



The European Council of Optometry and Optics

Pilot Accreditation Process

For Exemption from the Examinations

and Portfolio of

The European Diploma in Optometry

Report and Recommendations

to

The European Council of Optometry and Optics

April 2012

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The European Diploma in Optometry Pilot Accreditation Scheme Final Report

Executive Summary

The Development of an Accreditation Scheme to Recognise Prior Achievement in the Award of the European Diploma in Optometry

Introduction

As part of the development of the Diploma and in keeping with the principle of the recognition of prior educational achievement the European Council of Optometry and Optics intends to introduce an accreditation process to allow exemption from all or part of the Diploma Examinations. The accreditation process will thus contribute to transparency and facilitate the professional ladder system.

The concept of the European Diploma was agreed by the European Council of Optometry and Optics (ECOO) in 1988 but due to long internal discussions, particularly concerning pathology and the use of diagnostic drugs, the first examinations did not take place until 2000. The Bologna Declaration in 1999 worked as a catalyst, especially since ECOO's visionary initiative mirrors the European Union's ambitions – uniform scope of practice, harmonised education and free mobility of practitioners. ECOO agreed then on the principle of the Diploma and since then an examination cycle has been held every year.

The examination is in three parts, each part being divided into three modules and each module has a theory and practical assessment. Irrespective of prior achievement every candidate has to take all modules, both written and practical. Due to the wide variation in optical and optometric scope of practice in Europe, a portfolio of patient experience will be required as evidence of real clinical practice.

This is due to the wide variation of standards of optical and optometric qualifications in Europe. To be eligible to enter the examination candidates are required to hold a nationally recognised optical or optometric qualification. Further details of the syllabus and conditions can be found on the ECOO website: <http://www.ecoo.info/dynasite.cfm?dsmid=76917>

The examination was designed to be at the highest entry level into the optometric profession in any of the member countries of ECOO. Its purpose is twofold: to establish a uniformly high standard of optometry which would have a public benefit and political aim and to encourage the raising of educational standards and meet the expectation of students to increase their competency

The Accreditation Scheme

Following discussions, the General Assembly in Istanbul in November 2008 was given a presentation on a possible accreditation scheme which would bench mark national qualifications against the European Diploma with the intention of granting exemption from all or part of the Diploma examinations.

A pilot scheme was devised which was tested in three optometry schools one each from a country with developed optometry, a country with established optometry and a Central or Eastern European country where optometry is being developed. Initially, these were Norway, Germany and the Czech Republic. The school at Olten in Switzerland expressed an interest in joining the pilot and this provided a replacement for the Berlin University who introduced a new syllabus making a visit impossible for another two years.

The Scheme is in three parts. Part 1 is an explanation of the Scheme, Part 2 is the Self Assessment Document which maps the competencies of the qualification to be accredited against those of the Diploma, Part 3 provides guidance about the Accreditation Visit.

The Accreditation Scheme was developed and sent to each of the Schools in 2009 with the intention of completing the project within twelve months. Regrettably this target has not been met due to the time taken to complete the initial application forms in one case and a new course being established in Germany. Visits took place to Olten in October 2011, the Czech Republic in November 2011 and Norway in March 2012. A full copy of the Visit reports together with a statement of the Visitor's recommendations is attached to the Report.

The experience with all three Visits suggests that the scheme is fit for purpose; this is subject to the approval of the recommendations contained in the Report to be made to the Board of Management, Executive Committee and finally the General Assembly of ECOO in April 2012 in Dublin.

The value of the Accreditation Scheme is that every training institution will be able to benchmark their qualification against the Diploma indicating missing competencies. There will also be an opportunity to gain exemption from all or part of the Diploma examination.

The intention is that the process should be self funding in that those members or schools who wish to undergo the benchmarking or accreditation process will be required to cover the cost.

Conclusions and Recommendations

Accreditation has an important role to play in the development of the Diploma to achieve the harmonisation of optometric education in Europe which, in turn, will facilitate both the achievement of a common scope of practice throughout the European Union and help to achieve free movement of professionals. Together with the proposed European Qualification in Optics it will create a ladder of educational opportunity for professional qualification.

The Pilot Accreditation Scheme has shown that there is a close correlation between the conclusions reached by the Visiting Panel based on the completion and analysis of the Self Assessment Document and the results of the Visit to the institutions.

One of the main problems facing the Visitors was the level of clinical competence required for a graduate to practice independently. The Portfolio of Clinical Experience is intended to provide evidence of this competence. At present it is both too complicated and ambiguous and is in need of urgent revision. This report sets out the principles for this. The Portfolio should be a life long record of clinical achievement which should commence at the beginning of undergraduate courses.

Based on the experience of the Pilot Accreditation Scheme the Visitors make the following recommendations:

1. That the Pilot Accreditation Scheme is endorsed and becomes the formal accreditation scheme for the ECOO European Diploma in Optometry.
2. That accreditation for the courses at the Fachhochschule Nordwestschweiz, Palacky University and Buskerud University College, as set out in the visit reports be approved.
3. That, provided application is made within two years application may be made by the Fachhochschule Nordwestschweiz, Palacky University and Buskerud University College for full accreditation without charge except for the visitors expenses.
4. Consideration should be given as to how graduates who have a partial accreditation by virtue of their qualification can complete the Diploma
5. That the Self Assessment Document be simplified.
6. That the Portfolio is reviewed to clearly indicate the level of clinical experience which is required for the award of the Diploma.
7. That a preliminary meeting be included as part of the Accreditation Scheme.
8. That applicants should be given the option of benchmarking or full accreditation.
9. That benchmarking should be offered to new or redesigned courses.
10. That visits should take place in the second half of the second semester.
11. That the costs of benchmarking and accreditation should be met by the applicants.
12. That any accreditation should not apply retrospectively and that decisions are valid for a period of five years, or an earlier date if there are substantial changes to the course.
13. That an Accreditation Panel be established as a sub-committee of the Board of Management of the Diploma and that a co-ordinator be appointed who would receive an honorarium

The European Diploma in Optometry Pilot Accreditation Scheme Final Report

Introduction, Background and History

The European Diploma

The concept of the European Diploma was agreed by ECOO in 1988 but due to long internal discussion, particularly concerning pathology and the use of diagnostic drugs, the first examinations did not take place until 2000. Since then an examination cycle of written and practical examinations has been held every year.

The examination is in three parts, each part being divided into three modules and each module has a theory and practical assessment. Irrespective of prior achievement every candidate has to take all modules, both written and practical. This is due to the wide variation of standards of optical and optometric qualifications in Europe. To be eligible to enter the examination candidates are required to hold a nationally recognised optical or optometric qualification. Further details of the syllabus and conditions can be found on the ECOO website: <http://www.ecoo.info/dynasite.cfm?dsmid=76917>

The examination is available in three languages, English, French and German, which consequently restricts the potential candidate pool.

The examination was designed to be at the highest entry level into the optometric profession of any of the member countries of ECOO. Its purpose is fourfold: to establish a uniformly high standard of optometry and a common scope of practice for the public benefit, to encourage the raising of educational standards to meet the expectation of students for increasing their competencies, to set a European standard for optometry and work towards the recognition and harmonisation of optometry throughout the European Union. It also provides an advocacy tool for members to use in the promotion of optometry to national governments. The Diploma has played an important role in ECOO's response to the EU consultation on the current Professional Qualifications Directive.

The Diploma has been used to promote the development of the scope of practice of optometry throughout Europe. Subject to evidence of clinical experience the Diploma has been recognised by the UK General Optical Council for registration as an optometrist in the UK. The diploma has also been recognised, de facto, by Switzerland. The Diploma conforms with the requirements of the Bologna Agreement on the uniform development of graduate qualifications and in this respect was ahead of its time. The development of the Diploma has been a factor in the establishment of the European Academy of Optometry and Optics.

The development of the Diploma syllabus has had a significant effect on the development of optometric education and, through the encouragement of the Association of European Universities, Schools and Colleges of Optometry, (AEUSCO)¹, is now the model used by many educational institutions. The Diploma also provided the basic structure for the Global Competency Based Model of Scope of Practice of the World Council of Optometry. The Diploma provides the criteria for the national accreditation of the professional level of the Bachelors programme in the Netherlands. International focus is one of the main topics. Without this focus in the scope of practice the government will not subsidise education in the future.

The learning outcomes and the clinical and practical competencies assessed by the exams for the Diploma are defined by ECOO in the syllabus and examination.

¹ AUESCO amalgamated with the European Council of Optometry and Optics in 2008

The Diploma is a big bang examination which does not reflect the modern approach to the recognition of prior academic or clinical achievement. This has resulted in a low pass rate for the examination for a number of reasons including the lack of preparation of the candidates for the written examinations and a lack of clinical experience for the practical examinations. There are also restrictions due to the examination only being available in three languages. In reality most countries do not see the Diploma as being relevant to them due to its difficulty and the language problem. However, in every country where either opticians or optometrists are educated and certified there will be some level of equivalence to the Diploma which could allow national qualifications to be mapped against the Diploma and credit given for prior achievement.

4. The form of the Diploma – medium to long term

With the world based movement to competency based examinations there is the opportunity to develop the Diploma so that it recognises the standards of education and training in all of the member countries of ECOO. At the same time it will provide a recognisable European set of standard competencies against which the competencies of each country can be measured. It would then be possible to identify and remedy deficiencies in a transparent and equitable manner. Each country would be responsible for determining its own competencies. Once these have been recognised by the BOM/BOE the deficiencies can be rectified either by the development of training within the member country or individually by a ‘top up’ examination.

The benefits of this structure are:

It will encourage and enable countries to develop their educational structure at their own pace whilst building accreditation towards the full Diploma. This should make it more attractive to students and professionals and at the same time for each country to feel that they have an interest in the Diploma.

The Diploma would not be seen to be in competition with national systems of recognition and qualification but a part of a process which would be controlled by the individual country but audited by ECOO.

The Diploma would seem to fit well with the discussion paper issued by the Commission on the future of the General Directive. It will provide an easily recognisable standard against which national standards can be matched. It conforms with the principle of the free movement of professionals and provides a ladder structure for qualification. It can also be shown that some countries have already reached that standard and others are moving rapidly in that direction. Politically this should be helpful.

Accreditation

Following initial discussions at a meeting of the Education Committee in Sofia in 2003, the General Assembly in Istanbul in November 2008 was given a presentation on a proposal to develop an accreditation scheme which would bench mark national qualifications against the European Diploma with the intention of granting exemption from all or part of the written and practical examinations.

It was agreed that a pilot scheme would be devised which was to be tested in three optometry schools one each from a country with developed optometry, a country with established optometry and a Central or Eastern European country where optometry is being developed. Initially these were Norway, Germany and the Czech Republic. A small working group was established to develop the scheme.²

An Accreditation Scheme was developed and sent to each of the Schools in 2009 with the intention of completing the project within twelve months. Regrettably this target was not met due to the time taken to complete and assess the initial application forms and the discovery that a new syllabus had been adopted in Germany which made it impossible to visit this school until a full three year cohort of students had graduated. In the meantime the Fachhochschule Nordwestshweiz in Olten, Switzerland asked if it could

² Composition of the Working Group and Visiting Panel is at Appendix 1

participate in the pilot and this was agreed. The Visits were completed in Olten in October 2011, at the Palacky University, Olomouc, Czech Republic, in November 2011 and the Buskerud University College, Kongsberg, Norway in March 2012. The reports were submitted to the Board of Management of the Diploma and to the ECOO Executive Committee for discussion with final approval subject to the satisfactory completion of the Pilot study, to be endorsed by the ECOO General Assembly.

The Accreditation Process

A three part Accreditation Scheme was designed³

Part 1, The ECOO Accreditation Scheme

This sets out the purposes and benefits of the scheme, what will be accredited and how the accreditation will take place.

The European Diploma is competency-based: **Competency** is the ability to perform the activities within an occupation to the standard expected in employment. **Competencies** are the **skills, attitudes and knowledge** needed to be able to practice.

In the context of the Scheme, **“Competency”** refers to the performance of the optometric/optical practitioner: the integration of skills, attitudes and knowledge that informs the practitioner in his/her professional activities. **“Competencies”** are the individual components of the skills, attitudes and knowledge that must be mastered to achieve **“Competency”**.

In training programmes the skills, attitudes and knowledge gained on successful completion of a module or course are referred to as the **“learning outcomes”** of that module or course. The student demonstrates the achievement of these **“learning outcomes”** by passing the corresponding module assessments (examinations) that are designed to test specifically for the acquisition of these **“learning outcomes”**.

“Learning outcomes” are typically defined in the format: *“On successful completion of the module the student will be able to”*. Hence **“Learning Outcomes”** can be conveniently matched against the European Diploma **“Competencies”**.

The accreditation system considers the skills, attitudes and knowledge achieved by graduates of the programme. The approach will be to benchmark the learning outcomes of the training programme being considered against the competencies of the European Diploma.

Exemption will be given from any or all of the three Parts of the European Diploma whose competencies can be shown to have been taught and assessed to the European Diploma standard within the training programme.

There is an explanation of the Accreditation questionnaire and the additional documentation required to support it. There is guidance on completing the questionnaire and an explanation of the process of analysis and verification of the completed questionnaire.

Part II, The Self Assessment Document

This document is the result of a lengthy process of mapping the European Diploma competencies against those of the General Optical Council and the World Council of Optometry.

The Self Assessment Document lists the subject areas for each of the three Sections of the three Parts of the Diploma. These are divided into the knowledge base and the clinical/practical competencies. The

³ The full scheme is at Appendix 2

applicant is asked to show where in their programme the learning outcomes for each subject area are, to list their credit weighting and method of assessment for the clinical/practical competencies, how and where in the programme the competency is assessed and in the case of clinical experience, the number of patients examined and how these are recorded.

The document is then assessed by the Visitors and clarification sought where necessary. Once this is complete the Visitors give a preliminary opinion as to possible exemptions from parts of the Diploma. At this stage institutions may apply for the exemptions to be formally approved. This will require a visit by four Visitors who are a combination of practising optometrists or opticians and educationalists who might or might not be optical professionals. An alternative would be for the institution to opt to use the preliminary opinion as a bench mark for the development of its programme and not proceed to a formal Visit. However, in the Pilot the three institutions agreed to undertake the full accreditation process

Part III, The Accreditation Visit

Part III offers guidance to, training establishments about the expectations of the ECOO visitors in specific areas of student education and training and to the Visitors in their audit of the optical and optometric training programmes. The visitors consider evidence of the level of education and training and come to an overall judgement based on these guidelines.

Sections 2-12 of Part III indicate the nature of the information that the ECOO visitors will require for consideration before and in the course of the visit. The visitors will use this information as the basis for their audit. The sections describe, in general terms, what ECOO expects training programmes to demonstrate in order to obtain accreditation and exemption from all or part of the European Diploma.

In addition all the participants were asked to provide their feedback on the process including suggestions for improvement.

Accreditation of the Optometry School at the Fachhochschule Nordwestschweiz, Olten⁴

As previously explained the School at Olten applied to join the Pilot later than the other three participants. The application was received in November 2010 and the Visit completed in October 2011. An initial meeting to discuss the process took place in March 2011, the completed Self Assessment Document was received in August 2011 and a preliminary opinion given in October 2011 shortly before the Visit took place. The timescale was not ideal, particularly as the preliminary opinion and Visit were so close together. A summary of the Visitors recommendations for exemptions was given to the Head of Department at the end of the Visit and a full report presented to the Board of Management and Executive Committee at ECOO's November meeting.

