Innovative Model Report

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IDD 650

This report will attempt to create an instructional design model that will fill an identified gap found within current instructional design models.

The identified gap is a lack of an evaluation of delivery.

The gap was found by comparing five well know instructional design models: ADDIE, SAM, ASSURE, ROPES, and the Kemp Model. Below is a breakdown of each respective model:

- **ADDIE** – stands for Analysis, Design, Development, Implementation, and Evaluation. Each step has an outcome that feeds the subsequent step. During analysis, the designer develops a clear understanding of the "gaps" between the desired outcomes or behaviors, and the audience's existing knowledge and skills. The design phase documents specific learning objectives, assessment instruments, exercises, and content. The actual creation of learning materials is completed in the development phase. During implementation, these materials are delivered or distributed to the student group. After delivery, the effectiveness of the training materials is evaluated. (Kruse, 2002, p 1) (see figure 1)

Figure 1 (Durbin, 2016)

- **SAM** – stands for Successive Approximation Model. An iterative process that is very effective and well suited to smaller projects. Produces something of a usable product after only a couple of quick iterations. (Allen and Site, 2012, p. 36) (see figure 2)

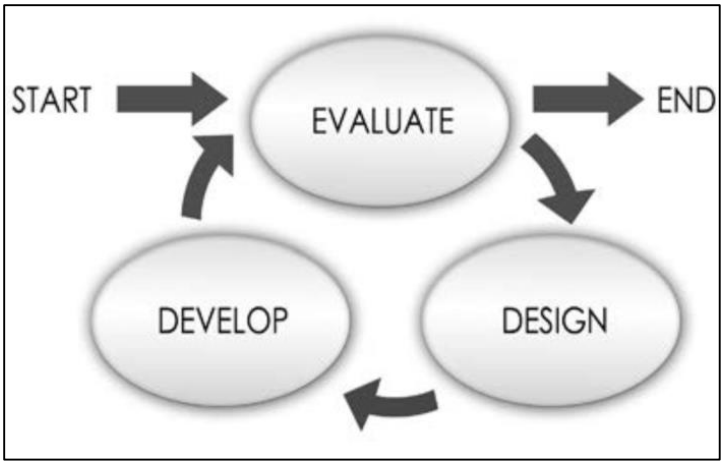

Figure 2 (Dailey, 2018)

- **ROPES** – The ROPES model is designed to have a facilitator sequentially teach a new topic or concept to learners. The content is delivered through a step by step process to help ensure learning will occur. (see figure 3)

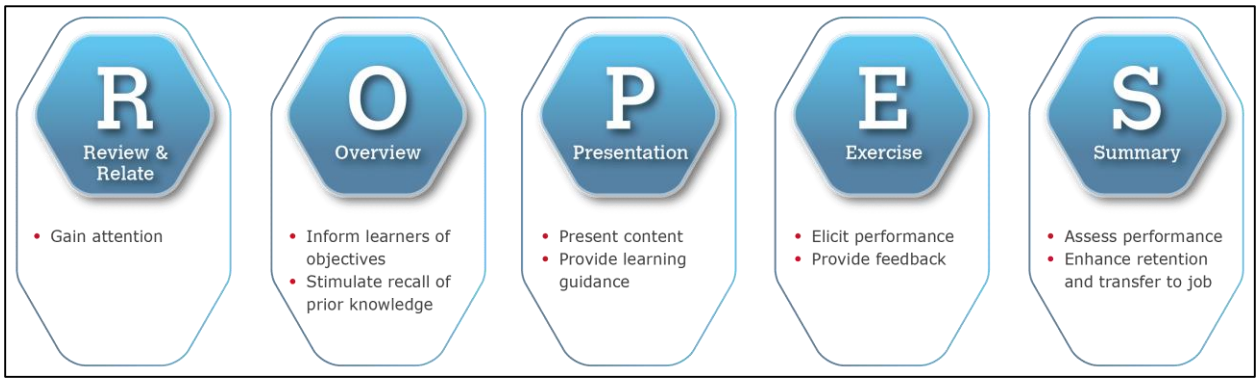

Figure 3 (mce.eu, 2017)

