses on application of that learning and helps bring all the knowledge gained through formal instruction to life.

It's easy to confuse and overlap some complimentary, but discretely different technologies. For example an EPSS must be distinguished from a traditional online help system which usually supports a single software application and is not necessarily focused on the entire range of job tasks which may involve multiple applications. EPSS must also be differentiated from e-learning simulations that are more closely associated with on-demand training, not just-in-time support.

From a business perspective, a former Nortel Networks executive, William Bezanson (2002) provided a definition linked to application usability and organisational results. He felt that an EPSS should be considered when:
- Skilled performers spend a significant amount of time helping less skilled performers
- New employees must begin to perform immediately and training is impractical, unavailable or constrained

- Employees need to be guided through a complex process/task that can't be memorised.

These situations often occur when new systems (e.g. Customer Relationship Management, Enterprise Resource Planning) are introduced, upgraded or consolidated, and in certain call centres when agents must perform using complex systems, processes or products. In fact call centres are a primary exponent in the use of EPSS and online help.

As the pace of technological change speeds up, many jobs will require constant adaptation and the distinction between learning and work will begin to disappear. EPSS's have a major role to play in the future of learning and to support the trend towards more informal learning systems.

Achieving high take-up and engagement with e-learning remains a challenge, but part of the solution is to give the end users what they need at the moment they need it. EPSS plays a significant role here as does Context Sensitive Help, which as opposed to general online help or online manuals, doesn't need to be accessible for reading as a whole, and is a technique for satisfying a user's quest for immediate answers.

If an EPSS can help an organisation to reduce the cost of training staff while increasing productivity and performance, why isn't everyone using? If it can empower an employee to perform tasks with a minimum amount of external intervention or training, then why are EPSS's not in wider use? Perhaps a couple of examples based on detailed research will help further:

Example 1 - HMS Collingwood at Fareham in Hampshire provides training for the maintenance and repair of electronic systems within the Royal Navy. This trial included the introduction of a CBT simulation produced by Lockheed Martin and an EPSS. A comparative study was completed with three groups of trainees, and the results revealed that those using e-learning with EPSS learnt faster with fewer mistakes.

Example 2 – In a recent research study entitled "The Effect of Performance Support and Training as Performance Interventions" the eLearning Guild found that 69% of online training developers planned to embed performance support content directly into users' work interfaces and software tools. Results indicated that users provided with the EPSS performed significantly better on an achievement test than those provided with training. The study participants' desire to have detailed information for on-the-job reference may be attributed to adult learners' preference for personal relevance.

In today's work environment driven by rapid technological change, jobs and tasks become very dynamic and EPSS is now becoming a widely supported reality. More and more vendors are providing solutions within their toolsets to support Performance Support. EPSS is coming of age and is at the heart of working toward just-in-time, direct-to-brain information delivery where the closer you get the information to the user, the better and the less you bother the user, except when they need it, the better.

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