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**(Professional paper)**

## **THE CHALLENGES IN IMPLEMENTING THE ICCEE INSTRUCTIONAL DESIGN MODEL FOR ONLINE LEARNING**

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**Abstract:** The contemporary learning process continually searches for innovative models and approaches that in concrete conditions will lead to best results, measured through the learners' achievements. The latest tendencies stress the importance of online learning, not just like an alternative strategy, but like an infallible segment of modern education. E-learning, supported by informatics technology, promotes new approaches in the acquiring of knowledge, skills and habits and also, development of the capabilities.

Designing an effective online learning model means to create positive learning environment, with clearly defined learning objectives, where the learners are motivated to learn and to enhance own intellectual capacities. The ICCEE instructional design model for online learning, by its specific approach in teaching-learning process organization and implementation, presents well-structured ID model that generates excellent results.

**Key words:** Instructional design, online teaching-learning models, ICCEE model.

### **PLANNING AND CREATING AN EFFECTIVE ONLINE MODEL**

The intention to create an efficient online course to completely achieve the learning objectives, challenges the instructional designers to continually search for new approaches in planning, creating and designing the e-learning models. Developing pedagogically effective instructional design models that leave lasting results is an imperative to be reached. Following the increasing growth of IT and the appearance of new learning concepts in pedagogy, instructional designers tend to implement them in order to create engaging online learning environment. The permanent process of online learning development and accomplishment is followed by many attempts to find out a powerful model of e-learning that will lead up the learners to the best outcomes.

In this sense, many instructional design models for online learning have been constructed. Some of them are, in fact, adopted traditional instructional design models that help instructional designers to provide appropriate substructure for online course design. The ADDIE model and The Dick and Carey systematic approach are the most frequently used traditional designing models into online learning. Also, there are few instructional design models dedicated exactly to online learning. These models intend to ensure motivational learning environment, clear objectives, applicable learning contents, permanent feedback and self-evaluation, constructive instructors and engaged and satisfied learners. Well-designed instructional models will help learners to facilitate the development and the delivery of online learning environments.

The main purpose when creating the online instructional design learning model is to be established on the basis of pedagogical, teaching and learning theories, especially the ones that are learner-centered, discovery-based and emotionally-driven. This offers a solid theoretical base and procures positive results in learning. The role of instructional designer is to create convinced instructional environment, where the acquisition of knowledge and skills will be more effective and appealing. In fact, the designer plans, structures, organizes and guides the process. He leads the learners through the process of self-progress making them able to take self-control on their learning. As an instructor and constructive assistant, the designer motivates and supports learners promoting active and meaningful learning. The learners tend to be focused on the e-learning content through the clearly established objectives. Using own IT skills, they actively participate into the process, learn, explore and conclude. The interactive collaboration with the designer (or teacher), with other learners and with the course content makes them stay engaged during the course, fastens their interests, stimulates their curiosity. The permanent feedback additionally enhances their activities in a purpose to achieve successful learning.

The strong need for pedagogically effective instructional design online model stresses the few basic principles that should be implemented in online course designing. They contribute in creating an engaging learning experience for the students. Following them, the designer might create the learning programs that highly interest, motivate and engage learners.

The first principle is to set precisely defined *clear learning objectives*. Setting clear objectives is something that has to be done at the beginning of each instructional design course development. It will help the designer or course instructor to determine the frameworks for course designing and to create strong course structure. Also, clear objectives will help learners to realize what are they expected to know at the end of the course program. Understanding the benefits of their engagement, they will see how their learning will contribute to improve their skills.

The online learning course should be *well organized*. It means that the course content needs to be designated in a core structure focusing the learning on the key points. Depending on previously defined objectives, organized learning content distributes a logical flow of new information to boost knowledge retention.

E-learning becomes easier when the learning content is distributed as *short learning modules*. It is not difficult at all to connect learners with small "portions" of knowledge, that can be acquired quite simply and effortlessly. The endless stories or videos and overloaded presentations disengage learners, making them not to devote enough patience to the learning.