The School had produced very detailed briefing documents which were very helpful in understanding the structure of the course. They had also redesigned the Self Assessment document to produce a much more user friendly version.

One of the problems faced was that of translation. This has been identified as a common problem as the Visitors work in English. The extent of the translation required was set at a minimum acceptable level.

The main potential problems identified by the Visitors from the preliminary meeting and self assessment document were:

The accreditation of Part A practicals, as not all students entered the course having an opticians qualification.

⁴ The full report is at Appendix 3

The amount and range of clinical experience gained in the School clinics and during the externship.

This led to a preliminary opinion which did not allow for exemption of Part A practical and clinical, of Part C2, epidemiology and biostatistics and none of the clinical competencies in Part C3.

The problem with dispensing was resolved by the introduction of a set of supplementary dispensing and workshop tasks.

The course includes a number of options, two of which were considered to be critical to accreditation of the subjects related to low vision and paediatrics. It was understood that most students take these options.

The other questions relating to Part C were satisfactorily resolved.

However, the award of the Diploma is dependent not only on meeting the requirements of the examination but also on the level of clinical experience necessary to be able to practise safely without supervision. This is covered by the Portfolio which each student has to submit following success in the written and practical examinations. It was the opinion of the Visitors that the patient contacts which were recorded did not meet the criteria of the Portfolio. However, some students appeared to have a greater level of external patient contacts than others but they had not been recorded. In discussion with the Head of Department it was clear that the Portfolio was misleading and would need to be reviewed.

The final conclusions and recommendations to ECOO were:

That the students in the BSc Optometry Programme in Olten, Switzerland should be exempted from the following parts of the Diploma.

Part A – on condition that students complete the six supplementary dispensing and workshop tasks.

Part B – on condition that the voluntary modules on low vision and paediatrics (VLV) and paediatrics (VKiO) are taken by all students.

.Part C – approved without conditions

However, the Visitors consider that graduates do require a level of clinical experience with unselected patients which is greater than that attained during the undergraduate course and, therefore, that there should not be exemption from the portfolio.

This is subject to the approval of the Board of Management of the European Diploma, the ECOO Executive Committee and the final report on the pilot accreditation process which will be made to ECOO at the Spring 2012 meeting.

Accreditation of the Optometry Department at Palacky University, Olomouc, Czech Republic⁵

The Czech School showed interest in the Scheme immediately after the presentation to the Autumn ECOO meeting in 2009. It was agreed that an exploratory meeting at the University in Olomouc would be useful. Two of the visiting panel met with the Department for a day, together with a translator. This proved to be a very useful meeting for both sides. Following the receipt of the Self Assessment Document there was an extended exchange of information including the need to translate the syllabus into English. It was not until May 2011 that the Department was informed of the preliminary opinion of the Visitors as to the extent of the exemption which was proposed. Language was again a problem and in this case a translator was made available by the Czech Optometrists Association.

⁵ The full report is at Appendix 4

The Visitors considered that they would need to give particular attention to:

Part A:

- The scope/level of experience gained internally and at the external placements.
- The range of optical appliances dispensed.

Part B:

- The scope/level of paediatric and geriatric optometry/low vision.
- The range and the effectiveness of the methods of monitoring students' external patient experience.

Part C:

- The extent of tuition in general biological sciences.
- The extent of tuition in relevant pharmacology and general and ocular disease.
- The input to the programme from the eye hospital and ophthalmology.

Based on these points, the preliminary opinion of the Visitors was that exemption could be granted to Part A, Part B and Part C1. Parts C2 and C3 were not considered adequate for exemption. It was also noted that although the Self Assessment Document indicated that some subjects were not in the course, detailed examination of the English translation of the syllabus showed that these were in fact covered elsewhere in the course.

There appeared to be an imbalance in the number of credits allocated to subjects, with important areas with few credits and less important subjects carrying an excessive number. This was due to the historical structure of the course and was being reviewed.

Legal and cultural problems were found in two clinical subjects. There was very limited clinical experience in fitting RGP contact lenses. This is due to the fact that they are rarely used in the Czech Republic. Although fluorescein is used regularly in the Department there is an issue about the legality of its use externally by non medically qualified people. There was concern that retinoscopy and ophthalmoscopy were not used on every patient. There is an over reliance on autorefractors and Czech law apparently forbids the examination of the posterior segment of the eye so that ophthalmoscopes are rarely used in practice. This was confirmed in discussions with an ophthalmologist who was happy for optometrists to examine the anterior segment but said that the posterior segment should be left to ophthalmologists.

Problems with the scope of dispensing experience remained and it was suggested that there should be better recording of both internal and external experience.

The main concerns centred around Parts C2 and C3. There appeared to be limited tuition and training. Whilst there was hospital based ophthalmological experience the Visitors were not convinced that this was acceptable without sufficient training in and regular use of ophthalmoscopy.

The final conclusions and recommendations to ECOO were:

That the students on the BSc Optometry Programme at the Palacky University, Olomouc, Czech Republic should be exempted from the following parts of the Diploma.

Part A – on condition that students can demonstrate that they have completed dispensing to real patients of a range of lenses including single vision, bifocal and varifocal lenses.

Part B – approved provided that in Part B3 students attend further tuition in RGP contact lenses for example the present Hecht course or equivalent training.

Part C – Part C1 approved, Part C2 not approved, Part C3 not approved

The European Diploma requires a level of clinical experience with unselected patients which is greater than that attained during the undergraduate course and, therefore, there should not be exemption from the portfolio.

This statement is subject to the approval of the Board of Management of the European Diploma, the ECOO Executive Committee. The final report on the pilot accreditation process which will be made to ECOO at the Spring 2012 meeting.

Accreditation of the Department of Optometry and Visual Science at Buskerud University College, Kongsberg, Norway.⁶

Buskerud University College was keen to join the Pilot from the outset as the current course is based on the syllabus of the European Diploma and welcomed the opportunity to test how far they had achieved this. Due to the workload involved in completing the Self Assessment Document progress was rather slower than both the College and Visitors had hoped. Nevertheless, the completed application was extremely well written and included very helpful and comprehensive supporting material for Part III, the Visit. In this case a preliminary meeting did not take place, which in retrospect was a mistake. Language was not a problem as both staff and students are competent in English.

This accreditation differed from the previous two in that it was for a combination of three elements, the BSc, the year of clinical experience that follows graduation and the post graduate contact lens qualification. A requirement of entry to the contact lens course is the completion of a log book which is similar to the Diploma Portfolio.

The main concerns of the Visitors centred around methods of assessments and record keeping and this resulted in a number of provisional exemptions being qualified as subject to the extent to which the various log books met the practice experience requirements of the Diploma. There also appeared to be a lack of input to the course from ophthalmologists both theoretically and clinically.

Provisional exemption was proposed for Part A, Part B with the practical and clinical elements subject to the qualification above and Part C with the exception of subjects 12 and 24, investigative techniques and abnormal ocular conditions.

The Visitors were impressed with the enthusiasm of the staff and students which was reflected in the course. However, it was disappointing that the lack of consistency of eye examinations and the standard of record keeping and log books meant that full accreditation could not be given.

The final conclusions and recommendations to ECOO were:

That the students on the BSc Optometry Programme at Buskerud University College should be exempted from the following parts of the Diploma.

Part A – Without condition

⁶ The full report is at Appendix 5

Part B – on condition that the Contact Lens Qualification has been awarded.

Part C1 and C2 – Without condition

Part C3 – Not exempted

Portfolio – Not exempted

This is subject to the approval of the Board of Management of the European Diploma, the ECOO Executive Committee and the final report on the pilot accreditation process which will be made to ECOO at the Spring 2012 meeting.

Beuth Hochschule, Berlin, Germany

The Beuth Hochschule in Berlin was very interested in having their course accredited. During discussions it became apparent that the syllabus had recently been revised. After detailed discussion the Working Group decided that it could not accredit either a new course or one that had been changed until the first students had graduated from it. However, they did set out the following principles for such courses.

Accreditation of a new programme.

The ECOO accreditation scheme was designed with established programmes in mind so there have been discussions about how there can be engagement with new programmes. Suggestions are outlined below and then there are a series of questions about the details of your programme.

All the years of a new programme must have run before there can be any accreditation. Graduates must have successfully completed all of the years of the new programme before exemption from the some or all of the European Diploma examinations can be awarded.

However, the self-assessment exercise itself is not substantially affected by whether or not the programme is running. Hence, if the training institution wishes the accreditation panel can give an opinion as to the extent that a new programme, as described in the self-assessment document, does, or does not, meet the European Diploma competencies then this can be done.

It is not the accreditation panel's role or ambition to design teaching programmes, but it is hoped that the accreditation panel's evaluation of the self-assessment document may identify, at an early stage, features that might subsequently prove to be an obstacle to accreditation.

Comments from Heads of Department

The Heads of Department of the three courses which were visited were invited to submit their views on the Pilot and these are reproduced below:

Professor Roger Crelier Fachhochschule Nordwestschweiz

I would like to feedback the evaluation process and your visit to Olten in just a very short paper.

First of all, I would like to point out very clearly, that we felt extremely well handled and got all the support we needed. Any questions we had were answered and whenever possible, our wishes and needs were taken seriously.

Self-Assessment Part(SA)

Pros

- *The possibility to do the SA was very helpful to analyse our strength and weaknesses*
- *We knew before the visit if we have any chance to go forward*
- *The analyse was of good quality and reliable for us*
- *The complete sequence was done in a relative short timeframe*

Cons

- *The table form of the original Self-Assessment document was not very useful. We had to re-arrange it to make it readable and to have a better overview.*
- *The Credit weighting of each single sub-subject is not a really good value. Too many of the sub-topics are taught in different modules.*
- *Numbers of needed clinical cases were not clear in different areas.*
- *It has to be clear if cases have to be 100% checked (very high quality cases) or just have to be of lower proof (like: yes, I did 400 RXs, somewhere out there). I would prefer to have lower numbers with high quality, because of the many low-level optometrists out in the field. One of the harder parts for the students is to find practical places with close supervision AND real optometry (this is for most of the continental optometry). Many colleagues out there just do not supervise and just sign cases or even do never care.*

SA Response of the Accreditation Panel

Pros - Clear and straight forward

Cons - none

Institution Visit

Pros - Very professional team

- *Very convenient visit!*
- *Good that we did not have to show up with the complete team. Otherwise it costs a lot of money and time for the institution. Good and useful timetable*

Cons - Timetable was not fixed early enough. It's very difficult to organise all these colleagues and externals in that short time. Avoid any shifts and movements of dates.

- *Do not demand for more externals than you did. Go for low numbers but make sure you get them. If you use to high numbers "willing schools" will try hard to find them, others just say "we couldn't find".*

Provisional results at the end of the visit

Pros - Good to have a first feeling at this time.

Cons - Make sure you tell them just as much as needed but not too much at this time, except you are already very sure about the outcome.

Dr František Pluháček and Dr Jaroslav Wagner, Palacky University, Olomouc

We would like to thank the ECOO for including the optometry study program at the Palacký University in the pilot project of the accreditation of the European Diploma in Optometry (EDO). The accreditation process was great experience and it provided important feedback on the study. The accreditation process and its results are a great motivation for the next development of the study.

We think that the accreditation process is well designed in general. The division of the parts A, B and C of the EDO to the subsections is a good idea. This division could be respected in the formal structure of the self-assessment questionnaire too.

We noted some small misunderstandings during the filling in and evaluating of the questionnaire caused by a different school system and its organisation in the Czech Republic as compared with ECOO requirements that are set according to the UK standard. However, all problems were solved continuously and successfully. If some requirements of the committee were unclear, they were explained adequately by the committee members. The presence of Pavel Šebek seems useful and effective with respect to the communication with the students and staff. The preliminary visit of the committee members was good for us – it helped us to clarify our idea of the accreditation process and its requirements.

The competencies of optometrists in the Czech Republic and the relevant minimal requirements on the study are in accord with the part A, B and C1. But the monitoring of the acquisition of competencies and its record is not required and monitored in detail by our educational system. Thus, during the preliminary phase we had to improve the system of monitoring of concrete competencies during the study and its recording in particular. It was a very positive step for the study. In this phase, the discussions and cooperation with John Siderov, Head of the Department of Visual and Hearing Sciences of Anglia Ruskin University, was very helpful and inspirational for us.

We have some questions about the impact of the accreditation process for the university and its graduates. Will the graduates exempt from the part A and B only when they ask for the complete EDO exam, or will they have recognised the part A and B as done separately? Will any special certificate of recognition of the relevant part of the EDO be bestowed upon the university and its graduates or will the graduates be registered just for the purposes of the EDO exam?

Dr Bente Monica Aakre, Buskerud University College, Kongsberg

Evaluation of the European Diploma accreditation (EDA) process at Buskerud University College, Department of Optometry And Visual Science

This document summarizes the EDA process at Buskerud University College (BUC). Each section is a reflection note from each stage of the process, and advice to future institutions that wish to apply for EDA is included.

Preliminary work

In the Visitors' report from the accreditation visit (Buskerud Report Norway Draft.doc) the timescale of the process is outlined. The first step described is dated October 2009 where BUC made the first formal contact and starts the accreditation process. However, for BUC the process started already in 2007, after the European Diploma had become competency based. We knew then that there was a possibility that the Norwegian education could apply for accreditation in the future, so we started to revise our syllabus and describe learning outcomes and competencies for each of our courses. In our opinion, making the course structure competency based was extremely useful in the process toward accreditation because it prepared

the institution for how the European Diploma works. Making the course structure competency based may sound as a straightforward task, but it proved to be a bit complicated, as will be explained below.

First, it is a mental exercise to describe a course by which knowledge each candidate has and which procedures they are capable to perform to a satisfactory level after passing the course rather than just describing the content. Previously, the aim of each course was often described as an aim for the lecturer: "...to give the student an introduction to the optical and physiological functions of the visual apparatus..." (from BUC "Physiological Optics" detailed course description, 2000). To make the study competency based, each course was revised and learning outcomes and competencies for the student was described. The European Diploma was a very useful tool in this process, and the wording was often taken straight from the Diploma. Changing the syllabus to be competency based was in many aspects just a wording exercise, but it took a long time to revise all courses. Parallel to this work, the content of each course was mapped against the European Diploma Syllabus. It proved to be extremely useful reviewing the detailed content of all our courses. We discovered that some topics were taught several times whilst other topics were lacking. This is natural, since traditionally each teacher have had the freedom to decide / weight which topics that should go into a course and it is a major task for the director of studies to have a detailed overview over what is taught. The accreditation process has served as quality assurance.

Second, many of the assessments needed to be changed. Learning outcomes had been defined, but not always tested for. Smaller, practical tests were therefore included in many courses, and the final practical examination was also changed to ensure that each competency was tested. We have run Objective Structured Clinical Examinations (OSCE) since 1999, because we regard this to be the most efficient and, for the students, a fair way to test for practical competencies. However, each station used to test more than one competency and the assessment was not objective enough. Our experience was that each station should test only a minimum of competencies, and that the timeframe allowed for each station needed to be short and. Today, the timeframe for each station is 10 minutes. The major drawback with station based examinations is the challenge of assessing the student's ability to see the full picture; to deduce, conclude and using his / her knowledge in new areas. To compensate for this, two stations of the OSCE today are discussions of patient cases. Still, in our opinion this drawback puts restrictions to how well students can be assessed for their overall skills, and we are continuously working to overcome this by including more VIMOCS into the written examinations and more case reports to be handed in by the students during all three years. Further, this competency is subjectively assessed by the supervisor at each eye examination the student undertakes at the patient clinic.

Third, we implemented log-books in line with the European Diploma to document the students' clinical experience with (real) patients. This was done in 2010.

