

AN INSTRUCTIONAL WRITING DESIGN IN TEFL

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Abstract

This research discusses the elements of instructional design in model writing. In this model present guidelines for writing instructional design and technical elements in models writing. Instructional design models provide for a systematic approach of implementing the instructional design process for a specific educational initiative. The instrument is observation and test. The instructional models are followed by process of selected models of the Dick and Carey systems approach and description for each model will serve as the foundation and supporting points required for comparing and contrasting process of the models. The result is find some element that is Conduct instructional analysis, Analyze learners and contexts, Write performance objectives, Develop assessment instruments, Develop instructional strategies.

Key Word: *Dick and Carey Model, Design models for Instructional Design Writing*

Introduction

Instructional design (ID) models can provide a systematic approach of implementing the instructional design process for specific educational initiatives (Morrison, Ross, & Kemp, 2004). Gustafson & Branch (1997) states that there is a wide variety of instructional design models describing the ID process created for different situations and settings (as cited in Gustafson & Branch, 2002b; Ryder, 2006). The purpose of the instructional design models offer both educational an training organizations design steps, management guidelines and teamwork collaboration options with designers, technicians and clients (Gustafson & Branch, 2002a). Specifically by definition, a model can be defined as “a way of doing something; an explicit representation of a reality. It is an example or pattern that prescribes relationships in a normative sense” (Branch & Gustafson, 1998, p. 4)

A model can also function as a visual and communication tool to help conceptualize complex schematics or instructional design process along with how the various stages or elements relate to each other (Gustafson & Branch, 2002a).

The application and value of a model is dependant on the instructional situation, problem or task (Siemens, 2002; Ryder, 2006).

The Dick and Carey systems approach model is one of the most influential ID system oriented models. Like most models, the Dick and Carey system bears the conventional core elements of analysis, design, development, implementation, and evaluation, also known as the ADDIE model. The Dick and Carey model is more complex where the approach based from the five core elements is broken down to additional or variety of steps with different terminology (Brant, 2001; Gustafson & Branch, 2002a). Most importantly, Brant (2001) states that, designers must end up with a product containing accomplished objectives and measurable outcomes. This process used in many businesses, government including military environments as well as performance technology and computer aided instructions reflects the fundamental design process (Gustafson & Branch).

Dick & Carey Systems Approach Model, The components for the model stated by Dick, Carey and Carey (2001) consist of nine procedural steps or linear sequences. Each of these components is dependant upon one another indicated by the direction of solid arrow lines. Dotted lines representing formative evaluations points to instructional revisions that originates from reexamination of the instructional analysis' validity and entry behaviors of learners. The sequential steps for the design are as follows: (a) assess needs to help identify learning goals, (b) conduct instructional analysis and analyze learners and contexts, (c) write performance objectives, (d) develop assessment instruments (e) develop instructional strategies (f) develop and select instructional material (g) design and conduct formative evaluations, (h) revise instruction based from formative evaluations, (i) design and conduct summative evaluation (not a mandatory step) (Dick, Carey & Carey, 2001; Gustafson & Branch, 2002).

Conduct instructional analysis. Before proceeding with instruction implementation, designers must conduct the process of instructional analysis to find out prior learner's skills, knowledge and attitudes. They must also carefully examine and create step-by step task description to help learners achieve instructional goals (Dick et al, 2001).

Analyze learners and contexts. This step aligned with the process of instructional analysis (see figure 5), involves the collection of information on learners' entry behavior, characteristics, prior knowledge, skills and attitude, academic motivation and learning preferences. An instructional design can then proceed to the selection of an environment that can support learning. The performance context for learning application and skills is important for the building of instructional strategies (Dick, Carey & Carey, 2001).

Write performance objectives. Next, objectives in the form of specific statements are important for informing what learners will do during instruction and upon completing of an instructional module. Objectives also function as measuring tools that connect to the assessment step (Gustafson & Branch, 2002). Dick, Carey & Carey (2001) consider this as the foundational step to the next stage for testing.