- **ASSURE** – "The ASSURE model is a six-step instructional system or guideline that is intended to help teachers utilize technology and media in the classroom. Its main perspective is on how to integrate media (any kind of media) into instruction in a method capable of producing the desired learning outcomes used in lesson plans to improve teaching and students' learning all while using technology. The ASSURE acronym stands for these important components:

A– Analyze Learners; S– State Objectives; S- Select Instructional Methods, Media, and Materials; U– Utilize Media and Materials; R– Require Learner Participation; E– Evaluate and Revise" (Heinich, 2002) (See figure 4)

Figure 4

- KEMP – The Kemp model approaches instruction and design from the perspective of the learner. "It focuses on improving the performance of the learners… (Nazlim, 2016, p. 1) "The overall needs, goals, priorities, and constraints of the learner are considered to determine the instructional solutions and is represented by a continuous cycle which includes planning, design, development and constant evaluation to ensure effective instruction" (Glasserman, 2018) (see figure 5)

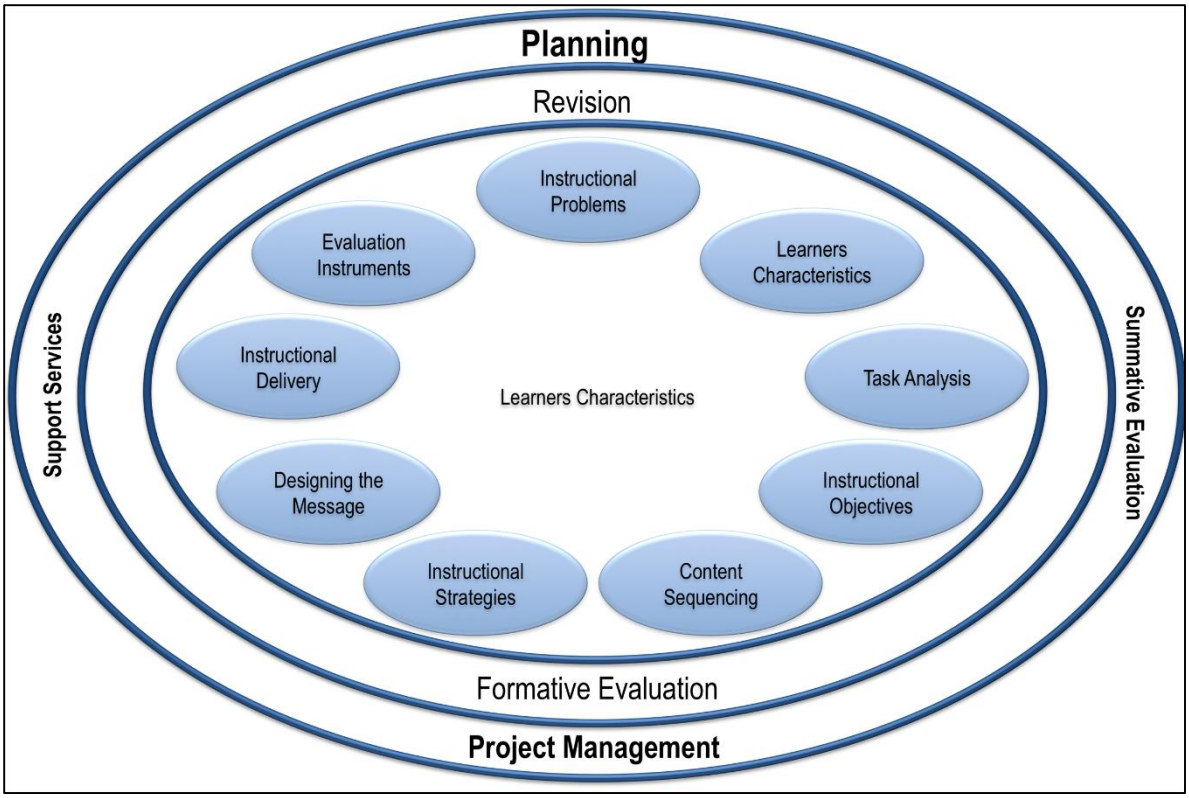
Planning
Revision
Instructional Problems
Evaluation Instruments
Learners Characteristics
Instructional Delivery
Learners Characteristics
Task Analysis
Designing the Message
Instructional Objectives
Instructional Strategies
Content Sequencing
Formative Evaluation
Project Management
Support Services
Summative Evaluation