The revision of our syllabus was in October 2009 considered to be sufficient to start the formal accreditation process. The process was delayed a year, since the project leader of the EDA process Dr. Bente Monica Aakre was on maternity leave.

The European Diploma as a working tool

We have used the learning outcomes and syllabus of the European Diploma (http://www.ecoo.info/mm/Dipl_E_LearningOutcomesandSyllabus.pdf) and the Portfolio/ Recognition of ECOO-European Diploma in United Kingdom (http://www.ecoo.info/mm/Dipl_E_Portfolio.pdf) as our main working tools in the EDA process. However, we do not think these two documents are ideal tools for this purpose. The syllabus is very detailed for some subjects and less detailed for others. It is preferable that the ED syllabus is as detailed as possible to ensure that all necessary topics are covered.

It would also be very useful if the diploma could indicate how large proportion each topic should occupy in the different subjects, and also how each subject is weighted against the other subjects. Because several members of staff have been members of the BoE, we are aware that the number of multiple choice

questions given for each part indicates the size of a subject- However, this is not obvious.

Further, the European Diploma does not indicate level of knowledge. Ideally, the learning outcomes and competencies should follow the European Qualification Framework (see section below). It would also make it easier for institutions to implement a portfolio or log-book if the description of the log-book and the documentation that should follow the log-book was more detailed. We believe that a new accreditation scheme should promote log-books because it allows for documentation of optometric experience that can be difficult for the universities to ensure that students get.

We have had an advantage in that Dr. Bente Monica Aakre has been a member of the European Diploma's Board of Examiners (BoE) for many years. In addition, Ms. Cecilie Bjørset and Dr. Ellen Svarverud (now also member of the BoE) have been examiners at the ED practical examinations in Cologne and Utrecht. For institutions wishing to get accreditation, it would be very useful to see the descriptions of the ED examination stations and the marking sheets, which are not yet available at ECOO's web-site. In addition, we believe internationalization and exchange of staff across European institutions is important to get input and inspiration to change the programme.

European Qualification Framework

The Norwegian Agency for Quality Assurance in Education (NOKUT) is responsible for accreditations of all Norwegian higher education programmes. From 2012, they will use the European Qualification Framework (EQF) when assessing educations. The implementation of EQF is a part of the Bologna declaration, agreed upon by the European institutions in 2008. All education institutions in Norway are obliged to implement the European Qualification Framework (EQF) in the course of 2012. The core of the EQF is to describe learning outcomes / competencies, i.e. what a learner knows, understands and is able to do. The purpose of the EQF is in many ways similar to the purpose of the European Diploma: "The EQF aims to relate different countries' national qualifications systems to a common European reference framework. Individuals and employers will be able to use the EQF to better understand and compare the qualifications levels of different countries and different education and training systems."

(http://ec.europa.eu/education/lifelong-learning-policy/eqf_en.htm) Agreed upon by the European institutions in 2008, the EQF is being put in practice across Europe. It encourages countries to relate their national qualifications systems to the EQF so that all new qualifications issued from 2012 carry a reference to an appropriate EQF level. To make the implementation of the EQF easier, it would be beneficial for institutions offering optometry programmes, seeking ED accreditation, if the European Diploma followed the EQF format and described the knowledge, skills and competencies for each subjects for a bachelor level (level 6).

The self assessment document

The self assessment document was not straightforward to fill in. Perhaps the form would benefit from a few more examples. There are so many forms of assessments and we were not always sure what we could/should fill in. We believe all clinical experience should be filled in, also when this is not formally assessed (but documented). We were initially very conservative and did not include all the eye examinations / tests the students do on each other in the pre-clinic, for example, although we got an opportunity to show this at a later stage in the process. A preliminary visit / talk / meeting would have been useful, as is also mentioned by the visitors in their report from the accreditation visit (Buskerud Report Norway Draft.doc). In the future, an EDA seminar at the ECOO meeting (or maybe EAEO meeting) might be useful for future applicants.

Internal organization of the work

Initially, one member of staff (Dr. Bente Monica Aakre) was given the full responsibility for the accreditation work. We do regard it extremely important to allocate time for the accreditation work, and one person should direct the work. However, in retrospect, we realize that several members of staff should have been more deeply involved in the work at an earlier stage. We recommend future

institutions that wish ED accreditation to form a working group constituted by director of studies, director of clinical studies/externship and one teacher from each year to facilitate a more efficient process. We did this at the later stages of the process and found it to work out excellently.

Conclusion

We have found the EDA process to be very useful. Although the visitors suggested that we will not get accreditation for all parts of the Diploma, we agree with their decisions and suggestions of improvements and we believe it will not prove difficult to fulfil the requested changes. We recommend and wish that other institutions will start an EDA process, since this will facilitate internationalization and exchange programmes for European optometry students and staff. Last, we regard the European Diploma accreditation of optometry programmes to be an essential part of the harmonization work of optometry in Europe

Issues Arising from the Pilot Accreditation Process

The Portfolio of Clinical Experience

During the Olten Visit questions had arisen about the interpretation of the current Portfolio and the Visitors agreed that this was in need of review. In discussion with the Executive Committee of ECOO it was clear that there was a concern that the review might suggest a change to the standard of the Diploma. Questions had also been raised about the status of holders of the Diploma who had qualified before the Portfolio had been introduced. A detailed discussion took place and the Visitors agreed on the following principles:

- a) The European Diploma (ED) consists since 2006 of a three part examination together with a Portfolio of clinical experience.
- b) The Portfolio is an integral part of the ED which is an examination based on competency and clinical experience.
- c) There is no intention on the part of the Visitors to change the current standards.
- d) The ED is by definition inevitably at a higher standard than that of most, if not all, of the professional entry standards in the individual countries of ECOO.
- e) The current Portfolio is too long and onerous. It has to cover clinical competencies that should have been, but were not, included in the in the examination. This error would be best corrected by revising the examination to include all necessary competencies. This would allow a short, simple and user-friendly portfolio to be designed.
- f) The Portfolio should be redesigned to provide for certified completion of a specified number of eye examinations together with a small number of case records demonstrating clinical practice at the level of the ED.
- g) The Portfolio may be completed as part of an undergraduate course, as a postgraduate or a combination of the two.
- h) It is suggested that every student should start a personal portfolio of clinical experience at the commencement of an undergraduate course.

A new draft of the Portfolio should be written, as soon as possible, based on the above principles.

Clinical Experience, Supervision and Record Keeping

In all three visits there were problems related to clinical experience, supervision and record keeping. The detail of these can be found in the individual reports. This is reflected in the non accreditation of subjects in Part C and the Portfolio.

Where supervision of externships was involved more emphasis could be placed on both the selection, assessment and monitoring of the supervisors. All the institutions were aware of this and in the process of reviewing their arrangements. Some supervisors thought that they should be giving more feedback on the strengths and deficiencies of the students

Clinical experience is provided by all the institutions but the scope of this was variable, all relied on externships to increase the number of unselected patients seen. Minimum numbers are required but the total numbers seen are not always recorded. This affected the accreditation of the Portfolio. It was disappointing that in many cases a full routine examination was not carried out on every patient.

Good record keeping is an essential part of the profession and, again, it was disappointing that in some cases the students' records of examinations and also the staff records of students' achievements were incomplete.

It was encouraging that there was ophthalmological input into all three courses and that two of the courses included experience gained in either hospital or private clinics. All the ophthalmologists who were interviewed were positive about the role of optometrists and would encourage more direct clinical experience of pathology.

Contact Lenses

Contact lens theory and practice is proposed for accreditation for all three courses, but there are concerns that the current trend to fit more and more daily disposable soft lenses and the consequent reduction in the prescribing of other soft lenses and in particular RGP lenses means that it is difficult for students to gain experience in fitting these types. All the departments made efforts to ensure that some experience was gained but this was generally minimal.

Credit Weightings

It had been hoped that comparing the credit weightings of the courses against a benchmark would give a good indication of individual subjects. However, they were very variable, sometimes due to the way in which modules were arranged. In one case this was for internal and historical reasons and the credit weightings were not reflected in the number of hours allocated to individual subjects.

Timescale

The development of the scheme was time consuming and this resulted in longer delays in responses than would be desirable in a permanent scheme. There are also potential delays in the timing of visits as these need to be held in term time. Two of the visits were held during the autumn semester which is very early in the academic year. The visit to Norway was more appropriate as it was closer to the end of the academic year. Future visits should be arranged in the spring.

Costs

The Pilot was funded jointly by ECOO and the participating institutions and the Visitors gave their time without charge. ECOO met the costs of the meetings, the Visitors gave their time freely and the institutions reimbursed the travel and subsistence costs for the visit. There were also the costs to the departments for the time in completing the Self Assessment Document and other documentation.

If ECOO proceeds with the scheme it is understood that the institution being accredited would meet the full costs of the visit. A draft budget shows the anticipated costs of the accreditation process to be €11,500 for a full visit or €5,500 for a provisional opinion without a visit.

Completing Full Accreditation

For those courses that have been partially accredited thought needs to be given as to how they can remedy the deficiencies. Provided that application is made within a reasonable time from the initial visit, say two years, it would be appropriate for the visitors to consider a partial application. This could be achieved by written submissions followed by a shorter visit by a smaller visiting panel. It is suggested that if such an application is made by any of the three pilot institutions this should be on the same financial basis as the initial visits.

Consideration will need to be given as to how graduates who have a partial accreditation by virtue of their qualification can complete the Diploma

Implications of the Introduction of a Qualification in Optics

Discussions are currently taking place to introduce a European Qualification in Optics. Given the experience with the Diploma, the introduction of another examination would be difficult if not impossible to justify. It is, therefore, suggested that the Qualification should be awarded by accreditation of courses.

Validity of Accreditation

The Visitors recommended that the approvals should not apply retrospectively to students who graduated before 2012, that the decision should be valid for a fixed period of five years or at an earlier date if there are substantial changes to the course.

Conclusions and Recommendations

Accreditation has an important role to play in the development of the Diploma to achieve the harmonisation of optometric education in Europe which, in turn, will facilitate both the achievement of a common scope of practice throughout the European Union and help to achieve free movement of professionals. Together with the proposed European Qualification in Optics it will create a ladder of educational opportunity for professional qualification.

The Pilot Accreditation Scheme has shown that there is a close correlation between the conclusions reached by the Visiting Panel based on the completion and analysis of the Self Assessment Document and the results of the Visit to the institutions.

One of the main problems facing the Visitors was the level of clinical competence required for a graduate to practice independently. The Portfolio of Clinical Experience is intended to provide evidence of this competence. At present it is both too complicated and ambiguous and is in need of urgent revision. This report sets out the principles for this. The Portfolio should be a life long record of clinical achievement which should commence at the beginning of undergraduate courses.

Based on the experience of the Pilot Accreditation Scheme the Visitors make the following recommendations:

1. That the Pilot Accreditation Scheme is endorsed and becomes the formal accreditation scheme for the ECOO European Diploma in Optometry.
2. That accreditation for the courses at the Fachhochschule Nordwestschweiz, Palacky University and Buskerud University College, as set out in the visit reports, be approved.
3. That, provided application is made within two years, the Fachhochschule Nordwestschweiz, Palacky University and Buskerud University College may apply for full accreditation without charge except for the visitors expenses.
4. Consideration should be given as to how graduates who have a partial accreditation by virtue of their qualification can complete the Diploma
5. That the Self Assessment Document be simplified.

6. As a matter of urgency, the Portfolio is reviewed to clearly indicate the level of clinical experience which is required for the award of the Diploma.
7. That a life long portfolio of academic and clinical achievement should be provided for each undergraduate student at the start of their course.
8. That a preliminary meeting be included as part of the Accreditation Scheme.
9. That applicants should be given the option of benchmarking or full accreditation.
10. That benchmarking should be offered to new or redesigned courses.
11. That visits should take place in the second half of the second semester.
12. That the costs of benchmarking and accreditation should be met by the applicants.
13. That any accreditation should not apply retrospectively and that decisions are valid for a period of five years, or an earlier date if there are substantial changes to the course.
14. That an Accreditation Panel be established as a sub-committee of the Board of Management of the Diploma and that a co-ordinator be appointed who would receive an honorarium.

Appendix 1

Members of Working Group and Visitors

Frank Buijs*

Former Head of Department, School of Optometry and Orthoptics, University of Applied Sciences Hogeschool Utrecht, The Netherlands
Member, Board of Management, European Diploma in Optometry

Member, Board of Trustees, European Academy of Optometry and Optics

Rune Brautaset BSc MPhil PhD

Director of Studies/Head of Unit Optometry Programs, Karolinska Institutet, Stockholm

Registered Optometrist, Norway and Sweden

Member Board of Examiners, The European Diploma

Robert Chappell OBE MPhil DSc FCOptom*

Past President, The College of Optometrists, The European Council of Optometry and Optics, The World Council of Optometry.

Past member the General Optical Council, Education Committee and Overseas Qualification Committee

Chairman, Board of Management, European Diploma.

Feike Grit, BSc DSc FCOptom FEAOO

Co-founder of the School of Optometry at Hogeschool Utrecht University of Applied Sciences (1988) and involved in the legislation and regulation of full scope optometry (2000) in The Netherlands.

Past president of Optometristen Vereniging Nederland, European Council of Optometry & Optics and European Academy of Optometry & Optics.

*members of working group

John Adrian M Jennings BSc MSc PhD FCOptom*

University of Manchester UK :Optometry Programme Director, 1992-2005

Quality Assurance Agency for Higher Education UK: Member of Optometry benchmarking panel, trained Optometry specialist assessor (England & Wales)

General Optical Council UK: Visitor to UK Optometry and Dispensing Optics training programmes, visitor to UK schemes for registration in Optometry & Dispensing Optics, visitor to European training institutions seeking GOC accreditation, Member of Education Committee

European Council of Optometry and Optics: Member of Board of Examiners European Diploma, Member of Board of Management European Diploma, Member of Accreditation Panel

Daniela Nosch

Graduated with a BSc.(Hons.) in Optometry from Cardiff University in 1999 and with a MSc. in Clinical Optometry from City University in 2006. She received the Diploma of Therapeutics (AS) by the College of Optometrists in 2007. Currently, she is a part-time PhD student at Cardiff University and a lecturer at the Optometry School of the University of Applied Science in Olten, Switzerland, where she is responsible for the clinic and teaches on clinical subjects. Previously, she worked for over ten years in specialised contact lens practice and general optometry at the Hospital eye service as well as in private practice in the UK, Germany and Switzerland.



**Guidelines for the accreditation of
European Optometric/Optics
qualifications for exemption from all or
part of the examinations of the
European Diploma in Optometry**

Part I:
The ECOO Accreditation
Scheme

January 2010

Part I: The Accreditation System

1. Introduction

The European Council of Optometry and Optics (ECOO) has a vision of Europe where there is easy access to affordable eye care provided by opticians and optometrists who practise autonomously to conserve and improve human vision

The legal scope of practice within the countries of ECOO varies from assembling spectacles to the autonomous management of eye disease. In the spirit of the Bologna declaration ECOO established the European Diploma in Optometry as a stimulus to the harmonization of European optometric education and clinical practice. The European Diploma is set at the Bachelor level in European Higher Education and provides a qualification appropriate for Optometric practice at Category 3 of the World Council of Optometry's four categories model. The countries of ECOO have adopted the Diploma as the "Gold Standard" for European Optometry.

As harmonization progresses an increasing number of schools and universities now base their curriculum on the Diploma. To foster this harmonization ECOO has established an **accreditation agency** to invite training institutions to benchmark their programmes against the European Diploma. The intention is to exempt graduates of approved programmes from part or all of the examinations of the European Diploma.