Develop assessment instruments. The purpose of assessments is to measure the performance objectives. Knowing each objective's behavior, conditions and criteria, offers the designer guidance on how to select and determine an assessment instrument that can measure performance objectives. Both objectives and assessments again are dependant on each other. (Dick, Carey & Carey, 2001).

Develop instructional strategies. Four major components consisting of pre-instructional activities, content presentation, learner participation (including feedback) and follow-through activities make up the instructional strategy component. Instructional strategies must focus on memory and transfer skills. The instructional designer while considering learning theories, should also decide the medium for instructional delivery including lesson interactivity (Dick, Carey & Carey, 2001).

Learners are required to engage actively with the instructional material. By the end of this phase, the designer should have draft copies of materials, assessments and instructor manual. The designer can continue revising and improving lesson materials during the evaluation process (Dick, Carey & Carey, 2001).

The above descriptions clearly indicate the linear form for the Dick, Carey and Carey model. Each process cannot function as a stand-alone. Dick, Carey and Carey (2001), claims to say that the systematic approach of the model is an effective and successful approach because of its focus on learners' objectives and final achievement prior to the planning and implementation stage. Next, there is a careful linkage between instructional strategy (targeted skills and knowledge) and desired learning outcomes (appropriate conditions must be supplied by instruction). The final and most important reason is the replicable and pragmatic design process where the product is usable for many learners and different occasions; time and effort revising the design product during the evaluation and revision process is recommended.

The team involved in the above design process often times consist of the instructional designer and team of specialist comprised of the manager, content specialist, media producer and evaluator. The team draws on each other's skills to produce the product. Instructor with specialized skills can also be a stand-alone team (Dick, Carey & Carey, 2001).

In a review of the writing instruction literature, Gleason and Isaacson (2001) also identified many of the same critical components of effective instruction for students with and without writing problems. They noted that explicit modeling is a core element, because simply being exposed to the writing process is insufficient for most students (e.g., Dowell, Storey, & Gleason, 1994; Gambrell & Chasen, 1991). Demonstration using overt mental dialogue (i.e., think aloud) is a particularly effective method because it permits novice writers to observe the tactics and motives of more experienced authors and to appropriate more sophisticated thinking.

Establishing Routines a major step in implementing strong writing instruction is establishing routines for (a) daily writing instruction, (b) covering the whole writing curriculum, and (c) examining the valued qualities of good writing. A typical writing lesson will have at least four parts: Mini-lesson (15 minutes): A teacher-directed lesson on writing skills, composition strategies, and craft elements (e.g., writing quality traits, character development, dialogue, leads

for exposition, literary devices), which are demonstrated and practiced through direct modeling using the teacher's writing or others' work (e.g., shared writing, literature, student papers). Initially, mini-lessons will need to focus on establishing routines and expectations.

Students indicate where they are in the writing process (i.e., planning, drafting, revising, editing, publishing). The teacher asks students to identify how they plan to use what was taught during the mini-lesson in their writing activities for that day; Independent Writing and Conferencing (30 minutes): Students are expected to be writing or revising/editing, consulting with a peer, and/or conferencing with the teacher during this time; and Sharing (10 minutes): Students identify how they used what was taught during the mini- lesson in their own writing and what challenges arose.

The teacher may discuss impressions gleaned during student conferencing. The students share their writing (it does not have to be a complete paper and may, in fact, only be initial ideas for writing) with the group or a partner, while others provide praise and constructive feedback. Students discuss next steps in the writing assignment. Several tools can help the teacher maintain the integrity of this lesson structure.

One, a writing notebook can be used for: (a) recording "seed" ideas for writing, such as memories, wishes, observations, quotations, questions, illustrations, and artifacts (e.g., a letter or recipe); (b) performing planning activities; (c) drafting writing pieces; and (d) logging writing activities and Give students time to explore potential ideas for writing through reflection, discussion, and research (writing notebooks are helpful for this); Identify and teach key vocabulary/phrases and leads that will help students create texts that "sound" like those written by accomplished authors; Finally, students need to develop an understanding of the valued aspects or traits of good writing and the capacity to incorporate these traits into their writing. Developing a routine for communicating about specific writing qualities is essential to the success of a writing program. A number of resources are available to help teachers do this (e.g., Culham, 2003; Spandel, 2001).

