Assessment Plan Report

Date Submitted: 02/20/2015

School: Engelstad School of Health Sciences

Program: Ophthalmic Technologies – Dispensing Technician Emphasis

Person(s) responsible for the design and implementation of assessment plan and writing the report:

Scott Helkaa

1. Project Overview and Assessment Goals

   A. List the program Learning Outcome(s) that the plan is assessing.

      Outcome 1: Demonstrate the ability to analyze the prescriptive and lifestyle needs of the patient and make appropriate recommendations for optical devices.

   B. Provide a brief description of the plan and the assessment question(s) being addressed.

      Outcome 1: (Question) Did the class of 2014 demonstrate the ability to analyze the prescriptive and lifestyle needs of the patient and make appropriate recommendations for optical devices.

      This outcome is assessed using a variety of assessment artifacts across multiple courses within the program. Task Assessment Sheets using Likert Scales, Practical Examinations, Case Studies, Patient History Reports, and Student Prepared Reflection Documents are used to assess student performance on Outcome One.

   C. If this report does not correspond to the most recent program assessment plan sent to the school assessment coordinator please submit a copy of the revised plan along with this report.

      This report does correspond to the most recent program assessment.

   D. Indicate when the outcome(s) were assessed and what conclusions were reached from the previous assessment, and what “closing the loop” changes, if any, were made based on those conclusions. Also indicate whether the assessment method used previously is the same as the one described in this report. If not, what is changed?

      Outcome One: Outcome One is assessed at the end of the semester for each of the classes listed below. Assessment consists of two parts first is a review of student performance on the Task Assignment Sheets used in the specified course. Secondly, discussions with student who have recently completed any one of the three certification/licensing exams each student has to take in order to become a Nevada licensed Optician is conducted by the full time faculty of the Program. Changes to the programs policies or procedures and teaching tools/methodologies are discussed in Part Six of this report.

         OPHT 223 Ophthalmic Dispensing II –
         OPHT 102B Introduction to Contact Lens (lecture)
         OPHT 105B Introduction to Contact Lens Lab
         OPHT 202B Contact Lens One
         OPHT 203B Contact Lens Two (Lab for OPHT 202)
         OPHT 291B Clinical Applications III
2. Project Design and Coherence

A. Identify the student product(s) used for direct assessment of the Learning Outcome(s) that you listed in 1.A. Explain the context for this product [course name(s) and number(s), place in curriculum, instructor(s), and so forth). NOTE: If your project depends on anonymity, report only contextual information that doesn’t need to be anonymous. If the project focused on a single or common assignment, please attach the assignment handout or explanation in the syllabus as an appendix.

OPHT 223 Ophthalmic Dispensing II (second semester course) – Task Assignment Sheets, Student Projects, and Written/Practical examinations are used in this course to assess Outcome One. Documents are prepared scored and reviewed by course instructors Scott Helkaa, Brett Roames, and Milan Karen. Input from outside site proctors are used when relevant. Scott Helkaa meets with each instructor at the end of the semester to review if changes need to be made to the assessment documents, if new assessment methods need to be employed and if any changes in the course curriculum need to be made based on student performance.

OPHT 102B Introduction to Contact Lens, OPHT 105B Introduction to Contact Lens Lab, OPHT 203B Contact Lens Two and OPHT 202B Contact Lens One. (Third and fourth semester courses). Task Assignment Sheets, Case Studies, and Practical Examinations are used in each course to assess Outcome One. All assessments are reviewed by the course instructor Dale Roveri. Dale Roveri then meets with the program director Scott Helkaa at the end of the semester to determine if changes need to be made to the evaluation process based on student results. Discussions on curriculum changes are also covered at this time.

OPHT 291B Clinical Application III – (Third or fourth semester course). Task Assignment Sheets and a Student Reflection document are used in this course to determine student performance. Documents are prepared by the course instructor and site proctors. Documents are reviewed with the student by the course instructor Milan Karen. Milan Karen then meets with the program director Scott Helkaa to review documents collected and determine if changes need to be made to documents or if other assessment methods should be used.

B. Explain how the student product was scored and by whom [for example, objective scoring by machine; course instructor using a rubric; judging panel using a rubric]. If the project used a rubric, please explain who created the rubric and attach it as an appendix.

Scoring of all documents is completed by the instructor of the given course, with input from site proctors when applicable. Task forms are then reviewed by the Program Director, especially in the cases where the student is evaluated by multiple individuals for a given task. The Program Director looks for any inconsistency and resolves issues if they arise. Examples of Task Assignment Sheets are provided in the appendix of this report. Task Assignment sheets where created by the Program Director with input from faculty for each given course.
C. Explain the “fit” or “match” between the program Learning Outcome(s) being assessed and the student product used as a direct measure. In other words, how fully does the quality of the product reveal achievement of the learning objective? [Sometimes there may be a one-to-one correspondence between the learning objective and the product. At other times, only some features of the product are relevant to the learning objective. In such cases, the learning objective might be assessed only by one or two rows of a rubric or by a few selected questions on an exam.]

Outcome One: Outcome 1: Demonstrate the ability to analyze the prescriptive and lifestyle needs of the patient and make appropriate recommendations for optical devices.