2. What will be the benefits of the accreditation process?

- All European Optometry/Optics programmes can be compared against an agreed international standard, the European Diploma.
- It will form the basis of a system for offering exemptions from parts, or all, of the European Diploma examinations to graduates of accredited programmes.
- Training Institutions will be encouraged to match their programmes to all or part of the competency-based European Diploma - this will help to harmonize Optometry within Europe.
- It may help training institutions, in the course of their national academic accreditation, if they can demonstrate that all or part of their programme meets the European standard.
- National "competent authorities" will find it easier to evaluate the training of applicants from another EU country – this will help to facilitate free movement of professionals.

3. What will actually be accredited?

- Because of the diversity of Optometry/Optics training within Europe the system will be Competency-based. The emphasis will be on the quality of the graduate rather than on details of the training process.
- The European Diploma is competency-based:
Competency is the ability to perform the activities within an occupation to the standard expected in employment.
Competencies are the **skills, attitudes and knowledge** needed to be able to practice.

In the context of this document **“Competency”** refers to the performance of the optometric/optical practitioner: the integration of skills, attitudes and knowledge that informs the practitioner in his/her professional activities. **“Competencies”** are the individual components of the skills, attitudes and knowledge that must be mastered to achieve **“Competency”**.

In training programmes the skills, attitudes and knowledge gained on successful completion of a module or course are referred to as the **“learning outcomes”** of that module or course. The student demonstrates the achievement of these **“learning outcomes”** by passing the corresponding module assessments (examinations) that are designed to test specifically for the acquisition of these **“learning outcomes”**.

“Learning outcomes” are typically defined in the format: *“On successful completion of the module the student will be able to”*. Hence **“Learning Outcomes”** can be conveniently matched against the European Diploma **“Competencies”**.

- The accreditation system will consider the skills, attitudes and knowledge achieved by graduates of the programme. The approach will be to benchmark the learning outcomes of the training programme being considered against the competencies of the European Diploma.
- Exemption will be given from those any or all of the three Parts of the European Diploma whose competencies can be shown to have been taught and assessed to the European Diploma standard within the training programme.

4. The Accreditation questionnaire.

- A questionnaire has been prepared that lists all the Competencies/Learning outcomes of the European Diploma. (**See Part II**).

- An Institution applying for accreditation completes the questionnaire as a self-assessment document indicating where these European Diploma outcomes are being taught and assessed within the programme being considered.
- The location of each competency/learning outcome within the programme is defined with respect to the Institution's formal Optometry/Optics **programme specification**.
- The relative importance of each competency/learning outcomes within the programme is given by the associated credit weighting.
- The method of assessment of each competency/learning outcome and its contribution to the final examination mark is indicated by reference to the programme's **examination document** or equivalent.

The questionnaire is long, but it is simple. It does not ask for details of the teaching process over many years. It asks for evidence of the quality of the graduate - the learning outcomes and the clinical/practical competencies achieved by graduates after successful completion of the programme.

5. Additional documentation in support of the questionnaire.

In addition to completing the questionnaire, please supply the following:

- Programme specification (or equivalent).
- Examination document (or equivalent).
- Student timetable, didactic and clinical.
- Records of students' clinical experience.

6. Analysis and verification of the Completed Questionnaire.

- The completed questionnaire is considered by ECOO and a provisional opinion is given as to possible exemptions.
- If the training institution wishes to continue with Accreditation a group of three ECOO nominated Opticians, Optometrists and Educationalists are invited to visit the Institution to verify the contents of the Questionnaire.
- The procedure to be followed on the visit by both the Visitors and the Institution is defined in the **Part III** of this document.

7. Guidance in Completing the Questionnaire.

- Guidance in the completion of the questionnaire is given in the examples from the questionnaire reproduced below in Tables 1 and 2.
*The Self-Assessment Questionnaire itself is **Part II** of this document.*
- In the questionnaire (and Tables 1 and 2 below) the first column lists all of the European Diploma Competencies in the twenty-four subjects that cover the curriculum.
- **Knowledge base of Competencies**
Some of the twenty-four subjects in the Competency-based European Diploma relate to the knowledge base that supports the competency and clinical skills.
- The requirement is to **“have an understanding of”** or **“a knowledge of”**.
- The achievement of **“understanding”** or **“knowledge”** can be acceptably demonstrated by indicating the formal written examination(s) in which the graduate demonstrated satisfactory understanding or knowledge of all aspects of the specific competency. An example of how this part of the questionnaire could be completed is given in Table 1.

Table 1. Knowledge base for the European Diploma competencies

Subject 1: Geometrical Optics			
Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into geometrical optics in order for the candidate to be able to understand and solve problems related to the eye and optical instruments/lenses, their function and correction. Knowledge and understanding should be demonstrated in the areas of: (1) refraction at single spherical or plane surfaces, (2) thin lenses, (3) thick lenses, (4) aberrations, (5) apertures, (6) spherocylindrical lenses, (7) thin prisms, (8) mirrors, and (9) ophthalmic and optical instruments. The aim is to achieve knowledge of the fundamentals of geometrical optics and how they apply to the human eye.			
Where in the programme.	Credit weighting.	Method of assessment.	
Geometrical Optics Course First Year See Programme Specification pXX	Geometrical Optics First Year Course XX Credits See Programme Specification pXX	Closed book written MCQ Examination. See Examination Document pXX	

- **Practical/Clinical Competencies.**
The remaining competencies relate to the clinical skills of the graduate.
There are a few exceptions (e.g. see Subject 5 (3) below),
- The clinical requirement is to **“have an ability to do”**.
- The achievement of **“an ability to do”** can be acceptably demonstrated by indicating the clinical examination(s) in which the graduate demonstrated competence in the specific skill required. An example of how this part of the questionnaire could be completed is given in Table 2.

Table 2. Clinical/practical European Diploma Competencies

Subject 5: Optical appliances					
<i>Clinical/practical competencies:</i>		Competency assessment		Clinical experience	
		How assessed.	Where in the programme.	Number of patients examined.	Record kept.
1	The ability to advise on and to dispense the most suitable form of optical correction taking into account durability, comfort, cosmetic appearance and lifestyle.				
2	The ability to measure and verify optical appliances, taking into account relevant standards.	Ophthalmic Dispensing Clinic Assessment See Examination Doc p xx	Ophthalmic Dispensing Third Year See Programme Specification p xx	12 patients	Student Clinic Logbook
3	<i>An understanding of prismatic effect, and the manipulation of lens form and setting to obtain the desired control of prismatic effect.</i>	(Complete as if a knowledge base topic)			

8. Programme details.

- Duration of programme
 Number of years: _____
 Full-time or part-time: _____
- Number of students each year: _____
- Is the programme competency-based? _____
- Is there a period of supervised clinical practice? _____
 How many weeks does it last? _____
 Is this organised by the training institution? _____
- Qualification awarded on graduation: _____
- National scope-of-practice (WCO 1-4): _____
- Legislation pending to change scope of practice? _____



European
Council of
Optometry
and Optics

**Guidelines for the accreditation of European
Optometric/Optics qualifications for exemption from all or
part of the examinations of the European Diploma in
Optometry**

Part II:

The Self-Assessment Document

January 2010

European Diploma Part A.

PartA. European Diploma	Subject areas
Visual Perception and Optical Technology	<ul style="list-style-type: none">• A1 - Visual perception• A2 - Optics• A3 - Optical appliances

Knowledge base for the European Diploma competencies

Clinical/practical European Diploma Competencies

Knowledge base for the European Diploma competencies Part A.

Subject 1: Geometrical Optics (European Diploma Section A2)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into geometrical optics in order for the candidate to be able to understand and solve problems related to the eye and optical instruments/lenses, their function and correction. Knowledge and understanding should be demonstrated in the areas of: (1) refraction at single spherical or plane surfaces, (2) thin lenses, (3) thick lenses, (4) aberrations, (5) apertures, (6) spherocylindrical lenses, (7) thin prisms, (8) mirrors, and (9) ophthalmic and optical instruments.

The aim is to achieve knowledge of the fundamentals of geometrical optics and how they apply to the human eye.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 2: Physical Optics (European Diploma Section A2 & A3)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into physical optics in order for the candidate to be able to understand and solve problems related to the eye and optical instruments/lenses, their function and correction. Knowledge and understanding should be demonstrated in the areas of: (1) wave optics, (2) interaction of light on matter, (3) polarization, (4) transmission through successive polarizers, and (5) image quality. The aim is to achieve knowledge of the fundamentals of physical optics and how they apply to the human eye.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 3: Visual Optics (European Diploma A3)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into visual optics in order for the candidate to be able to understand and solve problems related to image formation, both qualitative and quantitative, for the candidate to investigate the optics of the human visual system and refractive correction. Knowledge and understanding should be demonstrated in the areas of: (1) schematic eye models, (2) dioptrics of the eye, (3) entopic phenomena, (4) quality of retinal image, and (5) radiation and the eye.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 4: Visual Perception (European Diploma A1)

Learning outcomes: The candidates should demonstrate knowledge and understanding of the physical and physiological aspects of vision including the principals of psychophysical measurements, visual detection, visual discrimination, visual search and attention and binocular vision. Knowledge and understanding should be demonstrated in the areas of : (1) visual pathway, (2) colour vision, (3) space perception, (4) form perception, (5) light perception, (6) motion perception, (7) temporal perception, (8) basic psychophysical methods and theory, (9) psychophysical scaling methods and theory, and (10) signal detection methods and theory.

Where in the programme ?	Credit weighting ?	Method of assessment?

Clinical/practical European Diploma Competencies Part A.

Subject 5: Optical appliances (European Diploma Section A2 & A3)

<i>Clinical/practical competencies:</i>		Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to advise on and to dispense the most suitable form of optical correction taking into account durability, comfort, cosmetic appearance and lifestyle.				
2	The ability to measure and verify optical appliances, taking into account relevant standards.				
3	<i>An understanding of prismatic effect, and the manipulation of lens form and setting to obtain the desired control of prismatic effect.</i>				
4	The ability to manage non-tolerance cases.				

Subject 6: Occupational optics (European Diploma Section A3)

<i>Clinical/practical competencies:</i>		Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	<i>An understanding of eye protection regulations, and relevant standards, and the ability to advise on occupational visual requirements.</i>				
2	The ability to prescribe and dispense spectacles for vocational use.				

European Diploma Part B.

PartB. European Diploma	Subject areas
Management of Vision Problems	<ul style="list-style-type: none">• B1 - Refraction• B2 - Binocular vision• B3 - Contact lenses

Knowledge base for the European Diploma competencies

Clinical/practical European Diploma Competencies

Knowledge base for the European Diploma competencies Part B.

Subject 7: Vision and Aging (European Diploma Section B1 & B2)

Learning outcomes: The candidates should demonstrate knowledge and understanding and be able to discuss, test and explain the human development of the visual system and its response to aging. Knowledge, understanding and testing skills should be demonstrated in the areas of : (1) normal vision development in the infant and child, (2) normal motor development in the infant and child, (3) Normal cognitive and social development in the infant and child, (4) effects of early environmental restrictions, (5) normal changes in vision with ageing, (6) Anomalies of Child Development, (7) clinical techniques and tests to assess the development of children at various ages, (8) clinical characteristics of children who deviate from normal patterns of development, and epidemiology of developmental disorders (9) tests that diagnose vision problems which may be associated with deviations from normal patterns of development, (10) tests used by optometrists to determine a child's level of visual-perceptual development, (11) role of the optometrist and other disciplines in screening, evaluating,

Where in the programme ?	Credit weighting ?	Method of assessment?

Learning outcomes: managing and referring children who deviate from normal patterns of development, (12) anomalies of the Ageing Adult, (13) clinical characteristics of changes in perceptual function (non-visual) associated with ageing, (14) symptom profiles, clinical procedures, and tests identifying changes in vision, (15) clinical management of ageing patients with multisensory loss, (16) assessment of the need for referral and consultation with other disciplines, (17) colour vision anomalies by type and prevalence, (18) colour vision tests used for both screening and diagnosis of congenital colour vision anomalies, (19) conditions for colour vision testing, (20) societal implications of colour vision anomalies, and (21) assessment of the need for referral and consultation with other disciplines.

Where in the programme ?	Credit weighting ?	Method of assessment?

Clinical/practical European Diploma Competencies Part B.

Subject 8: Refraction (European Diploma Section B1)

<i>Clinical/practical competencies:</i>		Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to take an accurate history from patients with a range of optometric conditions.				
2	The ability to elicit significant symptoms.				
3	The ability to elicit relevant family history.				
4	The ability to elicit issues pertaining to the patient's general health, medication, work,				

	sports, lifestyle and special needs.				
5	The ability to impart to patients and explanation of their physiological or pathological eye condition.				
6	An ability to understand a patient's fears, anxieties and concerns about their visual welfare, the eye examination and the possible ocular side effects of medication.				
7	An ability to understand the patient's expectations and aspirations and manage empathetically situations where these cannot be met.				
8	The ability to communicate with patients who have poor, or non-verbal, communication skills, or those who are confused, reticent or who might mislead.				
9	The ability to communicate bad news to patients in an empathetic and understandable way.				
10	The ability to manage patients in a safe, ethical and confidential fashion.				
11	The ability to demonstrate an understanding of the legal, professional and ethical obligations of a registered optometrist.				
12	The ability to create and to keep clear, accurate and contemporaneous patient records.				
13	The ability to interpret and respond appropriately to existing records.				
14	The ability to make a judgement regarding referral and an understanding of referral pathways.				
15	The ability to refract a range of patients with common optometric problems by appropriate objective and subjective means.				
16	The ability to make appropriate prescribing and management decisions based on the refractive and oculomotor status.				
17	The ability to use appropriate ocular diagnostic drugs to aid refraction.				
18	<i>An understanding of the special examination needs of patients with learning and other disabilities.</i>				
19	<i>An understanding of the special examination needs of patients with severe visual field defects.</i>				

Subject 9: Low vision (European Diploma Section B1)

	<i>Clinical/practical competencies:</i>	Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to assess patients with impaired visual function.				
2	The ability to advise visually impaired patients about their impairment, disability or handicap.				
3	The ability to advise on the use of, and to dispense simple low vision aids including: hand and stand magnifiers, typoscope and hand held telescopes.				
4	The ability to advise on the use of and to dispense complex spectacle lens forms, including: multifocals, high corrections, and their applications to specific patient needs.				
5	<i>An understanding of the application of complex low vision aids, e.g., spectacle-mounted telescopes, CCTV.</i>				

Subject 10: Ocular motility and Binocular Vision (European Diploma Section B2)

	<i>Clinical/practical competencies:</i>	Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to assess binocular status using objective and subjective tests.				
2	The ability to manage a patient presenting with an incomitant deviation.				
3	<i>An understanding of the management of patients with an anomaly of binocular vision.</i>				
4	The ability to investigate and manage adult patients presenting with heterophoria.				
5	The ability to manage an adult patient with heterotropia.				
6	The ability to manage children at risk of developing an anomaly of binocular vision.				
7	The ability to manage children presenting with an anomaly of binocular vision.				

Subject 11: Contact lenses (European Diploma Section B3)

<i>Clinical/practical competencies:</i>		Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to insert and remove contact lenses and instruct patients in these procedures.				
2	The ability to fit soft contact lenses.				
3	The ability to manage the aftercare of patients wearing soft contact lenses.				
4	The ability to advise on contact lens materials and care regimes.				
5	The ability to manage the aftercare of patients wearing rigid gas permeable contact lenses.				
6	The ability to fit rigid gas permeable contact lenses.				
7	<i>An understanding of, and the ability to fit contact lenses to patients with astigmatism.</i>				
8	<i>An understanding of the techniques used in fitting contact lenses to advise patients requiring complex visual correction.</i>				

Most of the Investigative techniques relates to Part C but some of it relates to Refraction and Contact lenses. Use this scheme only for the Refraction/Contactlens relation!