The most commonly taught writing traits are ideas, organization, voice, word choice, sentence fluency, and conventions. These closely resemble the dimensions on which many state-mandated accountability measures base their writing achievement assessment (i.e., content, organization, style, and conventions). To help students develop a sense of what constitutes a strong example of a particular trait, teachers can have students listen to or read excerpts from a touchstone text (which could be a student writing sample) to (a) identify the primary trait evident in the excerpts and (b) identify concrete evidence for characterizing a piece of writing as strong on that particular trait.

Teachers also might ask students to develop their own definition for the trait and/or the descriptors for different scores on a trait rubric by examining superb, average, and weak examples. It is better to limit the number of traits that receive instructional focus at any given time to one or two; the decision regarding which traits are targeted should be guided by the genre and form of writing being taught as well as students' needs.

Teaching Writing Mechanics and Conventions Elementary school teachers must explicitly teach spelling and handwriting to their students (this is not to say that secondary educators do not address these skills, but they do so to a lesser extent). For students with disabilities and for other struggling writers, more extensive practice and review of spelling, vocabulary, and letter forms and the thoughtful application of Whether teaching spelling or handwriting, certain curriculum considerations should be addressed, including the following: Sequencing skills or grouping elements (words or letters) in developmentally and instructionally appropriate ways; Providing students opportunities to generalize spelling and handwriting skills to text composition; Using activities that promote independence; Establishing weekly routines (e.g., pretest/posttest, distributed and cumulative daily practice); Providing spelling or handwriting instruction for 15 minutes per day; Introducing the elements at the beginning of the instructional cycle; Modeling how to spell the words or write the letters correctly; Highlighting patterns and pointing out distinctive attributes (or having students “discover”); and Giving students ample opportunity to practice with immediate corrective

feedback.

Students should spend time practicing the elements being taught and self-evaluating their performance, with the teacher frequently checking their work and correcting errors as necessary. Depending on how well the students do, the teacher may teach additional skills lessons. The students also might work with each other to study/practice and evaluate each other's work. Finally, at the end of a cycle of instruction, the teacher should assess how well the students learned the elements.

Models of Instructional Design Writing

The different approaches to instructional design are nowhere more obvious than in the ever-growing list of models. Gropper (1977) has provided an analysis of instructional design models used in higher education environments. Extending Gropper's list, Andrews and Goodson (1980) analysed 40 models and concluded that instructional design models can serve the following purposes: Improving learning and instruction by following a systematic approach Improving management of instructional design and development procedures by monitoring and controlling the functions of the systematic approach Improving evaluation processes (including learner performance) Testing or building learning or instructional theory by means of theory-based design within a systematic instructional model Despite the vast number of different models recorded in the literature, there are some basic elements reflected in most of the various approaches.

These basic elements include the following actions: Determining the needs of the learners and examining the learning context and environment Determining the outcomes of the learning programme or course and formulating the learning objectives Developing appropriate and meaningful assessment criteria and procedures Establishing the most effective approach(es) to delivering the instruction Testing and evaluating the effectiveness of the instructional system (both the instruction itself and the performance of the learner) Implementing, adjusting and maintaining the instructional system We focus here on the models of Dick and Carey (1990) and of Smith and Ragan (1999).

The Dick and Carey model uses a systems approach in designing learning and instructional material. The model consists of various steps, starting with identifying the goals and analysing the needs of the potential learners. Thereafter performance or learning objectives are formulated. These objectives play a very important role in the rest of the process as the development of criterion-referenced test items, the instructional strategy and selecting appropriate delivery methods are based on these objectives. All these steps are integrated and continually revised.

