

INDIVIDUALISTIC INSTRUCTIONAL DESIGN

Mehmet Can Sahin
Anadolu University, Turkey
mcsahin@anadolu.edu.tr

ABSTRACT

This study proposes a new approach to the Instructional Design field. By the constructivism, education systems are moving from a massive structure to the more learner centered and more individualist structure. So far, ID field has adopted and digested the individualism notion partly. This paper proposes an individualistic approach to the Instructional Design field by putting learner in to the center of the design process. In the literature, there are a lot of instructional design criteria, theories and models for groups. But focusing the instructional design process on individual is a new approach. In this paper, principles of the Individualistic Instructional Design will be explained and its theoretical bases will be discussed

Keywords: Instructional Design, Postmodern Instructional Design, Constructivism

INTRODUCTION

Early Perspectives on Instructional Design

In order to clarify the Individualistic Instructional Design (IID) concept, first, it is better to review some Instructional Design definitions.

The field of instructional design and technology encompasses the analysis of learning and performance problems, and the design, development, implementation, evaluation and management of instructional and non-instructional processes and resources intended to improve learning and performance in a variety of settings, particularly educational institutions and the workplace (Reiser, 2001).

Smith and Ragan (2005) describe instructional design as; “a systematic and reflective process of translating principles of learning and instruction into plans for instructional materials and activities. An instructional designer is somewhat like an engineer”.

“Instructional design can be seen in terms of either macro-design procedures which provide overall direction to a design project (typically using instructional systems design principles) or micro-design that involves the design of lessons and Instructional strategies which constitute those lessons” (Richey ,2000)

Traditionally, ID theories are seen as prescriptive in the sense that they provide recipes or heuristics for doing designs, and they also specify how end-product instruction should look. Conceptually, ID theories are much closer to engineering than to science. An ID theory builds a collection of similar IF-THEN rules; designers are then supposed to apply these rules to their various situations (Wilson, 1997a)

It can be easily seen that Instructional Design process take into account the learners as groups such as classes, groups or levels etc. through the literature. So far, massive approach is used in every part of the society and of course in education. Historical background of massive approach to instructional design is related to military, plants production line and profit maximization motives. These approaches behaves the students as mass or goods (input), schools as plants, learning is production and truncated students are products. In real life, it is not so simple.

Neither macro nor micro design implies the individual here, rather than Instructional designers indicate groups of learners together in any size. But traditional ID approach never has a plan for just one person individually in the design process. Because the system works top-down manner, as theorists who created the system, designers also looked learners as groups. Moreover, as seen in the definitions, If not all most of the Instructional Designers assumed the instruction in the classroom to the group of learners. They tried to make the instruction be effective and efficient because of cost effectiveness purposes.

Based on the economical motives and some management purposes people are treated as classes, groups or more broad crowds through the history. If not all, most of the instructional models, strategies and methods are inspired either from production line models of engineers or management models of managers.

Education may be partially about management but learning is totally different from production or management. Learning cannot be resolved merely with input-process-output models. It has its own exclusive, complicated and dynamic structure.

Instructional models -inspired from production or management models- try to find massive solutions for educational problems. This massive approach leads overgeneralization about education and learning. Therefore, instructional models identify the learners as a group of people with some common attributes which they have. In fact, any group with some common attributes would never be as common as it is intended. When an instructional design model addresses groups of people, it generally misses great fraction of people because of mismatching of chosen instructional method or material that does not successfully fit to all of the individuals' unique brains. Every learner has unique characteristics and every learner

composed of unique ratio of combination of some cognitive attributions. Besides, people never learn as a group, on the contrary they learn individually. Consequently, every learner should be treated or educated individually.

Postmodernism and Paradigm Shift in Instructional Design

“The world today *is* postmodern. Educational technology must also be (Hlynka,1996). 'Postmodernism', as the term implies, is largely a response to modernity. Whereas modernity trusted science to lead us down the road of progress, postmodernism questioned whether science alone could really get us there. Whereas modernity happily created inventions and technologies to improve our lives, postmodernism took a second look and wondered whether our lives were really better for all the gadgets and toys (Wilson, 1997b). In other words, postmodernism is the criticism of modernism. Especially postmodernism is against one-fits-for all gigantic approaches and panacea systems.

Postmodern thinking is “A critique or distrust of Big Stories meant to explain everything. This includes grand theories of science, and myths in our religions, nations, cultures, and professions that serve to explain why things are the way they are” (Wilson, 1997b).

However, postmodernism has changed the world and mainstream effect of postmodernism is in the education field is Constructivism.

Postmodern Perspectives on ID with Constructivism

As a reflection of postmodernism in education, constructivism has very important differences from old paradigm especially point of learner. Concept of the Individual in Postmodern frame is different from the traditional one. Traditional education “assumes an average student, and provides that student with a predetermined list of objectives (Owen, 2001). But, in constructivism, learner characteristics and choices are important in the learning and instruction processes. In other words, individual and subjectivity are key components of the new paradigm.