Figure 5

The models were compared using the following rubric:

Criteria	Highly Effective	Effective	Developing	Ineffective
Ease of Use	4	3	2	1
	Model can be used by various designers and for various design projects. Requires a basic understanding of learning theories and principles	Model is easily used for various design projects and requires a knowledge of learning theories and principles	Model is not user friendly or easily executed. Prior exposure/experience with the design is necessary	Model is not user friendly or easily executed and requires extensive knowledge of learning theories and principles of a veteran designer
Collaboration/ Manageability	4	3	2	1
	Model has an extensive project management plan that outlines the tasks to be accomplished, resources that are needed, due dates, assigned aspects to various members and anticipated future needs. The model allows for regular follow-up activities to monitor progress and provide feedback to team members.	Model has clearly defined the tasks to be accomplished, assigned aspects to various members and anticipated future needs. The model allows for some follow-up activities to monitor progress.	Model has informally defined the tasks but not all team members understand them so not all members are able to make meaningful contributions. The follow-up is sporadic.	The model does not define the task and few members participate actively. There is no follow-up.
Revision/ Evaluation	4	3	2	1
	Allows for revision/evaluation of all components of the design throughout the entirety of the development process based on feedback from others	Revision/evaluation can occur at certain points during the design process	Revision/evaluation occurs at the end of the design process	Once design is finalized, altering it for any reason is not possible
Prototype	4	3	2	1
	Create multiple representations that allow you to evaluate specific features from multiple perspectives and develop multiple iterations	Create a single representation that allows one to evaluate specific features of a given idea and develop multiple iterations	Create a representation of an idea that can be evaluated by others	Create a representation of an idea that will not be evaluated by others

Criteria	Highly Effective	Effective	Developing	Ineffective
Resources	4	3	2	1
	Model is able to function within any given budget with appropriate use of time, money and personnel	Model can be utilized with minimal expenditures of time, money and personnel	Model can be utilized with moderate expenditure of time, money and personnel	Model cannot function within any given budget and requires significant expenditure of time, money and personnel
Learner-Centered	4	3	2	1
	Gives major attention to learner emotions, energy, activity, needs, and accomplishments. Allows for learner input at the beginning and during the design process.	Gives minor attention to learner emotions, energy, activity, needs, and accomplishments. Allows for some learner input at the beginning of during the design process	Attention is more focused on content delivery than on the learner experience. Allows for little learner input at the beginning and during the design process.	Focuses attention on content delivery only and project needs. Gives no attention to learner emotions, energy, activity, needs, and accomplishments. Does not allow for learner input at the beginning and during the design process
Instructional Objectives	4	3	2	1
	Model clearly states a measurable instructional objective before instructional design begins	Model states a measurable instructional objective before instructional design begins	Model states instructional objective before instructional design begins. The instructional purpose is not measurable	Model states instructional objective after instructional design phase begins. The instructional purpose is not measurable.
Instructional Delivery	4	3	2	1
	Model incorporates a clear, specific and detailed plan for instructional delivery within the design	Model provides at least 3 suggestions for instructional delivery within the design	Model provides minimal (less than 3) suggestions for instructional delivery within the design	Model does not incorporate a clear and detailed plan for instructional delivery within the design

