



Differentiated Instruction and e-learning in Corporate Sector – A Study

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ABSTRACT

In today's scenario, education and training is not limited to classroom alone. Technology has made it available for learners to seek training and gain competence in the respective areas of study or to perform the job skills in everyday businesses outside the classroom. Technology, though cannot replace teachers entirely, can certainly help teachers to create better experiences through the use of differentiated instructions. This paper intends to focus on how differentiated instruction helps to meet individual needs by taking the example of one of the training programs imparted to adult learners in corporate sectors.

KEYWORDS : e- Learning techniques, web based online training, corporate sector, effective learning, efficacy at workplace

Introduction:

Differentiation stems from beliefs about differences among learners, how they learn, learning preferences and individual interests (Anderson, 2007). The paper emphasis on how instructions play an important role in educating the learners on the key skills that they need to develop in order to manage customer relations and at the same time bring profits to the organization. Since, learning will be delivered on-line (also called web based training) using flash and animations; the instructions ought to be self – directed, where the learner can choose to learn at his/her own pace, place and time. The course is individual-ly learner centered, with a focus on utilizing appropriate instructional and assessment tools that are fair, flexible, challenging, and engage learners (in this context – the staff of Dr. Reddy's Laboratories in securing company's data) in meaningful ways. The paper concludes stating how the emerging technologies can change the ways learners and organizations consume and share information and how the application of appropriate instructions can help the learner to achieve his or her maximum growth, safeguard the organization's data and promote business.

Organisations in India and other developing countries are taking the assistance of technology to train and educate its staff to improve their skills, (soft skills and job skills), to ensure good business and huge profits. These trainings are also intended to reduce costs and save time by making use of web based training or instructor led training programs. Technology will never replace teachers; in fact, it will make teachers even more important – EDUCATION WEEK - Spotlight on Differentiated instruction. To address the changing needs of learners, the one-size fits all concept is not applicable any more. Different kinds of learner's have different leaning needs and this paved way to the beginning of differentiated instruction. Though the idea of differentiation (teaching with learner differentiation in mind) is quite an old one, there were no books on differentiation at the time, no conferences and no web sources for help. Then, how can educators provide more than one way to give learners access to information? To know this, we need to first understand what differentiated instruction is. Differentiated instruction, according to Carol Ann Tomlinson (as cited by Ellis, Gable, Greg, & Rock, 2008, p. 32), is the process of "ensuring that what a student learns, how he or she learns it, and how the student demonstrates what he or she has learned is a match for that student's readiness level, interests, and preferred mode of learning." Keeping this in the backdrop, an effort has been made in this paper to study how differentiated instruction has been used to impart training to the staff of Dr. Reddy's Laboratories on Information Security (Clientele of Excel Soft Technologies – an e-learning service provider).

Context:

Differentiation finds its roots and is supported in the literature and research about the brain. Evidence suggests that by instructing through multiple learning pathways, more "dendritic pathways of access" will be created. Information Security is a web based training in which training instructions were delivered in an advance online platform. The course had been designed to enable the learners (here, adult

learners) to access the information at their own pace, place and time and gain information on how to secure or safe-guard the organization's information and data. This was achieved by using several senses (i.e. sight- visuals/graphics & images, sound- audio, touch- interactivities) and by creating measurable learning connections. This type of differentiation when more regions of the brain store data about a subject, there is more interconnection and cross-referencing of data from multiple storage areas in response to a single cue, meaning one has learned rather than memorized.

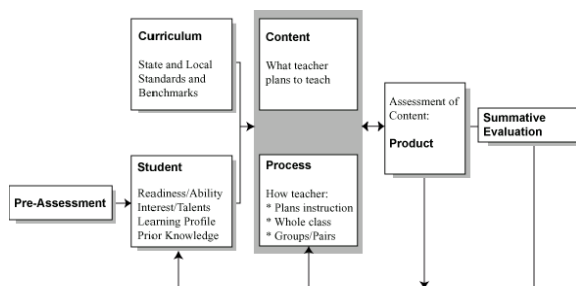
Some of the ways that set the stage for learning are as listed below:

- Learner-Friendly Interface
- Setting reasonable goals
- Teaching content
- Building relationships
- Building personal capacity for creative thinking and problem solving
- Using formative assessment regularly
- Keeping learners moving forward
- Praising effort and learning from mistakes
- Considering the implications for summative assessment
- Real time results

Discussion:

The course recognizes differentiation as an approach to teaching and learning, and not a list of strategies. Since learners (here staff employees) belong to different cultures, socio economic status, language, gender, motivation, ability, disability, personal interests, etc, instructors need to develop personalized instruction to meet these diverse varieties of learners through careful planning of the course. By considering these varied learning needs, personalized instruction was used to meet the readiness levels, interests and learning profiles. To do this, a different expectation for task completion for learners based upon their individual needs had been set. Differentiated instruction was achieved through four ways: 1) through content, 2) process, 3) product, and 4) learning environment.

Fig 1 gives an outline on the four ways of differentiated instruction below:



(adapted from Oaksford, L. & Jones, L., 2001)

Content:

The source content was given by the clientele in the soft form as Pow-erpoint presentation and hard form in the form of documents. The content was thoroughly analyzed to identify gaps and lack of impor-tant information if any that would be required by the learner to gain enough information on how to take care of company assets and data.

Process:

A project plan was devised by ExcelSoft and shared with the clientele. The plan gave all the details on the date of start till the completion of the product. The plan was devised after coordinating with the entire team that include the instructor, the graphic designers, programmers, etc. In this plan, the type of interactivities used was provided based on the budget, time and level required by the clientele. A sign-off was done by the clientele at each stage of development of the prod-uct. Any changes, whether textual or graphics were communicated through emails and calls which were implemented accordingly. Fig 2 shows one of the screenshots of the e-learning course (product) dis-playing how the content would be accessed and navigated.

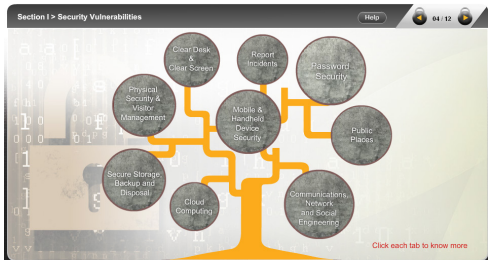


Fig 2

The learner had to click on each tab and hence he was constantly kept engaged in order to get the information desirable to complete the course. The content is not displayed here to in order to maintain the confidentiality of the clientele. The screens across the module used similar clickables and rollovers so that users can access the content easily. To do this, navigation buttons were also provided so that the learner can go ahead or go backwards to view content as desired.

Product: The first cut of the product was sent for client approval. After further changes were suggested, the final product was developed with all changes customized as per client needs. This was done using learning management system (LMS 2). A learning management system (LMS) is a software application for the administration, documenta-tion, tracking, reporting and delivery of e-learning education courses or training programs. Corporate training departments use LMSs to deliver online training, as well as automate record-keeping and em-ployee registration. Other softwares required to develop the product were Adobe Photoshop, Flash, Word, etc.

Learning environment: The course was designed for delivery on an online platform. Users would access the course from any place and at any time based on their convenience and interests, provided they should have an internet or intranet access. The drag and drop activities have been used for formative assessment at regular and appro-priate places so that learners were being kept engaged and guided to move ahead in thirst for knowing more. A constructive feedback was given, in which the learners were able to identify his/her areas of weakness and aim for improvement. Fig 3 presents a screenshot of the weaknesses of the learners below



Fig 3

The course would run for 20 – 25 minutes duration and complete the summative assessment, that would give the final scores and de-clare the learner as pass or fail. The staff would be asked to retake the course if the score was below 40%. However, if the learner secured 70% and above, he/she would receive a certificate of completion.

How did learning happen?

Fig 4.1 and Fig 4.2 below shows that with differentiation, learning happens effectively. Active learning takes place because of the use of videos, graphics, audio and interactivities, say about, 90%.

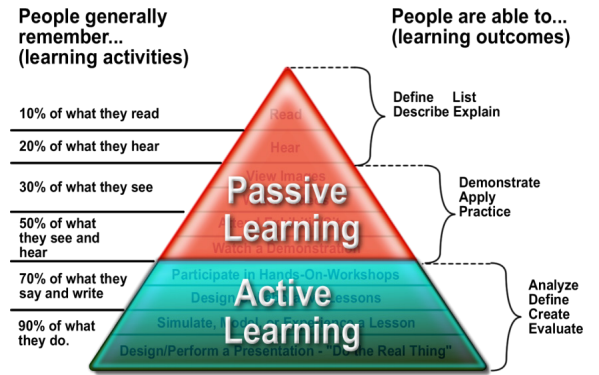


Fig 4.1



Fig 4.2

Conclusion:

The course used crisp, short and to the point content that would be just enough to gain knowledge on the content. The learning experi-ences were provided based on learners’ interests, abilities, and learn-ing styles. It offered ample opportunities for learners to engage with concepts, stretch their thinking (or tendons), and reach their goals. This can be thought of as differentiated “construction” rather than “in-struction”. It is essential to gauge learners’ progress and know when to push them. Real learning doesn’t happen when instructors are pre-senting information, but rather when learners are applying that Infor-mation. The instructor had to use the necessary tools to reach each learner. It can be concluded that the course can be thought of more as differentiated learning than differentiated instruction. Finally, it is important to know what impact did the instruction have on learners and was the course effective enough to achieve the objective? Results have not been shared by clientele when this article was being docu-mented.

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