Finally, in ID field paradigm shifted with postmodernism. In order to understand these big changes in the field, it can be useful the focus on the old and new paradigms in ID. Therefore, the old and new paradigms in ID are summarized below according to Beshears (2007);

Old Paradigm in ID and Characteristics of the Objective-Rational Instructional Design (ID) Model

1. The Process is Sequential and Linear
2. Planning is Top Down and "Systematic"
3. Objectives Guide Development Precise behavioral objectives are essential
5. Careful Sequencing and the Teaching of subskills are Important Break complex tasks down into sub components and teach the sub components separately.
6. The Goal is Delivery of Preselected Knowledge Emphasis is on the delivery of "facts" and enhancement of skills selected by experts, which favors drill and practice, tutorial, and other direct instruction methods
- 7 Summative Evaluation is Critical Invest most assessment effort in the summative evaluation because it will prove whether the material works or not.
8. Objective Data are Critical The more data the better, and the more objective the data the better.

New paradigm in ID and Characteristics of the Constructivist-Interpretivist Instructional Design Model

1. The Instructional Design (ID) Process is Recursive, Non-linear, and sometimes Chaotic
2. Planning is Organic, Developmental, Reflective, and Collaborative
3. Objectives Emerge from Design and Development Work
4. General ID Experts Don't Exist; General ID specialists, who can work with subject matter experts from any discipline, are a myth. Citizen legislators are developers who know and understand the content or context of practice and who pick up the ID skills needed.
5. Instruction Emphasizes Learning in Meaningful Contexts (The goal is personal understanding within meaningful contexts)
6. Formative Evaluation is Critical
7. Subjective Data May Be the Most Valuable

Problems with Postmodernism in Theory and Practice

In truth, not all constructivists are postmodern in their orientation (Wilson, 1997b). There are some contradictions in ID field. It can be seen that, educational philosophy is becoming more constructivist and individualist in today's world. Especially by constructivism, ID is getting more concentrate and focused on small groups, individuals and learner characteristics progressively. But its working habits are adopted from old paradigm. For instance, for measurement and evaluation purposes, Instructional designers and teachers began to use portfolios for individuals, recently, but they still design for groups and they instruct to learners as groups. In other words, massive education is carried out but students are evaluated as individuals with individual portfolios. This is a contradiction with the main idea of the constructivism and its applications in Instructional Design area. The proper logic must be as "individual evaluation for individual instruction". Hence, in order to make accordance with theory and practice in Instructional Design field, Individualistic Instructional Design approach can be applied into the ID process. According to this aim an instructional design model is proposed here; Individualistic Instructional Design.

INDIVIDUALISTIC INSTRUCTIONAL DESIGN PRINCIPLES

Individualistic Instructional Design (IID) Principles are derived mostly from Postmodern Instructional Design approach. Therefore, it shows naturally postmodern and constructivist attributes. There is not any prescription or rules to follow in IID. Key principles derived from the literature of Individualistic Instructional Design are as follows;

1. ID is learning and learner centered.(Smith, Ragan, 2005. p356)
2. Instructional Design must be aimed at, aiding the process of learning rather than, the process of teaching (Gagne at al, 2005).
3. Design of Instruction must be directed by needs and shaped to fit the learning environment (Smith, Ragan, 2005. p356).
4. "Good design" somehow bridges the gap between theory and practice. The real world often seems to be worlds away from theoretical ID (Schindelka, 2000).
5. Include end users (both teacher and student) as part of the design team. (Seels, p.148)
6. Regardless how well instruction has been designed, appropriate implementation is essential to success. (Smith, Ragan, 2005. p356)
7. Implementation and design are ultimately inseparable. Some of the most valuable lessons learned about instructional design come from the experience gained in setting up and administering programs. Real-world implementation can be just as important as theory-guided design (Wilson,1995)
8. Be willing to break the rules - wise people will choose theories and models selectively, and not use them where they don't fit (Wilson, 1997b).
9. Place principles above procedures, and people above principles - even key principles should be continually tested against the real needs of your end users (Wilson, 1997b).
10. Include all interested parties in the design and development process - make sure all constituencies are represented, and that the design is truly participatory (Wilson, 1997b).

These are the fundamentals of the Individualistic Instructional Design approach. This approach can produce a fully learner centered model in accordance with the principles of the postmodernism and constructivism.

CONCLUSION

First, Individualistic Instructional Design (IID) approach is an innovation and may be a contribution to field. By focusing on the individual, IID approach may fill some application gaps in the Postmodern or Constructivist ID area.

Second, mainly IID approach proposes indirectly to the policy makers to increase the ratio of teacher number per student.

Some may think that Individualistic Instructional Design approach will increase the burden of teacher in the classroom. It may require small amount of students to be successful. But in order to increase the quality of education, such costs must be taken in to account.

Individualistic Instructional Design model has, of course, some pros and cons. And also it is not yet tested empirically. So, it is a promising research area that worth to study for those who are interested in postmodern Instructional design and

constructivism.

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