The interrelationships and revisions are indicated with dotted lines in. In their model, Smith and Ragan focus on three main areas: *Analyzing* the learning context, the needs of the learners and the learning tasks or goals Formulating a *strategy* in which organizing, delivery and management aspects are addressed, which then serves as the basis for writing and producing the instructional materials *Evaluating* the materials once they are produced and, if necessary, revising them for future use All the steps in the model are also integrated and continually revised in order to make changes proactively. Arrows in the model indicate the integration and revision. Both models (and numerous others recorded in the literature), focus on the core elements of *analysis, design, development and evaluation*. These phases and processes

Analysis Instructional Design Writing

There is usually a great deal of uncertainty at the start of designing and developing learning programmes or instructional materials. The designer's job is to collect all relevant information and then to make sense of a variety of contradictions, inconsistencies and ambiguities. During this phase, sometimes referred to as front-end analysis, the designer will analyse information on, for example, the performance requirements of the job for which the training programme or instructional materials are aimed at.

The designer will also collect and analyse information on the context in which the learning will take place, the learners' characteristics, the learning outcomes and how learners will be assessed on newly acquired knowledge and

competencies. To collect and analyse all relevant information, designers will consult and interview a wide range of stakeholders such as members from the industry, subject matter experts, and learners who have completed a training course and even potential learners. As stated before, every design project has its unique challenges, and these will guide designers in collecting and analysing the information that is relevant to that situation. One cannot design a solution to a learning and training problem until the problem is correctly identified; that is, a designer needs to be clear on the training needs in order to design a learning or training programme that would improve current practice.

Information from the analysis phase provides the basis for the design phase. This phase is strongly supported by research findings from the fields of psychology, communications, education and technology. In other words, designers need a sound knowledge of learning and instructional theory in order to translate the results from the analysis phase into specifications for the design. These specifications are recorded in documents, sometimes referred to as a blueprint, and contains solutions to questions such as: What is the purpose of the instructional programme and materials?

What are the learning outcomes and objectives? How will we assess the learners' newly acquired knowledge and competencies? What content matter should be taught? What teaching and learning strategies can we implement to achieve the set outcomes and objectives? What delivery systems will best suit the training needs and characteristics of the target audience? What strategy will we implement to evaluate the effect and effectiveness of the instructional programme and materials?

It is important to bear in mind that the purpose of designing instructional programmes and materials is to improve competencies and performance in real-life settings. Therefore, the design specifications (instructional strategy and evaluation strategy, or blueprint) should include instructional methods, strategies and media that would be most effective for the types of learning involved and the characteristics of the target audience. During this phase designers also need to address practical issues such as availability of resources, staffing needs for the

development of materials and programmes and cost- effectiveness. This planning document, or blueprint, forms the foundation for the subsequent development of the materials. As new information becomes available or certain conditions of the learning context change, the details of the plan may be adjusted to ensure that the specifications still match the requirement.

Development and implementation Instructional Design writing

The development phase entails the process of authoring, reviewing, producing and validating the learning materials. For some projects the work of the designer ends once the planning phase has been completed. However, most designers are usually involved in all the phases. It is true that the development and production process often takes longer than the design activities. The danger is that, as time passes, the original intent may be misinterpreted. It therefore remains the designer's responsibility to ensure that the planned specifications and objectives are consistently met.

As new or more information becomes available, it is quite possible that the original specifications should be adjusted to accommodate new requirements as these adjustments are usually improvements. However, production changes as well as aesthetic changes must be consistent with the instructional intent to ensure that quality will be maintained throughout the ISD stages.

Depending on the design specifications, designers may work in project teams with authors, subject matter experts, editors, language practitioners, graphic designers, artists, film/video or other media producers, book designers and desktop publishers. It would thus be very appropriate to link instructional design procedures with project management principles. Not only does one need to manage the activities of the various role-players and specialists, but also many different kinds of outputs, for example, concept proposals, analysis reports, instructional design specifications, schedules and formative testing data.

During the initial stages of implementation, users of the instructional material may experience some problems. Designers should therefore also develop guiding materials for administrators and facilitators of such new courses. Also,

during the early stages of implementing new instructional materials, users may need a great deal of support to gain Nskills in how the changed version of a learning programme works. However, the need for support decreases as users become familiar with the improved way of doing things.

Evaluation Instructional Design Writing

Once the final product has been produced and learners use the learning materials, the evaluation at this stage is referred to as summative. Formative evaluation is intended to identify and correct shortcomings in the learning materials in the development phase. Summative evaluation, on the other hand, is intended to assist clients to establish the impact of the new materials and how well the instructional problem was solved, as well as the value of the solution to the institution or organisation.