Subject 12: Investigative techniques (European Diploma Section B1 & B3 and C3 for ocular abnormality, see there)

<i>Clinical/practical competencies:</i>		Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to assess a patient's colour vision and to determine whether it achieves the standards required by various vocational groups.				
2	The ability to use instruments in ocular examination and to understand the implications of the findings in terms of subsequent examination techniques.				
3	The ability to assess the external eye and adenexa.				
4	The ability to assess the tear film				
5	The ability to assess pupil reactions.				
6	The ability to use a slit lamp.				

7	The ability to use diagnostic drugs to aid ocular examination.				
8	The ability to examine fundi using direct and indirect techniques.				
9	The ability to use instruments to measure corneal curvature.				
10	The ability to investigate visual fields and to analyse and interpret the results.				
11	The ability to use a contact tonometer to measure intraocular pressure and analyse and interpret the results.				
12	The ability to make an assessment of the fundus in the presence of media opacities.				
13	The ability to use a slit lamp to detect anterior chamber signs of ocular inflammation.				
14	The ability to assess visual fields of patients with reduced visual acuity.				
15	<i>An understanding of techniques for assessment of vision in infants</i>				
16	<i>An understanding of the assessment of visual function, including the use of specialist charts for distance and near vision, and the effects of lighting, contrast and glare.</i>				

Subject 13: Paediatric Optometry (European Diploma Section B1 & B2)					
<i>Clinical/practical competencies:</i>		Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	Demonstrate an understanding of techniques for assessment of vision in infants.				
2	The ability to assess children's visual function using appropriate techniques.				

European Diploma Part C.

PartC.	Subject areas
General Health and Ocular Abnormality	<ul style="list-style-type: none">• C1 - Biology• C2 - Ocular biology• C3 - Ocular abnormality

Knowledge base for the European Diploma competencies

Clinical/practical European Diploma Competencies

Knowledge base for the European Diploma competencies Part C.

Subject 15: Anatomy and Histology (European Diploma Section C1)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into general anatomy and histology. Knowledge and understanding should be demonstrated in the areas of: (1) head and skull (muscles, arteries, veins, lymphs, cranial nerves, sinuses, vestibular system), (2) cells (membranes, compartments, organelles, stem cells, cell differentiation), and (3) tissues (epithelium, glands, connective tissue, muscle, blood, nerves).

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 16: Neuroscience (European Diploma Section C1)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into the area of neuroscience. Knowledge and understanding should be demonstrated in the areas of: (1) electrophysiology of the nerve cells (resting and action potential, synapses, receptors), (2) neuroanatomy (brain, cranial nerves, spinal cord, autonomic nervous system), and (3) neurophysiology (reflexes, pain and sensation, vestibular system, proprioceptive sensation, autonomic nervous system).

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 17: General Physiology and Biochemistry (European Diploma Section C1)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into physiology and biochemistry. Knowledge and understanding should be demonstrated in the areas of: (1) respiration, (2) gastrointestinal activity, (3) muscles, (4) body fluids, (5) renal system, (6) circulatory system, (7) endocrine system, (8) proteins, (9) carbohydrates, (10) lipids, (11) molecular biology, and (12) bioenergetics.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 18: General Microbiology and Immunology (European Diploma Section C1)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into general microbiology and immunology. Knowledge and understanding should be demonstrated in the areas of: (1) virology, (2) bacteriology, (3) mycology, (4) parasitology, (5) antigens and antibodies, (6) complement system, (7) non-specific immunity, (8) specific immunity, (9) hypersensitivity response, and (10) autoimmunity.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 19: General Pharmacology (European Diploma Section C1)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into general pharmacology. Knowledge and understanding should be demonstrated in the areas of: (1) pharmacokinetics, (2) pharmacodynamics, (3) drugs acting on the autonomic nervous system, (4) analgetics and local anesthetics, (5) antipyretics and anti-inflammatory drugs, (6) antibiotics, (7) antiviral drugs, (8) antiallergic drugs, (9) drugs affecting respiratory and cardiovascular system, (10) antiseptics, disinfectants, preservatives, (11) common systemic side effects of medications, and (12) general health.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 20: Pathology and General Medical Disorders (European Diploma Section C3)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into general pathology and general medical disorder and how they can affect the eye. Knowledge and understanding should be demonstrated in the areas of: (1) inflammation and repair, (2) cardiovascular diseases and the eye, (3) blood diseases and the eye, (4) endocrine diseases and the eye, (5) neurologic diseases and the eye, (6) nutritional disorders, (7) rheumatoid disorders, Vasculitis and Collagenosis, (8) infectious diseases, (9) tumours, and (10) congenital and hereditary conditions.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 21: Epidemiology and Biostatistics (European Diploma Section C2)

Learning outcomes: The candidates should demonstrate fundamental knowledge and insight into epidemiology and biostatistics, not only for application in laboratory experiments and research, but also for understanding how to interpret clinical evidence in optometric practice. Knowledge and understanding should be demonstrated in the areas of: (1) epidemiological data (incidence and prevalence, odds, relative risk, central tendency and variability), (2) screening concepts (sensitivity and specificity, predictive value, yield), (3) research design, and (4) morbidity and mortality.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 22: Ocular anatomy and Physiology (European Diploma Section C2)

Learning outcomes: The candidates should demonstrate knowledge, understanding and skills, and be able to discuss and explain in detail the anatomy and physiology of the eye. Knowledge and understanding regarding structure and function, and development and aging, should be demonstrated in the areas of: (1) orbita, (2) extraocular muscles, (3) ocular blood supply, (4) ocular and orbital nerves, (5) eyelid, (6) eyebrow, (7) conjunctiva, (8) lacrimal system, (9) cornea, (10) sclera, (11) anterior chamber and angle, (12) iris, (13) pupil and posterior chamber, (14) ciliary body, (15) lens and zonule, (16) choroids, (17) vitreous, (18) retina, (19) optic nerve, and (20) visual pathway.

Where in the programme ?	Credit weighting ?	Method of assessment?

Subject 23: Ocular Pharmacology (European Diploma Section C2)

Learning outcomes: The candidates should demonstrate knowledge, understanding and skills, and be able to discuss and manage patients when diagnostic drugs are indicated. Knowledge, understanding and testing skills should be demonstrated in the areas of : (1) factors affecting drug absorption, (2) cycloplegics, (3) mydriatics, (4) miotics, (5) local anaesthetics, (6) staining agents, (7) antimicrobial agents, (8) solutions used in contact lens work, (9) decongestants, antihistamines and anti-inflammatory components, (10) ocular effects of drugs used systemically, (11) first-aid and emergency measures used by the optometrists, and (12) formulation of eye preparations.

Where in the programme ?	Credit weighting ?	Method of assessment?

Clinical/practical European Diploma Competencies Part C.

Most of the Investigative techniques relates to Part C but some of it relates to Refraction and Contact lenses (B1 & B3). Use this scheme only for the General health/Ocular abnormality relation!

Subject 12: Investigative techniques (European Diploma Section C3 and section B1 & B3 for contact lenses and refraction i.e. , see there)

Clinical/practical competencies:		Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to assess a patient's colour vision and to determine whether it achieves the standards required by various vocational groups.				
2	The ability to use instruments in ocular examination and to understand the implications of the findings in terms of subsequent examination techniques.				
3	The ability to assess the external eye and adenexa.				
4	The ability to assess the tear film				
5	The ability to assess pupil reactions.				
6	The ability to use a slit lamp.				
7	The ability to use diagnostic drugs to aid ocular examination.				
8	The ability to examine fundi using direct and indirect techniques.				
9	The ability to use instruments to measure corneal curvature.				
10	The ability to investigate visual fields and to analyse and interpret the results.				
11	The ability to use a contact tonometer to measure intraocular pressure and analyse and interpret the results.				
12	The ability to make an assessment of the fundus in the presence of media opacities.				
13	The ability to use a slit lamp to detect anterior chamber signs of ocular inflammation.				
14	The ability to assess visual fields of patients with reduced visual acuity.				
15	<i>An understanding of techniques for assessment of vision in infants</i>				
16	<i>An understanding of the assessment of visual function, including the use of specialist charts for distance and near vision, and the effects of lighting, contrast and glare.</i>				

Subject 14: Refractive Surgery (European Diploma Section C3)					
	<i>Clinical/practical competencies:</i>	Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to properly advise on refractive surgery options and possible outcomes.				
2	The ability to identify corneal ectasia and dystrophies and other contraindications to refractive surgery.				
3	<i>An understanding of which techniques that is necessary in the pre-operative assessments.</i>				
4	The ability to perform the techniques used in the pre-operative assessments.				
5	The ability to manage the aftercare of patients having undergone refractive surgery.				
6	The ability to identify post-operative complications.				

Subject 24: Abnormal Ocular Conditions (European Diploma Section C3)					
	<i>Clinical/practical competencies:</i>	Competency assessment		Clinical experience	
		How assessed ?	Where in the programme ?	Number of patients examined ?	Record kept ?
1	The ability to interpret and investigate the presenting symptoms of the patient.				
2	The ability to develop a management plan for the investigation of the patient.				
3	The ability to identify external pathology and offer appropriate advice to patients not needing referral.				
4	<i>An understanding of risk factors for common ocular conditions.</i>				
5	The ability to recognise common ocular abnormalities and to refer when appropriate.				
6	The ability to manage a patient presenting with a red eye.				
7	The ability to manage a patient presenting with reduced vision.				
8	The ability to identify abnormal colour vision and to appreciate its significance.				
9	The ability to manage a patient presenting with cataract.				

10	The ability to evaluate glaucoma risk factors, to detect glaucoma and refer accordingly.				
11	The ability to manage a patient presenting with macular degeneration.				
12	The ability to recognise, evaluate and manage diabetic eye disease and refer accordingly.				
13	The ability to evaluate and manage a patient presenting with symptoms suggestive of retinal detachment.				
14	<i>An understanding of the treatment of a range of common ocular diseases.</i>				
15	The ability to recognise manifestations of systemic disease.				
16	<i>An understanding of the role of the optometrist in shared care schemes.</i>				
17	The ability to assess symptoms and signs of neurological significance.				
18	The ability to manage patients presenting with sight-threatening eye disease.				
19	An ability to recognise adverse ocular reactions to medication.				



European
Council of
Optometry
and Optics

**Guidelines for the accreditation of
European Optometric/Optics
qualifications for exemption from all or
part of the examinations of the
European Diploma in Optometry**

Part III:

The Accreditation Visit

January 2010

III. The Accreditation Visit

1.0 Introduction

Having completed the accreditation questionnaire and obtained a provisional opinion as to possible exemptions from parts of the European Diploma training institutions may apply for the exemptions to be approved formally. Formal approval will require a visit by a group of three ECOO nominated Opticians, Optometrists and Educationalists to assess the quality of the teaching programmes, the clinical facilities and the staffing arrangements.

Part III offers guidance to:

- Training establishments about the expectations of the ECOO visitors in specific areas of student education and training
- The ECOO visitors in their audit of the optical and optometric training programmes. The visitors will consider evidence of the level of education and training and come to an overall judgement based on these guidelines.

Sections 2-12 of Part III indicate the nature of the information that the ECOO visitors will require for consideration before the visit and in the course of the visit. The visitors will use these sections as the basis for their audit of the education and training that the institutions are providing. The sections describe, in general terms, what ECOO expects training programmes to demonstrate in order to obtain accreditation and exemption from all or part of the European Diploma.

N.B. These guidelines are written to cover all the competencies of the European Diploma. The self-assessment document indicates which ECOO competencies are covered in the particular training programme being considered.

2.0 Optometry/Optics Programme Construction

2.1 Design and Structure

While not wishing to be prescriptive about the detailed structure of the programme, the Visitors will expect the programme to be well structured. The theoretical teaching should be supported by, and integrated with, appropriate supervised clinical experience.

At least 30% of the programme should involve practical applications in clinical settings. The latter stages of the programme, when the students develop higher levels of knowledge and clinical skills, should comprise a significant part (60%) of the assessment for the final classification of the qualification.

2.2 European Competencies and Learning Outcomes

The Visitors will collect evidence to confirm that the European Diploma Competencies and Learning Outcomes claimed in the Self-Assessment document are achieved by each and every student who successfully completes the programme.

Evidence will be sought from a variety of sources including, but not limited to, the curriculum specification, examination results, external examiners' reports, institutional and national quality reviews, the national professional association, representatives of employers of graduates, teaching staff, recent graduates and current students.

The training institution should demonstrate:

- how the programme matches those ECOO European Diploma Competencies for which exemption is claimed in **Part II**, the self assessment.
- precisely where the various elements of the Competencies are covered in its programme
- that each and every student achieves all of these European Diploma competencies.

2.3 Clinical Work

Each student should personally maintain an accredited record (a logbook or portfolio) of all their clinical experience. This record should provide an opportunity for students to reflect on their strengths and weaknesses and include guidance and feedback from clinical supervisors.

The Training Institution should keep a central database of all the students' experience with patients. In this database a distinction should be made between "real clinical" patients, i.e. members of the general public attending the clinic for optometric/optical care, and "pre-clinical" patients, i.e. volunteers or fellow students who assist in the training by acting as patients in student clinics.

2.4 Clinical Governance

Visitors will expect to meet with the member of staff responsible for clinical governance issues.

The training institution should have a clinical policy document defining adequate supervision during clinical experience and the amount and range of practical experience that is necessary for the students to achieve the claimed competencies.

The Visitors will expect there to be a robust system in place to ensure that these defined minima are met by all students.

3.0 Teaching Learning and Assessment

3.1 Teaching and Learning Techniques

It is expected that both clinical and non-clinical teaching and learning should incorporate a range of contemporary practices that are relevant to the needs of the discipline of optometry/optics, the present needs of the students and to the likely future demands of primary and secondary health care.

The Visitors will welcome a variety of approaches to teaching and the assessment of learning as appropriate to the particular topics, including:

- lectures
- practical classes
- seminars
- workshops
- tutorials
- computer-aided learning
- clinical sessions and visits
- the development of students' ability to independently manage clinical situations
- ways to develop students' skills of independent self-learning, self management, team working and peer assessment
- opportunities to participate in vision/optics.

3.2 Assessment Structures and Procedures

It is expected that assessment structures and procedures should:

- Include formative and summative assessments to promote scholarship and knowledge, for example, examinations (MCQs, short answers or essays), projects, dissertations and other assignments.
- Equip students appropriately for prospective first entry into a variety of clinical optometric/optics environments through the formal assessment of competence in clinical subjects either by a series of tests taken under examination conditions over the programme or by a final examination at the end of the programme.
- Provide sufficient feedback to students to enable maximum learning and achievement.

4.0 Student Progression and Achievement

4.1 The institution should provide the following information for the past three cohorts of students:

- entry requirements and entry grades
- numbers applying and accepted for each of the last three years
- qualifications awarded
- employment gained

4.2 If applicable, the Institution should provide data on:

- the numbers and percentage of students who, following graduation from the institution, passed examinations in optometry/optics recognised by the national “competent authority”.

5.0 Monitoring and Evaluation

ECOO expects the institution to indicate that it has a commitment to continuing quality enhancement and has in place quality enhancement procedures.

