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Tourist or Traveler: Student Attitudes Toward the Study of Physics - A Survey of High School Physics Students and its Implications in the Classroom A. TABOR-MORRIS¹, T. BRILES, H. NOLAN, Georgian Court University — When students take physics in high school they do so for a variety of reasons, including, in some cases, its usefulness toward their future career goals. Students may engage in different learning strategies toward physics problem solving, for example, desiring step-by-step directions or committing to creating a mental map. Physics education research in the past indicates that the creation of a mental map can generate a sense of learning stability for students studying physics, especially due to of the complexity of this learning and its use of multiple intellectual abilities including verbal, graphical, pictorial and mathematical skills. Yet not all students appear to feel compelled to use mental mapping. An analogy is made here that indicates that some students appear to take on attitudes more aligned with visiting tourist observers, while other students seem to want to “go native” or even “move in.” A survey of 133 high school physics students was taken which included both students who indicated taking physics because of an interest in future science careers and those who did not. Results of these groups are compared and possible implications in the physics classroom are suggested.

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