Put the Learner First:
Infusing Cognitive Principles into the Development of Instructional Activities

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Introduction

In the past decade, as instruction has taken a more constructivist approach, there has been a need for instructional development models to focus on learner-centered instruction. This paper will discuss how the Morrison, Ross and Kemp instructional development model (Morrison, Ross & Kemp, 2001) infuses cognitive-based principles into the design of learner-centered activities.

Theoretical Framework

Morrison and Ross’ work with Bruner in cognitive psychology has influenced this instructional development model. Bruner (1973) posited that instruction should be: 1) based on the experiences and contexts that make the student willing and able to learn, known as readiness; 2) structured so that the learner can effectively grasp the content; 3) designed to facilitate the application of knowledge, allowing the learner to construct their own meaning. Morrison, Ross and Kemp’s model (2001, p. 4) asserts that the designer begins by answering a set of questions at the beginning of the design process.

**Figure 1:**

<table>
<thead>
<tr>
<th>Morrison, Ross and Kemp’s essential questions</th>
<th>Bruner’s theories</th>
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<tbody>
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<td>1) What level of readiness do individual students need for accomplishing the objectives?</td>
<td>Instruction should account for the learner’s experiences and readiness.</td>
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<td>2) What instructional strategies are most appropriate in terms of objectives and learner characteristics?</td>
<td>Instruction should be structured so that the learner can effectively grasp the concept.</td>
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<td>3) What media or other resources are most suitable for instruction?</td>
<td>Instruction should facilitate the application of knowledge, so students can construct their own meaning.</td>
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<td>4) What support is needed for successful learning?</td>
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In order for these questions to be answered, a detailed learner analysis must be completed. The learner analysis allows the developer to identify the instructional problems, the learners’ prerequisite knowledge, as well as the learners’ preferred method of learning. This allows the instructional activities to be catered specifically to the learners’ needs (Morrison, Ross and Kemp, 2001). The model’s emphasis on cognitive psychology is seen in its analytical and design components.

Questions two through four in Figure 1 address the design of instructional activities. These questions lead the developer to create instructional activities that are 1) specific to the objectives and learner characteristics, 2) enhanced with various forms of...
media, and 3) feature the teacher as a supporter of knowledge construction, as they provide scaffolding and guidance during the instructional activities.

The model (see Appendix A) features nine interdependent elements, which contribute to cognitive-based instruction. The model’s elements promote the development of instruction that caters specifically to the learner’s needs, and allows the learners to engage actively in the instructional activities. The full paper will thoroughly discuss the nine elements of the model and the alignment of those elements with cognitive viewpoints. Implications of selecting media to enhance instruction will also be discussed.

Bibliography


Appendix A: