

NOCTI Improvement Plan

Teacher Name: _____

Program Area: _____

NOCTI Test Code & Name:

New test? _____ Yes _____ No

What does the NOCTI data show? You will be using the NOCTI Competency tests for the pre-test and the post-test. You may also use the new NOCTI Competency Report

1. Print out the NOCTI Competency Report, Post Test. Under each standard, write the % of the test each standard makes up. You find that in the blueprint of the test or in your Teacher Companion Guide.
2. NOCTI is now providing a Competency-Level Summary Report. This report again breaks down all of the competencies and shows how many questions there were for each and what was the student group's average number of questions correct and the average percent correct. This new form is a way to quickly analyze the areas of concern that need to be addressed.
3. Areas of success: Print out the NOCTI Competency Report, Post-test, look at all standards and competencies in which your students received 80% scores: Pay particular attention to the standards and what % of the overall assessment is that standard. Circle the areas of success.
4. Areas of concern: Using the same NOCTI Competency Report, Post-test, look at all standards and competencies in which your students received below 80% scores. Pay particular attention to the standards and what % of the overall assessment is that standard and the number of questions in each competency. Highlight the areas of concern.
5. Print out the Group Score Report with both written and performance scores where you can look at all student scores at once. Is there a standard that is a clear area of concern where the most students struggled, and the standard is a large portion of the test? If yes, highlight the area.
6. Using this report, are there areas of concern in the Performance portion of the test? Highlight any areas where students did not receive 80% or higher.
7. Print out or view electronically the **NOCTI Analysis of Scores form** comparing your student scores to State and National. How is your program doing? Highlight any area in which your program is below the state levels. This form is only provided for the post-test results.
8. Print out the NOCTI Individual scores reports, do you see any areas in which few students improved from pre-test to post-tests?
9. Print out the NOCTI Individual scores reports under the Performance reports, do you see any areas in which your students all could improve even if they are over the 80%. What are your cut scores for both written and performance?

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How will we address the deficient areas? Let us look at how we are teaching and when we are teaching it.

1. Using the NOCTI Improvement Plan Competency Chart (either Word chart or Excel spreadsheet), develop a list of the deficient competencies under each standard. Look at your scope and sequence of when you teach each of those competencies. Under the area of “when is it taught”, determine when you teach this competency. This can be something like “first year, first semester” something that shows you whether your sequencing of your coursework needs to be addressed. It could be spring, senior year which means you need you need to make sure you are addressing it before the NOCTI assessment.
 - If you have taught something in their first year and do not address it again, then you need to be adding some type of review into the senior year.
 - If you are teaching something after NOCTI, you need to move it up in the curriculum or if you teach something in the senior year, but many are on Co-op, you need to move it up in the curriculum as well or make sure your co-op student get the material when they are back in the school for their regular visits.
 - Are you teaching it at all? If you do not have the resources, you can look at the back pages of the NOCTI Companion Guide which lists additional resources that were used to develop the test. You may be able to order a teacher’s copy for free to find additional information to use to develop questions or study guides. Be careful not to violate copyright laws. Remember it is against the law to copy textbooks to avoid buying them.
2. Look carefully at each competency and in particular, any terms or phrases that are in parentheses or after e.g. These terms or phrases **will be used on the test** so make sure your students know them? Make it a point for your students to understand the terms and that different terms could be used from what is used in your classroom. Word walls, vocabulary lists, flash cards, Kahoot, Quizlet, warm-up or exit tickets are all ways to ensure students are aware of those terms. More on this later when we discuss how to develop a student’s improvement plan. Most of the time if a lot of students did not do well on a question, it was because of vocabulary terms not because they did not know the material.
3. Using the NOCTI Improvement Strategy Plan form (either the Word chart or Excel Spreadsheet), list the competency areas and what you will do to address each area such as “move to senior year”, “review unit”, “define vocabulary words” or “develop NOCTI warm-up terms”. List what help will you need to make the changes needed such as “add a specialized resource” “help from math or literacy coach to develop math problems or word wall”.

