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Adult Learning for Continuing Professional Development among Dental Practitioners

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ABSTRACT

The Continuing Professional Development (CPD) of the Dental Practitioners after formal training in dental colleges has transformed notably in past few years. Traditional methods like lectures, books and journals are added by the newer methods like online courses, Case based learning through social media. These changing educational methods are linked to clinical practice very closely. The knowledge of the Adult Learning or Andragogy is essential in planning the Professional Development programs for the practitioners. Adult learners are goal oriented, learning oriented and responsible for their own learning. This review attempts to throw some light on various aspects of Adult learning and its significance in Continuing Professional Development for Dental Practitioners.

KEYWORDS: Adult Learning, Androgogy, Continuing Professional Development, Dental Professionals

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INTRODUCTION

Over the past few years the continuing education (CE) has evolved remarkably. In earlier time, most of the continuing dental courses were offered in dental colleges or through the various dental associations in the form of conferences and workshops. Most of these were organized to provide knowledge, improve the the clinical skills of the dentists. The dentistry has grown remarkably in past few years and the amount of information available today is enormous.

Many full-time as well as part time courses are now available for these learners. Hence it is important to understand the models of adult learning to meet the challenges faced by adult learners. The Adult learning is primarily the self-directed learning where the learner himself or herself is responsible for their own learning. It is important to ensure that adults receiving continuing education have access to good quality of effective learning. The most important aspect in Adult Learning is the self-motivated pursuance for lifelong learning. The Higher Education system needs to understand the these basic fundamental requirements of Adult education.[1,2,3]

The challenge in adult learning is that the learners have prior understanding of the subject with freedom to make choices about the learning methods and technology. Being working professionals they are busy with less time and work stress. The Adult learners require professional development programs which cater to their needs and meet their learning goals.[1,2]

ADULT LEARNING THEORIES

The learning theories are the several prevalent explanations to describe different perspectives on how the adults learn. These all adult learning theories have a common goal in creating the effective and efficient learning programs for the adults.[4,5]

Adult learning theories are collections of ideas and concepts regarding the way learning happens in adults. These theories are helpful in planning the courses during conception, development, and execution, with the aim to facilitate the learning process. These theories helps in designing the courses as per the perceived needs of learner, in devising the instructional strategies as well as the technology that best supports the instructional strategy.[3,4,5]

There is no single theory which can be applied to all the adult learners, but need to implement as per the learners requirements, learning situation, topics to be learned, etc. These models, theories, assumptions together form a knowledge base for adult learning. The adult educators should be aware of these models and knowledge base to effectively and responsively practice adult learning.[5]

Some of the researchers have put forward their assumptions and models for adult learning.

Andragogy

The term "andragogy" was first coined all the way back in 1833 by a German teacher named Alexander Knapp in an effort to categorize and describe Plato's theory of education. However, this

term is most closely associated with Malcolm Knowles, an educator who had a massive impact on the adult-learning field.[3.4]

Malcolm Knowles, an American educator, known for the extensive work in the field of adult education and use of the term andragogy. According to Knowles, andragogy is the art and science of adult learning. Thus it encompasses all the form of adult learning including the Continuing Education amongst the professionals.[3]

The term andragogy can be supposedly equivalent to the term pedagogy. Andragogy in Greek means man-leading in comparison to pedagogy, which in Greek means child-leading. However, it should be noted that the term pedagogy has been used since the Ancient Greek times, while Alexander Kapp, a German educator, first used the term andragogy in 1833.[3.4]

Knowles' 5 Assumptions Of Adult Learners

Malcom Knowles made 4 assumptions in 1980 specific to adult learning with the characteristics different from the Child learning. The 5th assumption was added in 1984.[3.4]

1. Self-Concept

   As a person matures his/her self-concept moves from one of being a dependent personality toward one of being a self-directed human being.

2. Adult Learner Experience

   As a person matures he/she accumulates a growing reservoir of experience that becomes an increasing resource for learning.

3. Readiness to Learn

   As a person matures his/her readiness to learn becomes oriented increasingly to the developmental tasks of his/her social roles.