Evaluation of Instructional Delivery	4	3	2	1
	Model includes a detailed plan, complete any needed evaluating materials, for evaluating the instructional delivery	Model includes a detailed plan for evaluating the instructional delivery	Model suggests the importance of evaluating the instructional delivery	Model does not address the evaluation instructional delivery

Table 1

All models fared well, and have their respective pros and cons. Below is a score comparison of the models:

Model	Score
ADDIE	26/36
SAM	29/36
ASSURE	24/36
ROPES	29/36
KEMP	31/36

Table 2

Based on the comparison of the models to the provided rubric, only two include a 'Highly Effective' Instructional Delivery Plan in the design (Kemp and ROPES). However, none of the models have a plan to evaluate the actual delivery of instruction. Stronge, Ward and Grant (2011) state that "Instructional delivery includes the myriad teacher responsibilities that provide the connection between the curriculum and the student" (p. 340). The importance of effective instructional delivery on the part of a teacher has been proven to influence student achievement and outcomes on learning, which further suggests the need for an evaluation from an instructional design perspective.

> Substantial research on the effectiveness of teaching methods indicates that the quality of teaching is often reflected by the achievements of learners. Quite remarkably, regular poor academic performance by the majority students is fundamentally linked to

> application of ineffective teaching methods by teachers to impact knowledge to learners (Ganyaupfu, 2013, p. 29).

Even though none of the compared models had an evaluation phase specifically for instructional delivery, the Kemp Model includes a step for confirmative evaluation. However, confirmative evaluation is used to determine the continuing competence of learners or the continuing effectiveness of instructional materials and to verify the continuous quality improvement of education and training programs (Dessinger and Moseley, 2015, p. excerpt). Even though this evaluation step goes beyond the formative and summative evaluation process of most models, it is not specifically designed to evaluate the delivery of content.

So, the proposed model will include components and concepts from several of the compared models, but is majorly based on the foundations of the Kemp Model. The Kemp model was chosen as a base because of how well it scored on the provided rubric and its inclination to be targeted for classroom instruction. “The model is particularly useful for developing instructional programs that blend technology, pedagogy and content to deliver effective, inclusive (reliable) and efficient learning” (Nazlim, 2016, p. 5)

In addition, “the circular approach adopted by the Kemp model guides designers to take the perspective of the learner, so that the learner’s overall goals, needs, priorities, and constraints are taken into consideration when deciding on instructional solutions. The nine key components of the Kemp Instructional Design, which are intended to focus on the whole learner throughout the design process, are much more detailed and nuanced than those included in previous models. However, because the stress in the Kemp model is on the interrelatedness of these nine elements, the design process itself can be a more dynamic and fluid process than other models would allow” (Kurt, 2016, p. 1).

The proposed model will also include the ROPES Model as a part of the Instructional Delivery Plan. This will provide a more complete design and equip every instructor, regardless of level of expertise, with the needed tools for an effective presentation, lesson, and/or training.

The proposed model is essentially a merging of the Kemp and ROPES Models with the addition of Instructional Delivery Evaluation. (see figure 6)