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How do we help our students address their deficient areas? Let us use the resources NOCTI provides and the sooner the better. At the beginning of the school year after the pre-test results are available, begin by having the seniors focus on their own data and what they know and do not know. Emphasis the importance of NOCTI all school year not just a month before the test.

1. Provide each student with his/her individual pre-test score report and the NOCTI study guide. Have the student begin at the area in the NOCTI Study Guide book that lists the first standard which will match his/her score report exactly. Tell the student the individual report tells them how many questions there was for each of the competencies and then how many they got correct. On the line in front of the competency, the student should write the number they got right over the total number of questions for each competency. For instance, if the student got 4 questions correct out of 5 on the first competency, the student should write 4/5 on the line in front of the competency. If the student got none of the questions correct, the student would write 0/how many possible questions. At the bottom of the page, they can note which areas in which they need to focus. They should do that for the entire book. This becomes their own NOCTI Improvement Plan. They may need to take a couple of days to do this so that it does not become an overwhelming task. Some students may need help to complete this task.
2. The second step is for the students to look at this data and determine where they need to have extra help or work. This is where it is important for you as a teacher to sit with the student to go over the report. In some cases, you may not have even covered the material yet. You need to tell them that and they can mark in their books when they are going to cover that material. If you have covered the material, what material is available to help them to improve. Can you give them old tests or materials from when you did cover the material? Do you have videos? Chapter notes? Can they sit in on theory lessons with underclassmen? Try not to just have them re-read the chapter and answer questions at the end. Students enjoy using technology so consider Kahoot or Quizlet. They are free to teachers and many teachers have already posted material online.
3. A very important part of the student's review are those words that are in parenthesis or after e.g.. The students should ask themselves if they know the terms and if they do not, they should highlight or circle the terms so they know this is something they should study to prepare for the assessment.
4. When a senior student has any free time, you can tell them to work in their NOCTI Improvement Book (study guide) on their areas of concern. That should become a standard operating procedure in your program area.
5. Think about those students who have not been in your program for the full time such as those who may only have been there for two years. They are still tested. How can you bring them up to date?
6. Students should take the sample test in the NOCTI study guide and there are tests available online. This also gives them practices taking the test online which may be very important especially for special education students or others who have not much technology experience.
7. Students should also practice the skills in the performance tests as well. You can set up practice performance tests to have them practice the actual skills they have to do. Make sure they are aware of the time allotted for each of the performance sections.

8. Students should read the rest of the information found in the study guide. It is valuable information that can help them. They should use the practice tests as well as the online sample tests that are available to them.

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Additional ideas for you to help your student to be successful on the NOCTI assessment:

1. Look at the Crosswalk for this school year found on the Student Occupational Testing website at careertechpa.org early in the school year. Do you have a new assessment? If yes, your students have taken the Pre-test for the new assessment so you can look at those competencies to see what has changed. **(Crosswalk is on careertechpa.org website. Hyperlink is at the end of this document)**
2. Know your NOCTI Blueprint. If your program has a national test, the blueprint is found on the NOCTI website; if you have a PA test, you will find the blueprint on careertechpa.org website. Both hyperlinks are at the bottom of this document. This is especially important if you have a new test.
3. Use the NOCTI Teacher Companion Guide. There is an immense amount of information in the book.
 - a. Test-taking strategies are in the book
 - i. A month before: go over the sample questions. Go over how to answer multiple choice questions.
 - ii. A day or so before: eating, sleeping, etc.
 - iii. How to actually take the test (such as read the entire question and all answers before choosing the best answer)
 - iv. Handling test anxiety
 - b. Go over the Standards and what percentage each is on the test. Do this early in the year and keep referring to it.
 - c. Go over the Performance Assessment breakdown and let the students practice the assessments throughout the year. Practice with the timelines given. Using the NOCTI Blueprints, you can develop sample job sheets. There are also sample questions in the blueprints that students should take and particularly identify any terms that are unknown or confusing.
 - d. There is a page on Commonly Missed Areas for both the multiple-choice tests and the performance tests. It is important to look at that page so that you can make sure you are addressing those areas especially if you see that your students are traditionally experiencing the same issues.
 - e. You have the list of the Standards and Competencies like your students have in their study guides. You can go over these with your seniors as a group asking them together who needs additional help or discussing the terms that are listed there. You have done an

analysis of your students' results so you should have those areas marked as to which ones have been an issue from the previous year.

