Dick & Carey Design Model Podcast Transcript

Hello and welcome to this podcast episode where we will be discussing the Dick and Carey Design Model. My name is Brooke Batchelor and I will be your facilitator today.

Today will be talking about the Dick & Carey Instructional Design Model which will help to bring some structure to your design process and hopefully fix any feelings of overwhelm when faced with a large instructional design project.

The Dick and Carey model has been around since 1978 when it was introduced to the world as the 'System Approach Model'. Depending on which literature you read, there are between nine and ten steps. The steps are connected to one another however each step will influence others to varying degrees.

I've popped a helpful diagram on the show notes for those of you who prefer to visualise the process so be sure to check that out.

For now, I'll discuss each step in a little more detail to help you gain an understanding of how it may be applied to your learning design project.

The first step in the Dick and Carey model deals with 'Identifying goals and objectives.' The learner needs to know what they will achieve by enrolling in your course. Your instructional goals will be broad statements and should describe what the learner will or should perform by the end of the course.

So, let's think about a little example here to demonstrate what I mean. Let's say you decide that you want to learn how to provide basic CPR and First Aid. When choosing a course that will meet your learning needs, you are likely to use the learning objectives for the course to help you determine if that course will provide you with the skills and knowledge you are looking for. For example, if you find a course where one of the objectives is to learn how to provide advanced airway support to a patient on life support, chances are you will *not* enrol in this one. It will be far too advanced for your learning needs. On the other hand, you may choose to enrol in a course that lists an objective such as 'Apply first aid to minor cuts and bruises.'

So, the first step is about describing what the learner should be able to perform after completing the course, and the second step is about identifying the gaps between what the learner already knows and what they need to know in order to achieve the desired outcomes from the first step. This step is commonly referred to as 'Conduct an Instructional Analysis'.

To meet this step, you may choose to conduct a pre-test with your learners to determine the level of knowledge they already have.

In a previous primary teaching role, I conducted a pre-test with my year one students to determine if any of the students understood basic multiplication. I provided a test asking

them to tell me how many groups of five astronauts were on the page and I placed ten pictures of astronauts. So, naturally, I hoped they would provide me with the answer of two groups.

The results of the test told me that my students had no idea what the question was asking of them and so I developed a series of lessons teaching them how to make groups and perform simple multiplication.

The third step in the Dick & Carey model is to 'Determine entry behaviours and learner characteristics.' In this step, you would begin to survey your learners to find out what motivates them and what traits, behaviours and personal preferences they have when it comes to learning. Once you have determined your audience characteristics, you can focus on those that directly relate to the goals and objectives you have already identified in your course. For example, when developing a course for child and family health nurses who would be facilitating work integrated learning experiences for undergraduate nursing students, I spent a day with the nurses in their clinics and investigated why they felt they needed the training. This experience provided important information that informed the course development as they were able to identify that they had no experience or knowledge in adult learning but rather many had experience with educating children under 12 years of age. This information was gold dust for me because I had a starting point for scaffolding their learning – they understood learning theories in relation to children so my course could build on this by getting straight to teaching them Adult Learning Theory and highlighting the differences.

They also told me that they wanted to improve their facilitation skills so that they could encourage new nurses into their field due to their aging workforce. From this, I understood that I was predominantly creating a course for female nurses and midwives aged over 50 years who were highly skilled in their day-to-day roles and who were highly motivated to learn how best to support & facilitate learning for undergraduate nurses in their workplace.

The fourth step in this instructional design process is to write performance objectives. Performance objectives describe the task or process that needs to be mastered along with the criteria that will be used to ensure the learner is progressing. Performance objectives are different to learning objectives as they set out to achieve measurable results and often identify the behaviour change that the course aims to influence. For example, a telehealth company may wish to improve call times by thirty seconds as a result of the newly acquired patient questioning skills obtained in the learning materials you are creating. Understanding this helps you, the instructional designer, to set well-defined goals for the training and enables clear and transparent assessment development. This information will help to inform the activities, exercises and assessments that will be developed as part of the course.

Once you have determined the performance objectives, you can move on to step five where you will develop an assessment plan and the assessment tools for the instruction.

Using the information about the learners you collected in the third step, you will have some idea of the types of testing approaches that your learners will best respond to. Your

test will reflect & test against the performance objectives you identified in step four and in this phase, you will also create a grading rubric & criteria.

It is important to note that at this stage, you will also be using these assessments as a way of determining how effective your instructional strategy is and what areas require improvement. But we will get to that in more detail when we tackle step eight.

The sixth step in the Dick & Carey model deals with the development of the instructional strategy. In other words, you will create a learning strategy that will transfer, develop and reinforce the identified skills and knowledge in the performance objectives. This is where the instructional designer can scaffold and sequence the learning in a way that brings out the best in the learner. It goes without saying that you will need to draw on your learning theories here to inform your instructional strategies.

In step seven, we move on to the development of the instructional materials by using the sequencing that was outlined in the sixth step. Here, you will gather and create the resources such as online tutorials, presentations, branching scenarios, text, multimedia-based instructional aids and the assessment items and tests. These aids will guide the learner towards the ultimate goals of learning and consider the learner preferences that you identified earlier.

Once you have sourced or created your instructional materials, it's time for step eight. This is where you will do your first formal evaluation – the formative evaluation. I like to think of formative evaluations as a way to in*form* me of how things went. So, in this step that is exactly what you will do. It's a great time to reflect on your observations of learner engagement, how well you felt that the instructional materials were received but also to receive learner feedback about the course.

Gathering learner feedback can be done in many ways – you could hold a focus group or do some one-on-one interviewing if you have the time. This step is crucial in helping you uncover any major issues with the content so that you can fix them and improve the overall learning experience and impact of the learning.

The final, and ninth step, is to perform a summative evaluation to determine if the course has achieved what you set out to achieve. In this step, you will want to know if your learners have picked up the knowledge and skills you intended the course to provide them with. You can find out this information through post-testing and assessments, through observation – particularly if you are looking for a demonstrated skill- or by gathering business statistics also known as Key Performance Indicators (KPIs).

So that's how the Dick & Carey Instructional Design Model process works. It provides some structure to what would otherwise potentially feel overwhelming when facing the development of a whole course.

For more information including the references used to create this podcast, a copy of the podcast transcript and a handy infographic summarising the Dick & Carey Model, please visit the show notes at brookebatchelor.com.au

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