Case Studies, Projects, and Tasks Assignments are designed to mimic ophthalmic fitting situations that the student will encounter in a dispensing clinic. Many of the case studies and tasks assignments come from jobs generated in the on campus optical clinic. The assessment tools are also designed by the course instructors, who all work in the field, based on patient situations they encounter in their private work.

Assessment tools and methods are also designed to follow the guidelines of the program accreditation body, The Commission on Opticianry Accreditation.

The assessment tools also mimic the grading forms and procedures used by the Nevada State Board of Opticianry, Arizona State Board of Opticianry and the Florida State Board of Opticianry during state licensing exams.

D. Explain how program faculty defined achievement terms (example: minimally competent, proficient, aspiring, satisfactory etc.) for the learning objective and how they distinguished between the levels of achievement (criteria). If the project used a rubric, does the rubric clearly indicate these categories and specify the corresponding criteria? If not, explain how rubric scores correspond to these categories. If program faculty haven’t yet defined terms and criteria for achievement of the learning objective(s), how and when do you plan to do so?

Outcome One: Achievement is defined by the current standards and practices used in the optical community, any applicable ophthalmic ANSI standard, as defined by the Commission on Opticianry Accreditation and following the scoring criteria used on the written and practical portions of the state board exams for Nevada, Arizona, Washington and Florida. Achievement terms are also consistent with the criteria followed by the American Board of Dispensing Opticians and the National Contact lens Examiners. Instructors have meet and agreed to the criteria used to determine a given Likert Scale rating for a given subsection on each Task Assessment Form.

E. If your project used a rubric, did program faculty try to establish inter-rater reliability in the use of the rubric? If so, explain how. If not, explain why.

Rubrics are not used at this time. The program is considering employing the use of rubrics in two courses of the optical program in the Fall of 2015.
3. **Assessment Methods**: Narrate how the project was conducted. Who did what when?

   Outcome One: See 2B

4. **Project Results**

   Comparison of CSN Task Assignment Sheets Analysis scores vs. State Board Exam performance on five criteria for CSN and Non CSN exam takers.

![Bar chart comparing CSN Students, State Average, and Task Sheet Analysis scores for various tasks.](chart1.png)

Comparison of CSN Exam takers vs. non CSN exam takers on National and State Board Exams.

![Bar chart comparing CSN Pass Rate, National/Sate Pass Rate for ABO, NCLE, and State Board exams.](chart2.png)
5. **Discussion of Results**

The program goal is based upon three factors, student completion of the program, student preparedness for licensure examinations and the comparison of student performance on five selected Tasks Sheets versus student performance on the five portions of the NSBDO practical exam. Students of the program take three separate licensing/certification exams. All three examinations are required for an individual to become a licensed optician in the state of Nevada. The first exam is sponsored by the American Board of Dispensing Opticians (ABO), The second exam is by the National Contact Lens Examiners, (NCLE) and the final culminating exam is sponsored by the Nevada State Board of Dispensing Opticians.

Student success with the three examinations for the group involved in this report is as follows. Exam pass rate for each exam is for first time takers on each exam.

- **ABO Exam 92 %**
- **NCLE Exam 100 %**
- **Nevada State Board Exam 100%**

Individuals who failed on the first attempt are given the opportunity to speak with the faculty of the program for any remedial needs and individualized training needs are addressed in OPHT 299B-Certification Review.

A review of the average scores for five Task Assignment Sheets – Lens ID, Eyeglass Neutralization, Slit Lamp, Contact Lens Neutralization, and Keratometry versus student performance on these sections of the NSBDO practical exam is completed. Results for the 2014 student cohort indicate that CSN student performance on the NSBDO practical exams outranks the overall results for all test takers on these exams. Results also indicate that student performance on the selected Task Assignment Sheets, completed while the student is still in classes, is slightly higher in Three out of five areas of the practical exam. Discussions with student of the selected cohort indicate that under performance in two of the selected areas is predominately due to “test anxiety”. This has led the instructors of the program to institute a mock board exam in the OPHT 291-Clinical Application using strict guidelines and test timing scenarios. The Program will also employ the use of mock board activities in OPHT 223 – Dispensing II and OPHT 203 – Contact Lens II in order to help the student acclimate to “on demand test stress” issues.

6. **“Closing the loop” actions:** what follow-up actions do program faculty plan to take next as a result of this project?

Starting in the Spring 2015 semester the program will be instituting a Mock Board Exam activity as part of the OPHT 291 Clinical Applications III course. Mock board activities under timed conditions will also be implemented in OPHT 223 – dispensing Two and OPHT 203 Contact Lens Two were applicable.

Revisions for the Task Assignment Sheets for all of the courses mentioned in this report at the end of the Spring 2015 semester, based on student experiences in the newly remodeled optical clinic as it expands its services in 2015 and use of the new equipment received by the program during the Spring 2015 semester.

The program will experiment with the use of rubrics that are currently being designed for the OPHT 223B Ophthalmic Dispensing II course and the OPHT 291 Clinical Applications course.

7. **Project ownership**

Outcome One: The Program Director, Faculty, site sponsors, program advisory board, students, and graduates of the program were involved in the discussions on the findings and participated in making any changes to the courses mentioned in this report.