- f. Have the students take the sample test then go over the answers with them using the answer key which explains why certain answers were correct or incorrect. This is important to help students to develop test-taking strategies.
 - g. The Companion book also shows you how to have the students access the online sample questions. See your site coordinator for additional help if needed.
 - h. As mentioned earlier, a page is provided to show a list of resources that were used to develop the assessment. While it is not expected that a school would have all of these, you may want to try to get one teacher copy for a reference.
 - i. Lastly, the book offers a list of NOCTI resources for teachers.
4. Other teachers have used many different techniques to help their students achieve success in the NOCTI assessment. Here are some sample ideas:
- a. NOCTI day: Some teachers establish one day a week in which a portion of the day will address NOCTI improvement. It can be terms, NOCTI math questions, or areas that the data shows improvement needs to be made. You have to be careful not to turn students off on NOCTI that they start to be absent on "NOCTI" day so switch up the activities. Don't have the entire day unless you are doing both theory and the performance. Be careful not to turn students off!! You have to switch up what you are doing. Use a variety of activities.
 - b. Teachers often do daily NOCTI warm-ups or NOCTI exit tickets. Again, use the areas that the data shows review is needed.
 - c. Involve underclassmen in NOCTI discussions so they are prepared. As you are teaching skills or theory, point out things that will be on NOCTI.
 - d. Don't just start to cram NOCTI a month before the assessment. That puts a lot of pressure on the students and really makes the students hate the idea. Work on it throughout the entire year but remember it should not be NOCTI all of the time.
 - e. Some schools use the NOCTI test as their "final" grade or let students who get an advanced score out of taking their "finals". It is a discussion to have with your administration if you are having students who are not trying or not showing up for the test.
 - f. Other teachers across the state/nation have already developed vocabulary lists on Quizlet and Kahoot. Both of those are free to use. Look what is already out there!
 - g. Don't forget to use what you have already developed. If you have something you teach in their first year that the students struggle with on NOCTI, pull out your tests and handouts to let them use as study guides. Don't reinvent the wheel; use what you have already developed if you can.
 - h. Some teachers have developed a bank of questions on the computer that they have their students continually take until they are able to get a 100% on the test. It is also used when there is any down time (time when a student is completed with an assignment but not enough time to start another or time when a student does not have a uniform, shoes, or safety glasses).

5. When you are developing tests, make sure you use multiple choice questions so that students are used to answering those questions. Make them tricky and tell students they are tricky to get them used to reading all four answers before choosing the best answer.
6. Todd Luke material: If your school uses the Todd Luke analysis of NOCTI scores, there is some additional help for you.
 - a. Todd breaks down his reports into four basic areas.
 - i. Competency areas where all students got all questions correct
 - ii. Competency areas where 80% of the students got questions correct
 - iii. Competency areas where 50-80% of the students got questions correct
 - iv. Competency areas where under 50% of students got questions correct (These are definite areas of concern)
 - b. Use the Todd Luke analysis of the pre-test scores that includes the students' names. This will show you which students need help on each of the competencies. This gives you the opportunity to meet with the students to discuss what help they need to improve their scores throughout the year.
 - c. Todd Luke also reports to your administrator a list of schools who are doing well in each of the competency in his post-test analysis report. If you are having issues with some competencies and do not know how to address them, perhaps you can contact some of the schools that are having success to see what they are doing to improve those areas.
7. Hyperlinks of help:
 - a. <https://nocti.org/>
 - b. <https://www.careertechpa.org/Programs/StudentOccupationalCompetencyTesting.aspx>
 - c. <https://www.careertechpa.org/Portals/0/docs/StudentTesting/Required%20Forms%20and%20Tools%20for%20Ordering/Crosswalk%202019-2020.pdf>
 - d. <https://www.careertechpa.org/Portals/0/docs/StudentTesting/Cut%20Scores%20and%20Certificate%20Information/2018-2019%20Student%20Cut%20Scores.pdf>