

Analyzing Post-Course Performance & Attitudes

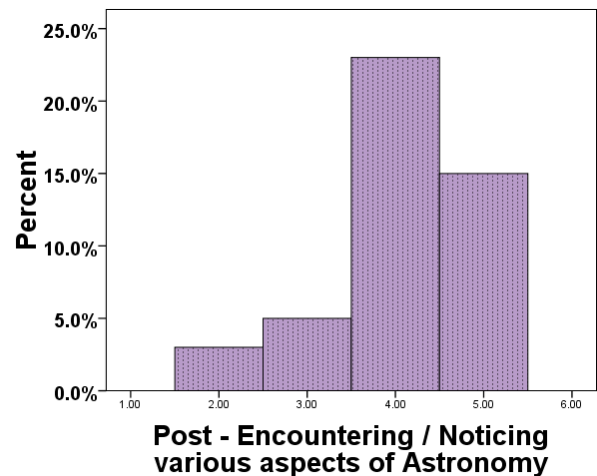
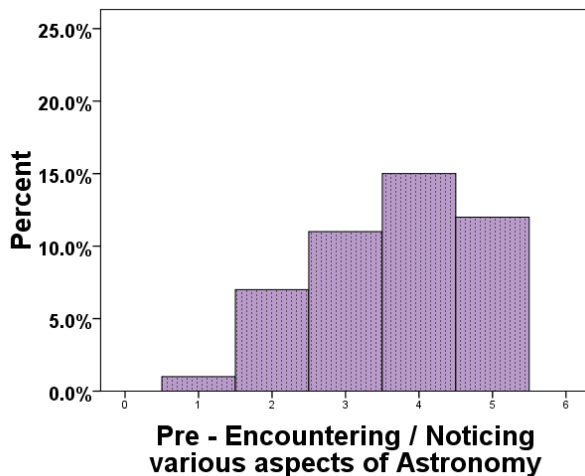
Change in Attitudes during course:

Importance of Astronomy:

- Factor analysis reveals that the Sharing/Enjoyment factors which describe the Pre-course data are not appropriate to the Post-course data
- No significant changes in most individual items of “I like/would enjoy...” questions, or in mean of items:
 - Marginally significant ($p = 0.07$) decrease in appreciation of astronomy-related book or equipment as a present (Change = 0.3)

How often students notice / encounter Astronomy:

- Significant (positive) changes were found in how often students reported encountering “aspects of astronomy” ($p = 0.068$), encountering items/technology originally developed for studying astronomy ($p = 0.01$) and using general skills that astronomers apply in their research to make decisions in their life outside of class ($p = 0.034$), as well as in the median of all similar items ($p = 0.033$; shown – x-axis is in order of increasing median frequency)



Relationship of Incoming Attitudes to Performance in Course:

- No significant relationship to performance gains on SPCI, or course grade
- Marginally significant trend ($p = 0.068$): students scoring highly on the Pre-enjoyment factor obtained a higher course grade.
- Students who scored highly on the Pre-sharing factor had greater gains in content as measured by the SPCI ($p = 0.033$; shown)