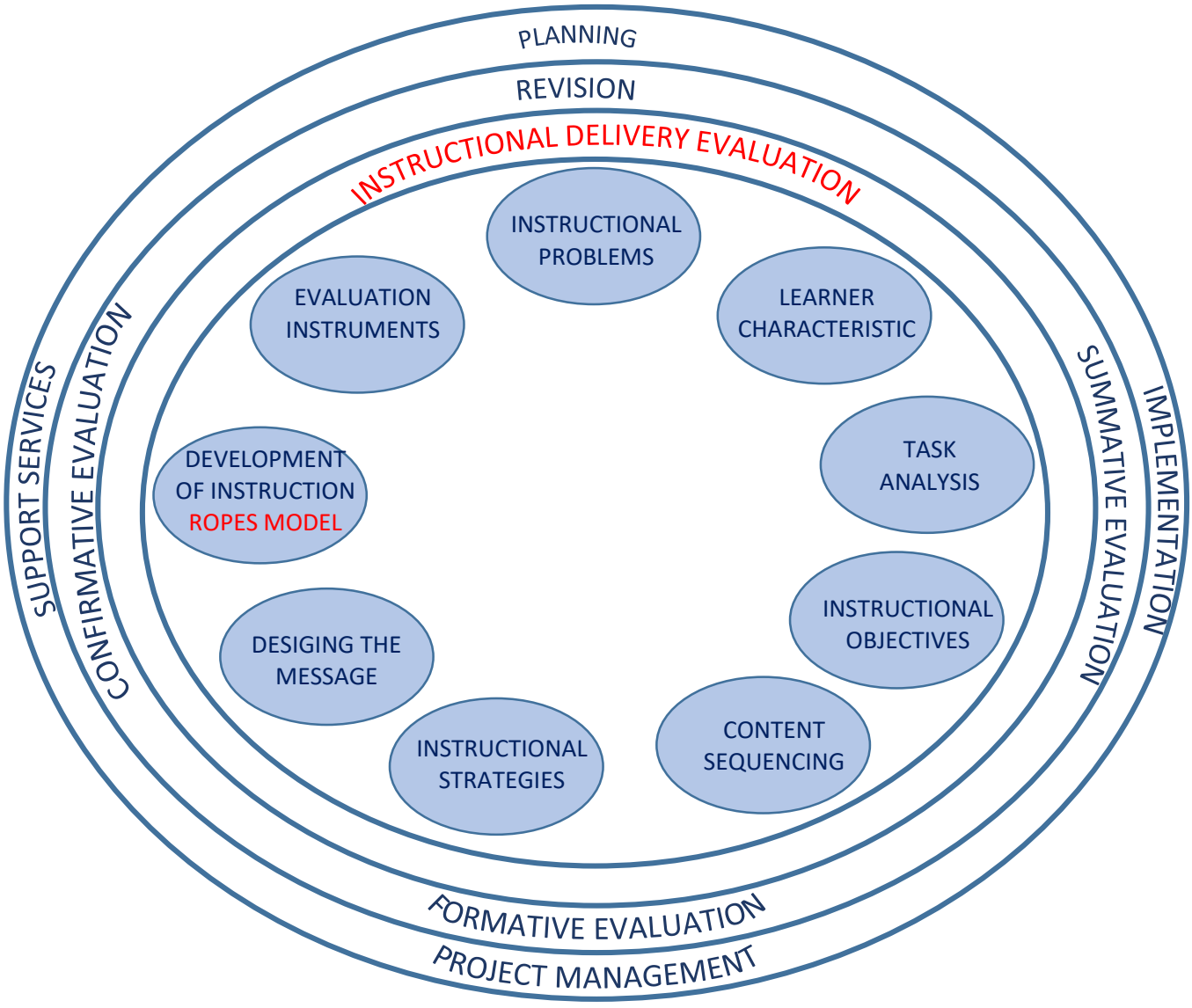

Figure 6 1

When compared to the rubric, the new model scored: 35. The creation of this model effectively fills the missing gap of evaluating the delivery of instruction that is commonly found in current instructional design models. Below is a checklist that can be used to evaluate Instructional Delivery, based on the proposed model. (see table 3)

Instructional Delivery Evaluation Checklist	Yes	No
Instructor spoke clearly/effectively?		
Instructor informed learners of the main training goal?		
Instructor provided an overview of the topic?		
Instructor described the benefits of understanding topic?		
Instructor discussed applications?		
Instructor discussed and demonstrated the steps?		
Instructor provided adequate time to allow for student practice/participation?		
Instructor observed and asked questions during learner participation time?		
Instructor reviewed the material?		
Instructor asked questions to confirm learner understanding?		
Instructor responded effectively to questions?		

Table 3

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