The next principle addresses the importance of incorporating *interactivity* into course designing. In order to make the learners interested in what they are learning and focused on their personal learning progress, there should be developed many interactive e-learning strategies,

such as an interactive virtual classroom environment. The interaction enhances learners' motivation and engagement into learning process.

The efficient *visual appealing* always functions like a highly stimulating tool to keep learners sustainably engaged during the learning process. The aesthetically appealing content seems to be interesting and attractive for learners, especially when it is enriched with animations, quality videos, avatars, virtual environment.

The learners' attention and motivation to constructively participate in the online course are related to the concept of learners' *curiosity*. To trigger students' curiosity means to increase their interest for learning. Due to the e-learning, students' curiosity might be enhanced by provocative and open-ended questions, conflict and dilemma exercises, challenging scenarios, games and quizzes etc.

Another principle that should be taken seriously when instructionally designing an online learning program is *exploring*. Learning by exploring is the most meaningful learning. In fact, exploring is a challenging way of learning that keeps learners active during the whole learning process. Online courses are inspiring environments for learning by exploration. The learners should be allowed to freely navigate through the learning program, so they can scan the necessary information themselves.

Giving *permanent feedback* helps learners to check their achievements immediately, they can correct the weaknesses in the learning, so can control their own learning progress. The feedback is an excellent motivational tool and inspiration for better results.

The process of instructional design online model creating must take in advance all these principles in order to produce an effective learning environment. Such model successfully connects the learners and the learning content, making the knowledge and skills achievement simple, natural and effortless.

## **THE ICCEE INSTRUSTIONAL DESIGN MODEL FOR ONLINE LEARNING**

The instructional designers who create online learning models should respect already designated principles and integrate them into a comprehensive teaching-learning model. One of the most frequently used models for online course designing is The ICCEE model. Its design is contributed by five designing steps, which represent the five basic phases of the model. The main phases (Identification, Choosing, Creating, Engagement, Evaluation) are set in sequential order, but for the course purposes, they can be easily set into circular order. This characteristic makes The ICCEE model attractive and applicable in online course designing.

### **Identification**

This is an initial phase in course designing. Here, the instructional designer identifies few important elements as a primary basis for the next phases. At first, the instructional designer establishes the online course format, whether it will be partly or entirely online platform. The adoption of online format indicates the next sub-step: identification of the instructional design objectives. The identification of instructional objectives needs to determine a complexity of issues related to the final learning objectives, each course class objectives, the objectives associated to the designer's declaration for the amount of the quantity and the quality of earned

knowledge and skills, the mandated objectives of the institution that the online course will be offered to and also, here should be taken in to account learners' characteristics and capabilities, the age and the current knowledge and skills level as preliminary learning experience, then what the learners need and desire to know, what is their prior experience in technology use. The identification of instructional objectives always requires clear and precise definitions of what should be acquired during the course and what should be known when it ends. Tightly related to objective identification is the identification of learning context. The online learning is practically web-based learning. The role of the instructional designer is to provide appropriate learning environment where the learners will be comfortable and safe, will interact to the instructor or teacher, to the learning content and to the other learners. Enhancing the mutual collaboration the designer will enhance learners' engagement and active participation into the course. In the identification phase the instructional designer identifies the pedagogical teaching-learning strategies. Here he decides which theoretical base (cognitivism, constructivism, behaviorism) will use as a framework for course designing.

### **Choosing**

The second phase in designing effective e-learning course is choosing. In this phase the designer is directed to plan and choose some important elements, essential to continue the online course creating. He starts with choosing how to organize the content layout. Choosing the content layout (linear or nonlinear) means that the designer decides how the learning content and material will be organized. Well-organized layout, that leaves good impression, is, maybe, the most powerful attracting tool to gain learners' attention. The clarity of the layout format facilitates the navigation through the course content, so facilitates the learning process. When online content layout organization is settled, the designer is dedicated to choose technology tools as the means of internal communication. The technological tools simplify the access, alleviate interaction, fasten discussion and promote dynamic learning. They prevent appealing the feelings of isolation, alienation, frustration and anxiety, too. It's always better to find simple, but efficient technology, easy to use than complicated technologies that might confuse learners and "get them lost". Choosing the course resources like a basis of relevant information is next stage in choosing phase. The designer selects appropriate resources to support learning process. The resources should offer basis of information, supported by the curriculum issues.