4. Orientation to Learning

   As a person matures his/her time perspective changes from one of postponed application of knowledge to immediacy of application. As a result his/her orientation toward learning shifts from one of subject- centeredness to one of problem centeredness.

5. Motivation to Learn

   As a person matures the motivation to learn is internal.

   In 1984, Knowles suggested 4 principles that are applied to adult learning:[3.4]

1. Adults need to be involved in the planning and evaluation of their instruction.

2. Experience (including mistakes) provides the basis for the learning activities.

3. Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.

4. Adult learning is problem-centred rather than content-oriented.

TRANSFORMATIONAL LEARNING

The Transformational learning (TL) is a form of adult learning that transforms the way of thinking of an individual about themselves and their surroundings due to shift in consciousness. Sparks of inspiration leads them to see things with new perspective. These moments of wisdom changes our mindsets.[5.6]

As an instructional designer, one should go all-out to create such learning experiences. These kind of learning experiences often have deep impact and long lasting impression.

This kind of learning stimulates the thoughts and emotions to bring in the "transformation" resulting from profound change in attitude and behaviour.[5.6]

Transformational learning theory describes the learning in adults by the way of such triggers. This theory elaborates that the learning happens in the adults when new dimension is added to old experience[7] or the old meaning in re-construed in different way.[8]

The Transformational theory of learning is explained through three stages:[8]

- Identification of a Dilemma or a Crisis: The realization that the concepts we had been believing over the period are wrong triggers the mind and emotions to find the new information or relook our earlier beliefs. This realization of having the incorrect information or no information is often upsetting to the learners, who then look forward to the courses to correct these wrong beliefs.

- Establishment of Personal Relevance: In adult learning, the learner has the choice to choose the topic, method and the timing. Hence to courses that personalises the learning experience and answers the "what's-in-it-for-me" question inspires learner and drives learning. The personal or professional interest of the learner should be established at the beginning of the program and reiterated again during the program. The vision of the results to the efforts put in by the learner keep them hooked to the program.

- Critical Thinking: The learners in adult learning are often the mature and rational with their own thinking and concepts. Hence the program should be planned in such a way to create the opportunity to critically re-look into their earlier thoughts and beliefs. When they are allowed to introspect and realize their earlier beliefs and thoughts, they accept the learning in better way and leads to more meaningful learning.

CRITICAL AREAS IN ADULT LEARNING

There are four major areas which were widely researched in the field of Adult Learning. All the areas have their own assumptions and discussions, still various concepts and interests of these individual theories overlap each other. Many of the concerns and explanations are common to all of

them, still the models evolving out of these are distinct from each other. Some of these areas are elaborated here.[9]

SELF-DIRECTED LEARNING

Self-directed learning emphasizes on the method in which adults make all the decisions for their own learning like setting their own learning goals, choose the appropriate learning method, find suitable resources and monitor their progress. There are some vital questions regarding the concept of adult learning like cross-cultural dimensions being ignored. More longitudinal and life history research is needed to understand how periods of self-directedness alternate with more traditional forms of educational participation in adults' autobiographies as learners. We also require to explore more about how adults engaged in self-directed learning use social networks and peer support groups for emotional sustenance and educational guidance. Finally, work is needed on clarifying the political dimensions of this idea; particularly on the issues of power and control raised by the learner's assuming responsibility for choices and judgments regarding what can be learned, how learning should happen, and whose evaluative judgments regarding the quality and effectiveness of learning should hold sway. It is very easy to equate self-direction with separateness and selfishness, with a narcissistic pursuit of private ends in disregard to the consequences of this for others and for wider cultural interests, if the cultural formation of the self is ignored. A view of learning which views adults as self-contained, volitional beings scurrying around engaged in individual projects is one that works against cooperative and collective impulses. Citing self-direction, adults can deny the importance of collective action, common interests and their basic interdependence in favor of an obsessive focus on the self.[9]