The institution should demonstrate that the following procedures are in place, that the procedures are effective and that satisfactory records are kept:

- a system of regular input from academic and professional experts external to the training institution whose advice is sought on the content, standard and contemporary relevance of the programme. The visitors would expect to see records of these discussions for the previous five years.
- a Board of Examiners with appropriate Programme and Assessment Regulations,
- appropriate mechanisms for receiving and responding to feedback from staff and students,
- arrangements for programme management and consultation (e.g. a Programme Board of Studies, Staff-Student Consultative Committee),
- an annual monitoring process, correlating the minutes of programme meetings, to include due discussion of programme data and statistics,
- a system of periodic national accreditation.

6.0 Staffing

6.1 Management and Leadership of the Programme

The academic unit responsible for the optometry/optics programme should have a senior, professionally qualified academic in a leadership position, who would normally chair the Programme Committee or Board. This person should have appropriate technical and administrative support.

6.2 Teaching Staff Information

The staff/student ratio for the programme. Regardless of the number of students, four, full-time, professionally qualified staff are usually necessary for satisfactorily running an optometry/optics programme.

It is expected that teacher-practitioners and visiting lecturers from community or hospital optometry/optics practices, and appropriate persons from other health care professions, should be involved in the teaching programme.

The following information is required:

- the names of all staff teaching the programme along with their roles and their qualifications,
- the teaching hours to the optometry/optics programme of each named staff member,
- the total teaching hours for each person named on the above staffing list including contributions to other programmes within the Institution,
- and an indication of any impending changes to staffing, facilities or student numbers.

6.3 Support Staff

The number of staff supporting the optometry programme and the clinic should be listed. These should include administrative assistants, secretaries, clinic receptionists, clinical administrators and technical support staff.

6.4 Staff Development

The institution should provide evidence of staff development programmes for staff employed in optometry/optics programmes.

7 Resources and Facilities

7.1 Physical Space

The institution should provide appropriate equipment for the clinical and practical training within the programme.

Specifically, the following information should be provided:

- a detailed list of all the physical space occupied by the optometry programme, showing the area in square metres for all dedicated space including laboratories, pre-clinics and main clinical facilities
- the aggregate space under each category of lecture/tutorial rooms, teaching laboratories, research laboratories, pre-clinic space and clinic space
- a detailed description of the clinic facility including the number of consulting rooms available, the associated clinical investigation space, the size and disposition of the dispensing area, the provision of workshop facilities and the size of the reception and front office facilities.

7.2 Clinic Equipment

The institution should provide a list of specialist equipment provided for the optometry/optics programme.

7.3 Learning Resource Strategy

The institution should provide its policy statement on the utilisation of traditional and modern learning resources.

The range of Library and Information Technology facilities e.g. library books and journals, electronic information systems and information technology equipment systems should be listed.

8.0 The Visit Format

8.1 Panel

The visiting panel of three will comprise of the following:

- One optometrist who is involved in optometric education
- One optometrist who is involved in clinical practice
- One educationalist, not necessarily an optometrist.
- The chairman will be a member of the panel

8.2 Schedule of Meetings

The Visit will last no longer than three days.

The panel will wish to meet the following persons:

- The head of the institution.
- The head of the optometry/optics programme.
- The clinic manager
- The staff teaching on the programme
- Support staff
- Staff from relevant institutional services (e.g. Library, IT)
- Representatives of students from each year
- A sample of recently qualified graduates
- A sample of employers of graduates

The panel will wish to observe the following

- Teaching sessions.
- Practical and clinic sessions.
- The equipment and facilities.

During the visit the panel will wish to see examples of assessed student course work, examination papers, student logbooks of patient experience.

9.0 Timescale of the Accreditation process.

Week 1

- An agreement to start the process between ECOO and the Institution.
- The issuing of the Guidelines and a request for the preliminary documentation.
- The selection and briefing of the Visitors

Week 8

- Receipt of documentation from Institution

Week 12

- Draft agenda and visit timetable for agreement with the Institution.
- Request any further documentation required by the Visitors.

Week 20

The visit to the institution takes place.

Week 24

- The first draft of the written report considered and agreed by the Visitors.

Week 28

- The agreed report is sent to the institution for factual correction.

Week 30

- The Final version of the report is sent to the Institution and the ECOO Diploma Board of Management.

Week 34

- Approval of the report by the ECOO Diploma Board of Management and formal award of exemptions.

10.0 The Written Report

The written report will take the following format:

- A brief description of the Institution.
- A description of the programme structure and organisation.
- A systematic comparison of the learning outcomes and clinical training of the programme with the European Diploma Competencies.
- A recommendation of the extent of accreditation to be granted.
- The period of accreditation and the date for re-accreditation.
- Minutes of the meetings.

11.0 Preliminary Information from the Training Institution.

Particulars of the Institution and the Programme.

- Name and address of the institution.
- Details of the nature, size and organisation of the establishment.
- Number of departments or equivalent units.
- Total number of students in the Institution.
- Name of department, or equivalent, teaching Optometry/Optics.
- Number of students studying Optometry/Optics.
- Level of the qualification awarded in Optometry/Optics.
- Number of years study in the Optometry/Optics programme.
- Full-time or part-time study.
- Number of weeks in the academic year, including exams.
- Name(s) of Optometry/Optics programme(s)
- Name and qualifications of the Head of the Optometry/Optics programme.

The institution is asked:

- to complete the comparison of Competencies in Part B.
- to demonstrate how the statements in Part C Sections 2-7 are satisfied.
(This may be best achieved by addressing the issues raised in each section in the same sequence as presented in the Part C.)
- to provide written evidence supporting each section or to indicate where the evidence is located in existing institutional documents. e.g. internal or external programme reviews, the programme specification, the examination regulations, student handbook, clinic handbook, etc.

Finally, the Institution should indicate the level of accreditation that it seeks against the European Diploma in Optometry and the Parts and/or Sections from which it seeks exemption.

Please note:

In completing the information required by ECOO it is recognised that the guidelines are written to cover all the competencies of the European Diploma and that that many programmes will not cover all aspects of the European Diploma.

In the self-evaluation the Institution should clearly indicate which of the European Diploma Competencies they consider are achieved by graduates of the Optometry/Optics programme.

Appendix 3



The European Council of Optometry and Optics

Pilot Accreditation Process

For Exemption From The Examinations

And Portfolio of

The European Diploma in Optometry

Report of a Visit to the Optometry School

at the

Fachhochschule Nordwestschweiz

Olten

October 19th - 21st 2011

Visitors

Rune Brautaset

Robert Chappell

Feike Grit

Adrian Jennings

Introduction

At its Autumn meeting in 2009 the General Assembly of the European Council of Optometry and Optics, ECOO, agreed to ask the Board of Management of the European Diploma in Optometry, the Diploma, to undertake a pilot project to investigate the feasibility of designing a process which would allow member countries to apply for their courses in optometry and optics to be benchmarked and subsequently accredited against the Diploma. The accreditation could be full or partial.

A small working group, Frank Buijs, Bob Chappell and Adrian Jennings designed a scheme in three sections which is attached as **Appendix A**. Four countries are currently participating in the scheme, the Czech Republic, Germany, Switzerland and Norway.

The first pilot accreditation process has now been completed at the Fachhochschule Nordwestschweiz in Olten, Switzerland. This report sets out the process that has been used from the initial application to the conclusion of the Visit and the recommendations of the Visitors.

The outline of the process and the timescale was:

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| 11.11.2010 | The Olten Optometry School applied to join the Pilot Project. This application was accepted and details of the scheme sent to them. |
| 30.03.2011 | The School requested a meeting to discuss the accreditation process. Bob Chappell and Adrian Jennings visited Olten for one day. |
| 15.08.2011 | The completed Self-Assessment for was received with the Module Specifications and other supporting documents. |
| 22.09.2011 | The Accreditation team, Frank Buijs, Bob Chappell, Feike Grit and Adrian Jennings, met in Utrecht to consider provisional exemptions. |
| 11.10.2011 | The Olten School was informed of the provisional opinion of the Visitors as to the extent of the exemption for the Olten BSc Optometry Graduates from the examinations of the European Diploma. |
| 19.10.2011 | Formal Accreditation Visit to Olten by Rune Brautaset, Bob Chappell, Feike Grit and Jennings. |
| 21.10.2011 | A summary of the Visitors Recommendations for Exemption presented to the Head of Department of the School of Optometry, Olten. |
| 11.11.2011 | Recommendations presented to the Board of Management of the European Diploma and the ECOO Executive Committee for approval |

The Visitors would like to express their thanks to Professor Roger Crelier, Head of Department and his staff, in particular Stephane Hinni and Daniele Nosch for their enthusiasm, support, co-operation and understanding in undertaking this Pilot Accreditation.

The report is divided into three sections and sets out the process from the initial enquiry to the formal visit.

Section 1 – The Accreditation System

Following the receipt of the application from the Fachhochschule a number of questions were asked about the process and it was agreed that Bob Chappell and Adrian Jennings would visit Olten to explain the process in more detail, to answer questions and also to give the Visiting Panel preliminary information and to identify potential problem areas at the earliest opportunity.

The School had produced very detailed briefing documents which were extremely helpful to understanding the structure of the Course. A draft of the Self-Assessment Document has been produced which mapped the competencies of the course against those of the Diploma.

One of the problems that was that of translation. This has been identified as a common problem as the Panel work in English. The extent of translation was agreed at the minimum acceptable level.

The extent of clinical work undertaken by the students was discussed together with its supervision and evaluation.

One major problem that was found related to the accreditation of Part A practical experience. The entry requirements for the course included the Augenoptiker EFZ qualification which included workshop and dispensing experience. As a result no such experience was included in the BSc course. It was made clear that if the School wanted exemption from the Part A practical section then they would have to have evidence that, as part of the BSc course these competencies had been assessed. It was not the responsibility of the Visitors to assess and accredit another course.

Section 2 – The Self Assessment Document

Following the informal discussions referred to above the School submitted the Self Assessment Document, **Appendix B**. This was analysed. Suggestions had been made to deal with the Part A Practical problem. This required all students, irrespective of their prior qualifications, to undertake 6 dispensings, including workshop practice across a range of different lens types and frame designs and materials.

A meeting of the Visitors took place in Utrecht which examined the completed Self Assessment Document in detail and raised a significant number of questions which were subsequently sent to the School asking for a response before the Visit took place.

These questions related to:

The Accreditation Document Section 1

- Student numbers
- The total number of ECTS Credits
- The accreditation of the four year apprenticeship qualification
- The maintenance of logbooks or portfolios
- The numbers of students admitted without the apprenticeship qualification
- How much clinical experience was gained in the School Clinics and how much during externships
- What was the range of patient experience
- How much time do students spend working under the supervision of an ophthalmologist either in School or Ophthalmology clinics.
- How is the external supervised practice organised
- Over what time and under what circumstances are diagnostic drugs used

The Accreditation Document Section 2, The Self Assessment Document

- What is the design of the examinations, who sets and marks the examinations. Are they moderated and is there any external examiner input.
- Are there practical or clinical examinations at the end of each semester
- Do these marks contribute to the formal, end of year, mark and to the degree award
- If the student fails what is the process for re-taking the failed examinations?
- What happens if they fail to fulfil conditions such as attendance at clinics?
- If necessary for accreditation could all students take a particular option module
- Are national accreditation reports from previous years available.

Part A: Optical Technology

- Is there any evidence of clinical and practical experience covering dispensing and workshop experience?
- Occupation Optics (ED Subject 6) Clinical and practical – how is this assessed

Part B: Management of Vision Problems

- Vision and Ageing (ED Subject 7) – is there any theoretical teaching in paediatrics and ageing?

- Ocular Motility & Binocular Vision (ED Subject 10) why are zero patients shown in subsection 7 but 5 patients claimed in paediatrics?
- Investigative Techniques (ED Subject 12) Subsections 7 & 8 – what opportunity do students have to use diagnostic drugs. Subsections 13 & 14 – are there no opportunities for patient experience
- Paediatric Optometry (ED Subject 13) – Clinical/Practical – is this patient experience also suitable for binocular vision (ED Subject 10 – subsection 7)

Part C: General Health and Ocular Anatomy

- General Pharmacology (ED Subject 19) – Knowledge Base Subsection 12 – Are general health concepts covered in APat1 and APat2
- Epidemiology and Biostatistics – Knowledge Base Subsections 1 & 4; Are these subjects covered in BiStu?
- Investigative Techniques (ED Subject 24) – Clinical/Practical Subsections 7,8,11 – What opportunity do the students have to use diagnostic drugs? Subsections 13,14 – is there no opportunity for patient experience?
- Abnormal Ocular Conditions (ED Subject 24) – Clinical/Practical – where are these patients being examined, department clinic, private clinic, public hospital?
- Under what supervision are these patients being examined?
- What is the nature of the clinics and the patients?
- After graduating to what extent are the graduates capable of independently managing ocular disease in a primary care setting?
- Subsection 17 – what about incomitant strabismus, optic neuritis and MS.

This section is illustrative of the depth of analysis of the self assessment document. Responses were received from the School and on the basis of these a provisional list of the proposed accreditation was sent to the school. Questions which remained unanswered or where the answers were unclear would be dealt with at the visit after which final recommendations on the scope of accreditation would be made. The proposal as sent to the School appears below:

Response of the Accreditation Panel to the Self-Assessment document and other information provided by the Department.

1. Provisional opinion as to exemption for Olten Optometry Graduates from the Examinations of the European Diploma.

This provisional opinion is based on the Panel's analysis of the documents supplied. Evidence found during the Verification Visit may result in changes in the Panel's recommendations. Formal exemption can only be given after the Verification Visit.

Part A: Optical Technology

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part A 1	Optics	Subject 1: Geometrical Optics	Provisional Exemption
		Subject 2: Physical Optics (also A 2)	Provisional Exemption
		Subject 5: Optical appliances (also A 2)	<u>No exemption</u> For review at visit
Part A 2	Optical Technology	Subject 2: Physical Optics (also A 1)	Provisional Exemption
		Subject 3: Visual Optics	Provisional Exemption
		Subject 5: Optical appliances (also A 1)	<u>No exemption</u> For review at visit
		Subject 6: Occupational optics	<u>No exemption</u> For review at visit

	<u>Knowledge base</u> for the European Diploma competencies
	<u>Clinical/practical</u> aspects of European Diploma competencies

Part B: Management of Visual Problems

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part B 1	Refraction	Subject 7: Vision and Aging (also B 2)	Provisional Exemption
		Subject 8: Refraction	Provisional Exemption
		Subject 9: Low vision	Provisional Exemption
		Subject 12: Investigative techniques (also B 2)	Provisional Exemption
		Subject 13: Paediatric Optometry (also B 2)	Provisional Exemption
Part B 2	Binocular Vision	Subject 7: Vision and Aging (also B 1)	Provisional Exemption
		Subject 10: Ocular motility and Binocular Vision	Provisional Exemption
		Subject 13: Paediatric Optometry (also B 1)	Provisional Exemption

Part B 3	Contact lenses	Subject 11: Contact lenses	Provisional Exemption
		Subject 12: Investigative techniques (also B 1)	Provisional Exemption
Part B 4	Visual Perception	Subject 4: Visual Perception	Provisional Exemption

Part C: General Health and Ocular Abnormality.