Summative evaluation should ideally be carried out after the new learning materials have been implemented and users are familiar in using the materials in an effective manner. This process can be very complex, costly and time-consuming depending on the nature of the project. Often, independent evaluators are called upon to conduct the summative evaluation to ensure objectivity, and not the designer who was closely involved in all the design and development stages of the final product.

Conclusion

Often, the instructional systems design process may be portrayed as linear. In practice, however, it is frequently iterative, moving backwards and forwards between the activities as the project develops. While ISD is intended to provide the external conditions for learning, the “learning” still remains the responsibility of the learner. In other words, the designer can select and arrange certain external conditions to assist in the internal learning process. The designer’s function, therefore, is to plan the learning experiences that results in changing current behaviour, performance and cognition to some new, as yet unlearned, behavior and mental processing in order to achieve set learning outcomes. Furthermore, one also needs to bear in mind that not all learning is the result of deliberate

instruction. Social behaviour and emotional learning, for example, are learned from sources such as parents, other adults, peers and the media. Experiences from daily life situations constantly shape and mold our attitudes and behaviour.

References

- Andrews, D. and L. Goodson. "A Comparative Analysis of Models of Instructional Design." *Journal of Instructional Development*, 3, No. 4 (1980) 2-16.
- Atkinson, R, C. McBeath, and D. Meacham. *Quality in Distance Education*. Bathurst: Australian and South Pacific External Studies Association, 1991.
- Ausubel D P (1968) *Educational Psychology: a Cognitive View* Holt and Rinehart, New York.
- Baath J (1980) *Postal Two-way Communication in Correspondence Education* Gleerup, Lund.
- Bloom B S, Englehart M D, Furst E J, Hill W H and Krathwohl D R (1956) *Taxonomy of Educational Objectives: the Classification of Educational Goals: Handbook I, The Cognitive Domain* Longman, New York.
- Braden, R.A. "The Case for Linear Instructional Design and Development: A Commentary on Models, Challenges and Myths." *Educational Technology*
- Dick, W. and W. Carey. *Systematic Design of Instruction*. 3rd ed. Glenview, IL: Harper Collins, 1990.
- Dijkstra, S., N. Seel, F. Schott, and R.D. Tennyson. *Instructional Design; International Perspectives, Vol. 2: Solving Instructional Design Problems*. New Jersey:
- Gagne R M, Briggs L J and Wager W (1992) *Principles of Instructional Design* (5th edn) Holt, Rinehart and Winston, New York.
- Heinich R, Molenda M and Russell J D (1989) *Instructional Media and the New Technologies of Instruction* (3rd edn) Macmillan, New York.
- Heinich R, Molenda M, Russell J D and Smaldino S E (1996) *Instructional Media and the New Technologies for Learning* (5th edn) Prentice Hall, Englewood Cliffs, NJ.
- Hooper S and Hannafin M J (1986) Variable affecting the legibility of computer generated text *Journal of Instructional Development* 9 (4) 22–28.
- Jonassen D *et al.* (1995) Constructivism and computer-mediated communication

in distance education *The American Journal of Distance Education* 9 (2) 7–25.

Lawrence Erlbaum Associates, 1997. Evans, T. and D. Murphy. *Research in Distance Education*. Geelong: Deakin University, 1993.

Moore M G (1991) Distance education theory *The American Journal of Distance Education* 5 (3) 1–6.

Troia, G. A., & Maddox, M. E. (2004). Writing instruction in middle schools: Special and general education teachers share their views and voice their concerns. *Exceptionality*, 12, 19-37.

Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68, 202-248.

Valencia, S. W., & Au, K. H. (1997). Portfolios across educational contexts: Issues of evaluation, teacher development, and system validity. *Educational Assessment*, 4(1), 1-35.

Varble, M. E. (1990). Analysis of writing samples of students taught by teachers using whole language and traditional approaches. *Journal of Educational Research*, 83, 245-251.

Wolf, D. P. (1989). Portfolio assessment: Sampling student work. *Educational Leadership*, 46(7), 4-10.