CRITICAL REFLECTION

For many adult educators looking for a form and process of learning that could be claimed to be distinctively adult, developing critical reflection is probably the idea of the decade. Developmental psychology has the evidence demonstrating that the adults are capable of critical reflection, through various hypotheses such as embedded logic, dialectical thinking, working intelligence, reflective judgment, post-formal reasoning and epistemic cognition describing the ability of adults to think contextually and critically. The concept of critical reflection focuses on three interrelated processes; (1) the process by which adults question and then replace or reframe an assumption that up to that point has been uncritically accepted as representing commonsense wisdom, (2) the process through which adults take alternative perspective on previously taken for granted ideas, actions, forms of reasoning and ideologies, and (3) the process by which adults come to recognize the hegemonic aspects of dominant cultural values and to understand how self-evident

renderings of the 'natural' state of the world actually bolster the power and self-interest of unrepresentative minorities.

At present theoretical analyses of critical reflection (frequently drawn from Habermas' work) considerably outweigh the number of ethnographic, phenomenological studies of how this process is experienced. Contextual factors surrounding the decision to forgoe or pursue action after a period of critical reflection are still unclear, as is the extent to which critical reflection is associated with certain personality characteristics.

EXPERIENTIAL LEARNING

The real life experiences play a vital role in shaping the humans. The knowledge, clarity and the wisdom gathered through these experiences can never be gained through the books and journals. The Experiential Learning Theory emphasises that the essence of adult learning is making sense of experiences. The best learning is achieved when the adults are allowed to perform to do themselves. Their direct involvement in learning through experience results the better and long lasting learning. David A. Kolb explained experiential learning by elaborating the cyclical four stages of learning:[10]

1. Concrete Experience (CE): Adults learn best when the learning experience goes beyond the chalk-and-talk routine. Kinaesthetic learning or learning by encouraging physical actions (simulations) and learning that evokes strong emotional responses (realistic scenarios that reveal cause-effect relationships) create powerful experiences that are not forgotten easily.

2. Reflective Observation (RO): Adults need to engage with and reflect on their experiences to glean insights and acquire knowledge. So it is critical to not only create opportunities for experience-based learning but also provide time and space to encourage reflection. Create opportunities for "watching" the action unfold before the eyes (demonstrations) and "analyzing" processes and procedures (scenario-driven activities, case studies).

3. Abstract Conceptualization (AC): The success of experiential learning lies in the learner being able to decode abstract concepts from their reflections, generalize these ideas, and realize the relevance to their reality. Designs assessments to encourage learners to exercise their "critical thinking" abilities, so they can formulate concepts and procedures.

4. Active Experimentation (AE): Role-playing activities, internships, and other hands-on tasks let learners apply the learning and thus truly "learn by doing." Active experimentation leads to concrete experiences, and the cycle of experiential learning resumes.

LEARNING TO LEARN

The ability of adults to learn how to learn - to become skilled at learning in a range of different situations and through a range of different styles - has often been proposed as an overarching purpose for those educators who work with adults. Like its sister term of 'meta-

cognition', learning how to learn suffers for lack of a commonly agreed on definition, functioning more as an umbrella term for any attempts by adults to develop insight into their own habitual ways of learning.[9,11]

Studies of learning to learn have been conducted with a range of adult groups and in a range of settings such as adult basic education, the workplace and religious communities. Yet, of the four areas of adult learning research discussed, learning how to learn has been the least successful in capturing the imagination of the adult educational world and in prompting a dynamic program of follow-up research. This may be because, as several writers have noted, in systems of lifelong education the function of helping people learn how to learn is often claimed as being more appropriate to schools than to adult education. Many books on learning to learn restrict themselves to the applicability of this concept to elementary or secondary school learning.[9]

CONCLUSION

Continuing Dental education requires dental professionals to keep upgrading and updating themselves through learning and relearning. The adult learning that too at a later stage of life may pose a challenge in itself. If dental professionals are self-aware about how to learn and the providers aware of the nuances of andragogy the final outcome maybe an exceptional one. Both the learner and facilitator need to understand various methods and theories which may help in achieving what is intended in any professional developmental course.

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