# Chapter 58 The Fallacies of MDA for Novice Designers: Overusing Mechanics and Underusing Aesthetics

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# **ABSTRACT**

Ever since MDA was publicized by Hunicke, Leblanc, and Zubek in 2004, it has become a building block for game developers and scholars. However, it has also incited several misconceptions that have spread among students and the gaming community. For example, players have overused the term "mechanics," to the point that it is virtually meaningless. On the other side, the terms "dynamics" and "aesthetics" have been comparatively neglected, despite their value. Building upon our experiences of teaching an undergraduate game design course, we argue that these misconceptions stem from the ways that consumers have misinterpreted the MDA framework. Game educators are not necessarily working with experienced designers: they are working with students who are often more passionate about playing games than making them. Thus, game educators need to target this misconception in order to shed light on preconceived biases.

# INTRODUCTION

With the rise of game development as a viable career choice, more and more students are entering game design programs for higher education. Decades ago, potential designers were seen as solitary tinkerers, but now, they are players who feel inspired by games and have paths to turn that inspiration into production. However, this introduces a new problem: these players often develop misconceptions about game design based on their experiences from consuming games rather than creating them. On the academic level, instructors need to be aware of these misconceptions and specifically target them.

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The misconception I want to discuss is the concept of mechanics. This word was popularized by Hunicke et al. in a 2004 workshop paper at GDC, along with dynamics and aesthetics in their foundational MDA model (Hunicke, Leblanc, Zubek, 2004). MDA argues that game design can be understood as the connections among mechanics (data, formulas, rules), dynamics (behaviors, interactions, decisions), and aesthetics (emotions, reactions, feelings). Since its inception, MDA has been appropriated by players and morphed into an amalgamation of different definitions. In its current state, the word "mechanics" is nearly meaningless, and has lost all of its insight into the MDA framework. Despite this, the word is still extremely common not only among players, but also among students who are relying on their previous experience as players.

For instructors in game development, it is not sufficient to teach students how to make games. They also need to unteach students how they thought games were supposed to be made. Many of the students who are entering university-level game design programs are primarily inspired by playing games rather than making games. Even though MDA was originally developed as a means to bridge this divide, I argue that it has unintentionally yet ironically widened it. However, if we become more aware of the problem, we can take steps to fix the situation.

# Game Design and MDA

The field of game design, as a specific area of discipline within the larger context of game development, has faced misunderstandings and misinterpretations throughout its history. In the formative days of video games as an industry, there was no distinct role for a "designer." Often, there was only one programmer building everything, from graphics to rulesets. As productions grew larger, those programmers began to work with dedicated artists. Design became an explicit role with the rise of adventure games, where design overlapped with narrative in puzzles and dialogue (Williams, 2017).

Even today, "game design" is often used as a nebulous concept. For example, Drexel University's undergraduate game curriculum is called "Game Design and Production." However, this name is inaccurate, because the curriculum has historically not taught game design. It has focused on art production such as 3D modeling and animations which are then imported into games. In the past, the curriculum was accurately called "Game Art and Production," but it was renamed to "Game Design and Production" with very little change in the actual curriculum. There is still so much confusion among the terms "game design," "game development," and "game programming." In classes, students still struggle to even define a "game" in the first place, unaware that such arguments have already been explored (Juul, 2003) (Aarseth, 2015). Students are often surprised at how difficult game design can be when they first start plumbing its depths, which is why Jesse Schell quickly reassures readers to have the confidence to say "I am a game designer" in his textbook "The Art of Game Design" (Schell, 2008).

Game designers themselves seem to find difficulty in defining their role. Loosely, a game designer creates an experience for the player, but the precise manner in which this is achieved seems to be a black box. Daniel Cook likened this to the process of alchemy: experimenting wildly with different potions and brews, relying on mysticism and voodoo rather than logical scientific rigor (Cook, 2007).

The game design community has informally rallied around the "door problem" as an example of how game design differs from and interacts with other aspects of development (England, 2014). A game designer decides what a door does: how it opens, what the player does, when certain events associated with the door are triggered, and so on. This gives a concrete example of game design in practice, which the field sorely lacks.

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