

## Course Perceiving Differences among College Science Students from Various Cultures: A Case Study in the US

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**Abstract :** Background: As we all know, culture plays a pivotal role in the realm of education, influencing study perceptions and outcomes. Nevertheless, there remains a need to delve into how culture specifically impacts the perception of courses. Therefore, the impact of culture on students' perceptions and academic performance is explored in this study. Drawing from cultural constructionism and conflict theories, it is posited that when students hailing from diverse cultures and backgrounds converge in the same classroom, their perceptions of course content may diverge significantly. This study seeks to unravel the tangible disparities and ascertain how cultural nuances shape students' perceptions of classroom content when encountering diverse cultural contexts within the same learning environment. Methodology: Given the diverse cultural backgrounds of students within the US, this study draws upon data collected from a course offered by a US college. In pursuit of answers to these inquiries, a qualitative approach was employed, involving semi-structured interviews conducted in a college-level science class in the US during 2023. The interviews encompassed approximately nine questions, spanning demographic particulars, cultural backgrounds, science learning experiences, academic outcomes, and more. Participants were exclusively drawn from science-related majors, with each student originating from a distinct cultural context. All participants were undergraduates, and most of them were from eighteen to twenty-five years old, totaling six students who attended the class and willingly participated in the interviews. The duration of each interview was approximately twenty minutes. Results: The findings gleaned from the interview data underscore the notable impact of varying cultural contexts on students' perceptions. This study argues that female science students, for instance, are influenced by gender dynamics due to the predominant male presence in science majors, creating an environment where female students feel reticent about expressing themselves in public. Students of East Asian origin exhibit a stronger belief in the efficacy of personal efforts when contrasted with their North American counterparts. Minority students indicated that they grapple with integration into the predominantly white mainstream society, influencing their eagerness to engage in classroom activities that are conducted by white professors. All of them emphasized the importance of learning science.

**Keywords :** multicultural education, educational sociology, educational equality, STEM education

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