### **Creating**

In the creating phase, the instructional designers develop the main course strategy. At first, they create or trace the course path which will lead learners from initial to advanced knowledge and skills. Creating course flow indicates to settle down the structure of content presentation: whether it follows linear, nonlinear or hierarchical order. To design the intuitive course track the instructional designers usually collaborate with institutionally designed designers in order to provide a "product" that will satisfy technological, instructional and educational issues. Into the course path the designers integrate the instructional methods, educative materials for content presentation, assignment and assessment tools, supporting learning materials and interactive communication methods. In this phase it is important to install applicative content following the logical plan of presenting the new information. The multimedia, audio, video and graphics will accelerate and intensify this process. Building the

assignment and assessment materials in this phase transparently helps to fully avoid partiality and prejudices and ensures the quality and originality of the process. The interactive communication methods establishment indicates the usage of social media and social network to enhance communication and make it dynamic and collaborative.

### **Engagement**

The main tendency: how to prevent learners' dropping out of online classes and how to make them active participants is elaborated in this instructional design phase. It is the fact that the learners don't manifest the willingness to participate in online courses very often. Their displeasure on e-learning usually addresses technological problems, feeling of isolation, boringness, the lack of motivation. That's why, the main purpose of this instructional phase is to overcome the disadvantages and ensure positive, motivational and engaging learning environment. There are three styles of online students' engagement: academic, social and emotional. The academically engaged students, gain prompt feedback for their performance. The permanent feedback as highly motivated tool helps learners to stay informed about the personal achievements reached during the assignment and problem solving process. The learner is socially engaged when he is interactively connected to other learners, so he can feel the benefits of mutual collaboration. The creation of comfortable learning community that stimulates learners' curiosity, motivation and positive behavior for online learning includes group discussions, multimedia discussions, social network meetings, forums etc. It seems that, the most effective way to motivate and engage online learners, is to touch their emotions. Emotionally engaged learners feel more connected, which enhances their self-confidence in learning. The positive support like audio or video stimulus will help learners to get successfully engaged into online learning process.

### **Evaluation**

Evaluation is the last phase in The ICCEE instructional design model. Every effort in reaching the learning objectives must be evaluated. The online instructor assesses many aspects of learners' achievements: tests, quizzes, assignments, presentations, text works, communicational posts. The evaluation might be carried out at the end of each class and at the end of the online course. The effectiveness of online instructor activities should be also evaluated. It could be tested by checking the learners' opinion using the techniques of questionnaire, interview, survey, checklists etc. The evaluation, formative and summative, finishes the instructional designing online process giving beneficial directions for designing model improvement.

The ICCEE model brings positive vibrations in the field of instructional design online model development. It incorporates the traditional instructional design models and currently existing ID models best considerations into innovative, well-designed and effective online learning model. Its structure can be purposely transformed from linear to circular, so it is easily applicable to various online courses. The five basic phases and the sub-phases meet the main and the specific needs of online teaching and learning, allowing the instructional designers to go back to previous phases whenever it is necessary. Academically based on pedagogical learning theories, the model respects the learners' characteristics, needs and abilities and provides comfortable learning environment that continually expands students' knowledge base.

## CONCLUSION

The instructional designers are continually trying to find the best approaches in planning, creating and designing the e-learning models. The effective online learning model must be established on the pedagogical substructure of teaching and learning theories. It should identify learners' current knowledge and skills level and take in advance learners' needs and desires. When creating a successful online model the instructional designers provide efficient guidance through comfortable learning environment that facilitates the knowledge and skills acquisition. The ICCEE instructional model is focused on designing e-learning strategy that promotes active teaching and learning and leads up to optimal outcomes.

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