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part C 1	Biology	Subject 15: Anatomy and Histology	Provisional Exemption
		Subject 16: Neuroscience	Provisional Exemption
		Subject 17: General Physiology and Biochemistry	Provisional Exemption
		Subject 18: General Microbiology and Immunology	Provisional Exemption
		Subject 19: General Pharmacology	Provisional Exemption
Part C 2	Ocular Biology	Subject 21: Epidemiology and Biostatistics	<u>No exemption</u> For review at visit
		Subject 22: Ocular anatomy and Physiology	Provisional Exemption
		Subject 23: Ocular Pharmacology	Provisional Exemption
Part C 3	Ocular Abnormality	Subject 20: Pathology and General Medical Disorders	Provisional Exemption
		Subject 12: Investigative techniques	<u>No exemption</u> For review at visit
		Subject 14: Refractive Surgery	<u>No exemption</u> For review at visit
		Subject 24: Abnormal Ocular Conditions	<u>No exemption</u> For review at visit

2. Formal Accreditation

Formal recommendation to the European Diploma Board of Management for exemptions from sections of the European Diploma can only be made after a satisfactory visit by the Accreditation panel. The purpose of the Accreditation Visit is to verify the information in the documents and to ensure that all relevant European Diploma competencies have been achieved by all graduates of the programme.

3. Accreditation Visit

An Accreditation Visit must be within the teaching year when students are present and all three years of the teaching programme are being delivered. The programme management team wish to have a formal visit and have agreed to the period 19-21 October 2011.

4. Details of the Accreditation Visit

The Accreditation Visit will follow the format described in Part III of the Accreditation Guidelines. Please note that the accommodation and travel expenses of the Visiting Panel are to be met by the training Institution.

Amongst other things, the Visitors will give particular attention to:

Part A:

The method by which the Institut fur Optometry can demonstrate that all BSc graduates have achieved all of the Part A competencies. The scope/level of experience gained in the BSc external placements in all aspects of ophthalmic dispensing including provision of occupational spectacle corrections. Evidence will be sought from:

- Discussion with lecturing staff, students and employers.
- Logbooks/records of students' patient experience.

Part B:

- The scope/level of paediatric and geriatric optometry and low vision.
- The use of diagnostic drugs.
- The effectiveness of the methods of monitoring students' external patient experience.
- Evidence will be sought from: Discussion with students, staff and employers. Student logbooks, the Clinic appointment book, student timetables.

Part C:

- The extent of tuition in general biological sciences.
- The extent of tuition in relevant pharmacology, systemic and ocular disease.
- Students' competence in investigative techniques, use of diagnostic drugs, diagnosis and management of ocular disease.
- The input to the programme from ophthalmologists.
- Students' individual experience with ocular disease patients.
- The extent to which graduates are capable of independently managing ocular disease in primary care.
- Evidence will be sought from: discussions with staff and students, student timetables, student logbooks.

We hope that you find this Provisional Assessment of the Olten Optometry programme is useful. If there are any comments you wish to make or issues you wish to query we will be pleased to receive them.

Section 3 - The Visit

The Visit took place from 19th to 21st October 2011 at the Fachhochschule Nordwestschweiz in Olten. The programme is attached as **Appendix C**.

Meeting with the Dean and Head of Department

The visitors met with Roger Crelier Dean and Head of the School of Optometry. He explained that Optometry was a School within the School of Engineering which had been the most appropriate school to join when becoming part of the Fachhochschule in 2007. Prior to 2007 Optometry had been a private training institution, a Höhere Fachschule, offering a two year course. The Höhere Fachschule was largely independent with a budget determined by the Council of the Höhere Fachschule, appointed by the Swiss professional association Schweizer Optikerverband, SOV.

The previous course had lasted two years following a four year apprenticeship and allowed those with the diploma to refract. In 2000 the SOV began discussions with the Government to raise the standard of education to BSc level. This meant large changes in the syllabus, the introduction of clinics and clinical examinations and the development of a more scientific approach to the subject with the introduction of subjects such as biostatistics. The curriculum of the new course was based on that of the European Diploma in Optometry. Degree status was achieved in 2007 and the first students were enrolled on the three year course in 2007.

The educational requirements for entry are either a four year optical apprenticeship plus a higher level academic qualification, the Berufsmaturität, or a gymnasium education (Matura) plus one year's employment in an optical shop which would be certified by the employer but not controlled by the School. Apprenticeships start at age 16 after 9 years education at school.

The students are mainly Swiss, either German or French speaking but there are some French, German and Austrian applicants accepted for the course provided they have a similar level of qualification with either a national optical qualification e.g. a French BTS, or have the year's experience in an optical outlet.

The Course is taught over three years in six fifteen week semesters in comparison to the previous two year 40 week course and is nationally accredited.

There are about 100 optometrists with a PCO or Aalen Masters qualification and around 925 optometrists in the country which has about 1300 retail outlets for a population of 7.5 million. About 420 ophthalmologists practise in Switzerland.

The course does not include any practical dispensing as this is covered either in the apprenticeship or one year experience in an optical outlet.

The opportunities for research are limited by the lack of any major optical industry in Switzerland and financial constraints.

Students are only allowed one re-sit for each module which results in a drop-out rate of 10 -15% overall.

The mix of French and German speaking students is a cycle of two years German speaking intake followed by one year French speaking. The current first year is 29 French speaking students.

The maximum number that can be accommodated for clinical work is 36 with 14 clinical rooms. Currently there are 29 in the first year, 19 in the second and 21 in the third year.

In February 2012 a Masters in Advanced Studies will commence which will upgrade the two year qualification to the current standard. It will be a two year part time course consisting of 4 certificates and a total of 60 ECTS Credits.

There is planned co-operation with Cardiff University to develop PhD projects.

There is no formal reading list but texts are recommended during lectures. These tend to be in a mixture of German and English.

There are 9.95 FTE optometric members of staff of whom 6 are full time. A list of academic staff is attached as **Appendix D**.

Tour of Facilities

The department is split between two sites a few minutes walk apart with lectures taking place in one building with the practical and clinical work in the other. The School expects to move to new accommodation in 2013. Instruction takes also place in the ophthalmological clinic opposite the school (Pallas Clinic) and in a private clinic in Bern. There is a small library in one of the rooms which is also used for practical work.

The clinics were well arranged and equipped, there are 14 clinical rooms used for both practical and clinical work which were well equipped: a list of clinical equipment is attached as **Appendix E**.

Meeting with Non Professorial Teaching Staff

The meeting was with two part time members of staff:

Volkhard Schroth

Is a 50% FTE teaching on a Wednesday and Thursday. He qualified in 1989 in Berlin and gained a BOptom from PCO in 2007. He had his own practice and specialised in asthenopia working with children with learning difficulties and binocular vision anomalies. There was no dispensing in the practice. He had research interests with the Dortmund Group and was currently involved with a Hoya funded fixation disparity project at Olten since 2009. He teaches refraction, binocular vision and strabismus to the same cohort of students over a three year cycle. Roger Crelier taught another cohort and Michael Goldschmidt the French group.

This could mean that students would be restricted in their depth of knowledge and their awareness of different approaches to the subjects. It was explained that the need to have a French speaking

lecturer for that cohort restricted using different lecturers but they all had a specific syllabus to teach to.

Thomas Hofmann

Initially qualified through the apprenticeship route followed by working in an ophthalmic clinic on clinical evaluations for implants and laser surgery. Took an MSc in Aalen and then taught on the New England College of Optometry Course there. He had opened his own practice in Basel last year. Worked on a 50% FTE. He teaches anatomy and physiology, gonioscopy and 90D. He also teaches medical practitioners and is a regular presenter at international meetings with a number of publications

As part time members of staff they felt that they had as much involvement with the course as the full time members. The course was much more structured than the previous two year one. They had freedom to teach and to input into discussions about the development of the course.

They had a half day for preparation but both said that they spent at least an extra half day of their own time, which they were happy to do.

Diagnostic drugs were used in the 5th Semester although it was not clear what the criteria were for their use on clinic patients. Children could be seen in the clinics from about age 6 to 7. The programme was well organised. Unusual cases were presented to the students and all will have seen some cases that need referral.

They were encouraged to visit conferences, had internal courses and had good teaching support.

There are two licences for opticians – A which includes refraction and B for dispensing only. The majority are A licences. This means that most practitioners do refractions but do not have access to fundus camera s and field screeners.

No documentation of borderline cases, i.e., patients with suspicious abnormal ocular conditions, in which proof of decision-making was not recorded.

Meeting with Clinic Manager

The Clinic Manager is Daniele Nosch who qualified as an optometrist in the UK. There was a long discussion about the records that are kept of the number of patients seen in the clinics and it was not clear what the total throughput of the clinic was or how many patients were referred. It was thought that the number of patients seen in the previous year was around 900, this number had been steadily increasing since the clinic was established in 2009.

Only third year students see real patients in the refraction and the contact lens general clinics. In addition there are specialist clinics for patients who require further investigation. Demonstration patients with unusual ocular abnormality are either brought into the clinic in the sixth semester or seen externally in ophthalmological clinics.

Students were expected to have seen 30 refraction and 30 contact lens patients (15 directly and 15 by observation) and some of these could be during their one day a week externship. There is a two

to one student to supervisor ratio in clinics. All records have to be signed of and additionally students have to be fully assessed for 12 patients, 6 refraction and 6 contact lens and have to have a % pass rate.

It was estimated that about 10% of patients seen were referred. Referral letters were written by the students and approved by the supervisor. However it couldn't be guaranteed that every student would refer at least one patient.

Currently there was no system of assessing the external supervisors or of requiring a minimum level of equipment in the supervisors practices or of knowing if the students had access to a consulting room.(in discussion with the third year students it was confirmed that the group we saw all worked in practices with more than one consulting room.) It was thought that most supervisors had a PCO or Aalen 'post graduate' qualification.

Paediatric experience was gained through visits to a kindergarten where the children were assessed by station tests – retinoscopy, visual acuity and binocular vision. Each student saw 5 children 2 of whom were under 3.

A visiting orthoptist dealt with amblyopia in the third year. Sakp module –Systematic analysis of complex clinical case studies.

Students used diagnostic drugs on each other but we were told that it was used on patients as necessary. There did not appear to be a protocol for the use of diagnostic drugs on patients, decisions seemed to be made on an 'as necessary' basis.

There was no in house spectacle dispensing but contact lenses were both fitted and dispensed.

Currently the clinic was open during the semesters with lecturers being on call during vacations.

Discussion of the Accreditation Part A with the Module Leader and others

Difficulties had been identified in the accreditation of Part A (Optics and Optical Technology). Because there is no practical dispensing in the BSc course, reliance is placed on the apprenticeship covering this. However, it was not clear how those students without an apprenticeship gained their experience in dispensing and workshop practice. This had been clarified by the explanation that those without an apprenticeship had to spend a year working in a practice to gain that experience although there were no specific competence or supervision requirements for the one year students

It was noted that the record sheets, **Appendix F**, did not specify the mix of lenses to be dispensed and frame materials and type to be used and the need for the patient record to be attached to indicate the type of patient being dispensed e.g. vocational or safety.

It was agreed that providing the six newly designed dispensing records by each student would cover the relevant European Diploma competencies and satisfy the requirements for accreditation of Part A .

Meeting with an Ophthalmologist with input into the Course.

Dr Wild is an ophthalmic surgeon practising in Berne in a clinic providing refractive and cataract surgery and general ophthalmology. He trained in Basle with a glaucoma specialist and worked in Olten in a clinic where he gained cataract and retinal disease experience. He leads the clinic in Basle. While at the Pallas clinic in Olten he was invited to become involved with the School there and has been an active supporter of the role of optometrists and ophthalmology's involvement in their training. This interest has continued since his move to Basle where he now has students visiting his clinic in groups looking at ocular pathology.

He thought that the students were well educated, their use of instruments was good and their ability to recognise abnormalities average but that they would be able to recognise borderline pathology. There had been a very considerable improvement in standards since the introduction of the BSc course.

He was very enthusiastic about providing more opportunities for students to see pathological cases and suggested that his and other clinics would be interested in providing one to one externship experience to final year students. He also thought that there would be benefit to be gained from some of the ocular pathology being taught by an ophthalmologist.

Meeting with French First Year Students

All the French speaking students were Swiss although one had dual French nationality. Two had entered through the Gymnasium education and one year optical experience route, the others had trained as apprentices followed by the Matura. One student had a Bachelor degree in Economics. There are 29 students in the first year.

They have about 35 hours of timetabled study and they thought that they spent a further eight to ten hours of private study in the evenings and at weekends.

They had good access to lecture presentations through the intranet and handouts. There was no ongoing formal assessment but examinations at the end of each semester. They had access to guidance for practical examinations.

Students had access to the practical labs and clinics outside normal teaching hours.

Text books were optional but they thought they needed at least one book for each module. They were complimentary about the quality of the teaching staff.

Meeting with Second Year German Students

We met with 6 second year students, four had entered by the Swiss apprenticeship route, one through the gymnasium route and one who had done a three year apprenticeship in Germany. The German student had chosen to qualify in Olten as she thought that the education was more comprehensive.

The students thought that they had received a good education. They saw the benefits of working with ophthalmologists. Although they had studied physical and geometrical optics and ophthalmic lenses during their apprenticeship the level in the BSc course was higher and more detailed.

They had practical experience in refraction, retinoscopy, ophthalmoscopy, slit lamp and contact lenses. General pathology had been taught in the first two semesters, ocular pathology had started in the current one.

The library was not used much except for project work.

They found the cost of buying their own instruments expensive. They thought that some theory was taught too early in the course and should be closer to when they needed to use it practically. Statistics was mentioned.

They had to spend most evenings and weekends studying. The refraction rooms and equipment was available for the students outside teaching hours. However, no use of diagnostic drugs was allowed outside lecturing hours.

Meeting with Final Year Students

The six final year students had all entered the course via the apprenticeship route. They had found the enhanced optics and ophthalmic lens lectures useful and not repetitive of the apprenticeship course. They worked about 37 hours a week spending an extra 90 minutes a day on preparation. In addition they worked in a practice for one day a week gaining more clinical experience under the supervision of an optometrist where they saw a mixture of real patients and relatives and friends covering all areas of practice. Most of this practice was done on Saturdays. The level of supervision varied but seemed to be one to one initially which gradually reduced to a conversation after each patient as confidence increased. In practice about a 50/50 split of time was spent doing dispensing and eye examinations. They would like to have the opportunity to see more patients, particularly with ocular pathology. Their suggestion was to see more patients in the open clinic at school.

The students were confident, well motivated and enthusiastic about future employment and the opportunities to both develop their skills and to help to motivate their two year educated colleagues to embrace a greater scope of practice. As with the other years there was a lack of understanding of the scope and role of optometry nationally and internationally.

The students would in general like to add to the current teaching of ocular pathology and that there should be more ophthalmological involvement in the AOC teaching.

Meeting with Recent Graduates

We met with three of the first (June 2010) cohort of graduates. These students seem to be from the top 10% of students. Each explained their current scope of practice which covered:

Refraction, spectacle dispensing, contact lens fitting routine and specialist, glaucoma screening, visual defects, perimetry, non contact lens tonometry, binocular indirect and 90D fundus examination, fundus photography and practice management. Some patients were referred from doctors. One of the optometrists was involved in writing clinical papers.

They felt that they played a major role in encouraging their colleagues who had qualified by the two year course to embrace the increased scope of practice that they had achieved.

The law in respect of examining children varied, in some Cantons children under 16 could only be seen if they had previously been seen by an ophthalmologist on one occasion. It later transpired that this was in a small minority of Cantons and that in most children could be seen at any age.

The charge for a refraction in the high street is around 60 SF which included the use of an ophthalmoscope. Surprise was expressed that some optometrists appeared to charge a basic fee for a stand alone refraction with extra charges for other tests including ophthalmoscopy. This was not seen to be in the interests of either the patient or the reputation of optometry.

