

Example for requirement 1d4: Overall assessment of a Program-Level learning outcome (please be thorough in all responses). Need to be submitted for each Assessment Indicator(s) in each Program-Level Learning Outcome.

Program-Level Learning Outcome: Apply security principles and practices to maintain operations in the presence of risks and threats	
Course(s) that formally assess(es) this program-level learning outcome: ABC 216 - Industrial Control Systems Security	
Assessment Indicator: Snort: Snort alerting on ICS protocols and placed in correct area of network	
Overall, how well did the students perform on this Program-Level learning outcome? (right-click on the checkbox and select 'properties' and 'checked')	<input checked="" type="checkbox"/> below expected levels <input type="checkbox"/> at expected levels <input type="checkbox"/> above expected levels
Analyze assessment of indicator results documented by the "Average score for the indicator as a percent" and "How well did the students perform?": What does the information in the previous reporting suggest to you about the performance expectations, the teaching strategies, and student learning?	<p>There are two areas where students consistently underperformed: Snort and CSET. In addition, some topics were basically review and students should have performed better. These include setting up a VPN and the network demonstration.</p> <p>CSET is basically an automated tool for documentation and does not require technical knowledge to run. This was the easiest part of the project but some students did not bother doing it or underperformed. It is very difficult to get students to document their work and this needs to be emphasized more in the program.</p> <p>The Snort part of the project required them to develop new rules for the ICS protocols. Underperformance indicates they may not quite understand how Snort works.</p>
Next steps: Plans for reinforcing effective teaching and learning strategies and for improving student learning (clearly identify what will be done, by whom, by when, and how you will assess the impact of the changes)	<p>More lecture on Snort and writing snort rules in ABC 216.</p> <p>Emphasize Snort in the earlier classes.</p> <p>A preliminary exercise in the CSET tool.</p> <p>More lecturing on Snort and CSET.</p> <p>Assessment will be based on how the students perform on the project in spring of 20XX.</p>
Projected quarter/semester of implementing "next steps"	Spring 20XX
Results of "next steps" implementation – this section is to be completed the following year (describe how the implementation of the above "next steps" impacted teaching and learning in the program)	SNORT was incorporated into ABC 215 as an assignment. This seemed to help students for ABC 216 and some improvement was seen because of this. Additional lectures were given relating to SNORT as well. Drastic improvement could be seen as the class performed up to expected results averaging around 80%. Students were also given additional lectures and resources relating to CSET. This allowed students to be more adept at using CSET and creating appropriate final projects. The results increased as well by about 10%
Suggestions for improving this report or process (if any)	[Suggestion text here]