They thought that the low vision module in the course gave a foundation for further learning through working with patients.

They thought that they had seen about 40 patients during their internal clinical experience. It was later clarified that this was 20 examinations and 20 observations.

During their externship they had had a cross section of clinical and dispensing work.

Meeting with current student' practice placement supervisors

The meeting was with three supervisors, one with an OD from Houston, an Olten graduate from the two year course and a two year graduate with a PCO Masters qualification. Their practices were well equipped . The students initially undertook two to three examinations a day and refracted, fitted contact lenses and dispensed. At the beginning they were closely supervised which reduced as confidence was built. They said that the skills of the three year course graduates was very much better than those from the two year course. They brought new ideas into the practices and were more interested, knowledgeable and competent.

They thought it would be useful if there was more practical experience and research carried out. They also thought that there should be more exposure to real cases of ocular pathology and that students should spend some time working in an ophthalmology clinic.

Optometry was now included in the law in 25 out of 26 Cantons and is a protected title.

They thought that guidance for supervisors would be helpful and that there should be feedback on the strengths and deficiencies of the students.

Visits to Lectures, Practicals and Clinics

A practical was observed where students were using slit lamps to examine the lids and adnexa. The equipment was good, teaching tubes and video were available. The students were engaged. Hand outs were good. There was no ongoing assessment but a practical exam took place at end of semester.

A number of lectures were observed, there is no compulsory attendance:

First Year English class: Attended by 2 Italians, 2 French, 16 French speaking Swiss. Good standard scientific English. Self teaching using disc and laptop play back. English was taught to two levels up to reading articles. There is marked course work. The students attentive and keen and the teaching seemed to be at an appropriate level.

After the students left Ms Summermatter explained that these students were the group with poorer language skills. Her objective is for the students to be able to read relevant scientific papers and ideally be able to understand a visiting speaker. She has been contributing to the programme for four years. She finds the class room acoustics and layout less than ideal but she has the opportunity to attend a staff meeting once each semester to raise such concerns.

Overall a very impressive mixed ability teaching session.

A Second Year anatomy and slit lamp lecture and practical was well attended. An interactive lecture with lots of discussion with students who seemed interested. Students interested and took responsibility for what to do. The students seemed well instructed. The Room was well equipped.

FG and RC attended a 2nd year ocular pathology lecture on the eyelids and adnexa. 19 students were present which was the full number. Handouts with spaces for notes were used together with powerpoint. The content of the lecture was good and well delivered and the students attentive and involved.

FG and RC then attended a first year lecture on ophthalmic lenses which was well attended. The content was relevant. Reference was made to a text book which all students appeared to have and there were hand outs and a powerpoint presentation.

RB attended Binocular lecture and practical. Well attended. Students interested and took responsibility for what to do. Students seems well instructed. Rooms available well equipped.

Third year refraction and contact lens clinics were observed. The students worked in pairs, one undertaking the examination while the other watched. The students seemed very confident in using the equipment. There was one supervisor to two patients and the level of supervision was discrete with advice being offered as appropriate.

AJ looked through examples of Third Year student logbooks.

The present Third Year are only in week 6 so the only completed logbooks are those from 2009/2010. In future it would be wise to arrange visits in May so that the current students achievements can be assessed.

The log book is arranged in three section, Refraction, Contact Lenses and Pathology.

Refraction (Routine eye examination) 30 Patients - 15 as practitioner and 15 as observer:

The record sheet includes sections for:

Symptoms, history, family history, prescribed drugs.

Motility, cover test, NPC, pupils.

Refraction, muscle balance also Polatest recording chart.

Non-contact tonometry and time of day.

Detailed anterior segment and fundus record including CD ration and ISNT-rule.
Visual fields (Octopus) is an additional technique, not routine as is corneal topography.

Contact lenses 30 patients - at least 15 as practitioner and a minimum of 15 as observer

The record sheet includes sections for;
History, refraction, anterior segment, topography (Oculus Keratograph).
Lens fitting record sheets and after care sheets

Pathology 15 patents

In addition to the patient record there is an extended analysis relating the particular patient to textbook description and management.

Cases discussed:

Diabetic retinopathy

Central vein occlusion

Colour vision investigation and visual fields

Terrien marginal corneal degeneration

Pellucid marginal degeneration

Glaucoma

Fields associated with abnormal discs, notches.

Extended Polatest investigation of binocular vision.

The logbooks were impressive. They and indicated exposure to a range of patient conditions and the exercise of high level optometric skills. However, it must be acknowledged that only a small number of logbooks from 2010 were examined.

It might be prudent to request in May 2012 a list of the patient experience gained by the current Third Year.

Discussion

The explanation of the entry requirements had clarified concerns about the accreditation of Part A practical work. All students had had previous experience of dispensing including workshop practice although there were no supervision requirements for the one year trainees.

The provision of low vision training was clarified: There is a specialist clinic where four patients are seen and students have to complete a written report. In addition groups of 4 students spend 1 – 2 days with low vision trainers. Low vision work in the refraction clinic is limited to high reading additions. . Module VLV (Low Vision Semester 3) is one of the six optional courses.

Lectures are given in the theory and methodology of perimetry and students gain practical experience in using field screening equipment. Generally the Octopus screener is used. They also have lectures on visual field anomalies and their relation to pathology. In the 5th semester they undertake screening for glaucoma with patients.

No numbers were available for how many visual field were checked by each student. There was some disappointment that the final exam did not include a full refraction, although all students had

to complete 6 successful refractions out of 8 under examination conditions. If unsuccessful the module had to be completed. If not the student failed.

The general opinion was that Part A could be accredited if the 6 dispensing cases were included.

Part B was only acceptable if both the low vision and paediatrics were included. As far as Part B and C were concerned there was some missing data from the mapping of the Olten syllabus against that of the Diploma. In particular Part B Sections 7(7), 7(8),7(13) and Part C 19(12), 21(1), 21(4). It was thought that these were in fact covered but had not been listed.

There was concern that while the syllabus covered all the areas of the Diploma there was not sufficient clinical experience to be sure that students were safe to practice at a European standard level when they graduated. So that while the theoretical and practical parts of Part C were adequately covered it was the view of the Visitors that this would not meet the standard required for independent practice.

Final Discussion and Recommendations

The Visitors then discussed their recommendations and conclusions and on the final morning the following statement was made to the Head of Department:

Statement and Summary of Visitors' Recommendations for Exemption of Graduates from the Examinations of the European Diploma and the Formal Process of Accreditation

The Visitors would like to express their appreciation to the Head of Department, his staff and students for their welcome and very positive support to the Visitors during the Visit.

We have been very impressed by the organisation of the course, the dedication of the staff and the commitment and enthusiasm of the students and their external supervisors.

Our conclusions and recommendations to ECOO are as follows:

The European Diploma in Optometry is a four part qualification with three written and practical parts and a Portfolio of clinical experience. It is our recommendation that the students on the BSc Optometry Programme in Olten, Switzerland should be exempted from the following parts of the Diploma.

Part A – on condition that students complete the six supplementary dispensing and workshop tasks.

Part B – on condition that the voluntary modules on low vision and paediatrics (**VLV**) and paediatrics (VKiO) are taken by all students.

.Part C – approved without conditions

However, the Visitors consider that graduates do require a level of clinical experience with unselected patients which is greater than that attained during the undergraduate course and, therefore, that there should not be exemption from the portfolio.

This is subject to the approval of the Board of Management of the European Diploma, the ECOO Executive Committee and the final report on the pilot accreditation process which will be made to ECOO at the Spring 2012 meeting.

It is also our recommendation that this approval should not apply retrospectively to students who graduated before 2012, that this decision is valid for a fixed period to be decided, probably five years, or at an earlier date if there are substantial changes to the course.

In producing the final report on the Accreditation Pilot we would ask the School to submit a report setting out its views on the whole Accreditation Scheme including suggestions as to how the process might be improved.



The European Council of Optometry and Optics

Pilot Accreditation Process

For Exemption From The Examinations

And Portfolio of

The European Diploma in Optometry

Report of a Visit to the Optometry School

at the

Palacky University

Olomouc, Czech Republic

23 - 25 November 2011

Visitors

Frank Buijs
Robert Chappell
Feike Grit
Adrian Jennings

Introduction

At its Autumn meeting in 2009 the General Assembly of the European Council of Optometry and Optics, ECOO, agreed to ask the Board of Management of the European Diploma in Optometry, the Diploma, to undertake a pilot project to investigate the feasibility of designing a process which would allow member countries to apply for their courses in optometry and optics to be benchmarked and subsequently accredited against the Diploma. The accreditation could be full or partial.

A small working group, Frank Buijs, Bob Chappell and Adrian Jennings designed a scheme in three sections which is attached as **Appendix A**. Four countries are currently participating in the scheme, the Czech Republic, Germany, Switzerland and Norway.

The second pilot accreditation process has now been completed at the Palacky University, Olomouc, Czech Republic. This report sets out the process that has been used from the initial application to the conclusion of the Visit and the recommendations of the Visitors.

The outline of the process and the timescale was:

- | | |
|------------|--|
| 29.11.2009 | Following interest shown after a presentation at the Autumn ECOO meeting it was suggested that an exploratory meeting at the department would be helpful. Bob Chappell and Adrian Jennings visited the University for one day. |
| 06.04.2010 | The completed Self-Assessment form was received. |
| 12.07.2010 | Response to Palacky's Self-Assessment setting out a number of queries. |
| 26.11.2010 | Palacky's response together with the syllabus in English. |
| 18.01.2011 | Response to Palacky with further queries |
| 10.03.2011 | The Accreditation team, Frank Buijs, Bob Chappell, and Adrian Jennings, met in Utrecht to consider provisional exemptions. |
| 18.05.2011 | The Department was informed of the provisional opinion of the Visitors as to the extent of the exemption for the Palacky BSc Optometry Graduates from the examinations of the European Diploma. Their decision was to proceed to a full accreditation rather than stop at the self assessment phase. |
| 23.11.2011 | Formal Accreditation Visit to Palacky University by Frank Buijs, Bob Chappell, Feike Grit and Adrian Jennings together with Pavel Sebek from the Czech Association who acted as translator. |
| 25.11.2011 | A summary of the Visitors Recommendations for Exemption presented to the Head of Department of the School of Optometry, Palacky University. |
| 19.04.2012 | Recommendations presented to the Board of Management of the European Diploma and the ECOO Executive Committee for approval |

The Visitors would like to express their thanks to Professor Zdenek Hradil CSc, Head of the Department of Optics, RNDr Frantisek Pluhacek, Head of the Optometry Programme and their staff,

in particular RNDr Wagner and Ms Musilova for their enthusiasm, support, co-operation and understanding in undertaking this Pilot Accreditation. Also to Pavel Sebek for his translation skills.

The report is divided into three sections and sets out the process from the initial enquiry to the formal visit.

Section 1 – The Accreditation System

Following the interest shown by the Czech Association at the launch of the Pilot it was agreed that Bob Chappell and Adrian Jennings would visit the Palacky University to explain the process in more detail, to answer questions and also to give the Visiting Panel preliminary information and to identify potential problem areas at the earliest opportunity.

The Department had undertaken a considerable amount of preliminary work and there was an opportunity to tour the facilities and understand the history and structure of the course. There was a detailed discussion of potential problems in completing the Self Assessment document. The importance of explaining the nature of competency assessments, of a clear audit trail and the need to prove the claims made in the Self Assessment document were emphasised.

One of the problems was that of translation. This has been identified as a common problem as the Panel work in English. The extent of translation was agreed at the minimum acceptable level. The Czech Association kindly made Pavel Sebek available as a translator.

The extent of clinical work undertaken by the students was discussed together with its supervision and evaluation.

As this was the first department to undertake the accreditation process this initial visit was found to be valuable for both the Visitor Panel and the Department and has now been included as part of the scheme.

Section 2 – The Self Assessment Document

Following the informal discussions referred to above the Department submitted the Self Assessment Document, **Appendix B**. This was analysed and the Department asked for some clarifications. The replies included an English translation of the syllabus.

A meeting of the Visitors then took place in March 2011 which examined the completed Self Assessment Document in detail and raised a significant number of questions which were subsequently sent to the School asking for a response before the Visit took place.

The submission and subsequent clarifications from Olomouc were reviewed and it was agreed that the stage had been reached when a decision had to be made about the level of accreditation that might be given subject to a formal visitation by the panel. Whilst it was understood that when the scheme had been fully developed there would be an option for schools to use the scheme to benchmark their courses without accreditation it was understood that the candidates for the pilot scheme would undertake the full process.

The Parts of the examination were discussed Section by Section and a broad view taken as to whether or not the information supplied warranted accreditation as meeting the knowledge base and competencies of the European Diploma. A pro forma (attached as Appendix A) was designed to

indicate the areas where there were questions which needed to be further investigated during a visit together with Sections where it was clear that they did not meet the requirements of the Diploma.

It was noted that although Olomouc had identified deficiencies when completing the Self Assessment Document some of these appeared to be covered in the English translation of the syllabus which had been sent at a later date.

Based on this information the Visitors' views were as follows:

Part A (Optics and Optical Technology)

It was generally agreed that the subjects in both Sections of Part A (Optics and Optical appliances) were adequately covered. During the Visit attention would need to be paid to the extent of occupational and sports dispensing, the range of optical appliances dispensed and the scope of experience gained both internally and in externships.

Part B (Management of Vision Problems)

It was agreed that in general terms Sections 1,2,3 and 4 (Refraction, Binocular Vision, Contact Lenses, Visual Perception) were adequately covered in the syllabus. There are questions to be further investigated in relation to the ageing eye, paediatrics and low vision. More details were needed about patient interaction, the scope of external practice and more detail concerning monitoring and reports of external practice experience.

Part C (General Health and Ocular Abnormality)

Whilst it was agreed that Section 1, Biology was adequately covered there was agreement that this was not the case with Sections 2 and 3 on Ocular Biology and Ocular Abnormality particularly in view of the lack of credits in ocular pharmacology and the knowledge base of ocular abnormalities.

Note: This section is illustrative of the depth of analysis of the self assessment document. Responses were received from the School and on the basis of these a provisional list of the proposed sections for accreditation was sent to the school. Questions which remained unanswered or where the answers were unclear would be dealt with at the visit after which final recommendations on the scope of accreditation would be made. The proposal as sent to the School appears below:

Response of the Accreditation Panel to the Self-Assessment document and other information provided by the Department.

1. Provisional Opinion as to Exemption for Palacky Optometry Graduates from Examinations for the European Diploma.

This provisional opinion is based on the Panel's analysis of the documents supplied. Formal exemption can only be given after a satisfactory Verification Visit.

Part A: Optical Technology

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part A 1	Optics	Subject 1: Geometrical Optics	Provisional Exemption
		Subject 2: Physical Optics (also A 2)	Provisional Exemption
		Subject 5: Optical Appliances (also A 2)	Provisional Exemption
Part A 2	Optical Technology	Subject 2: Physical Optics (also A 1)	Provisional Exemption
		Subject 3: Visual Optics	Provisional Exemption
		Subject 5: Optical Appliances (also A 1)	Provisional Exemption
		Subject 6: Occupational Optics	Provisional Exemption

	<u>Knowledge base</u> for the European Diploma competencies
	<u>Clinical/practical</u> aspects of European Diploma competencies

Part B: Management of Visual Problems

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part B 1	Refraction	Subject 7: Vision and Ageing (also B 2)	Provisional Exemption
		Subject 8: Refraction	Provisional Exemption
		Subject 9: Low vision	Provisional Exemption
		Subject 12: Investigative Techniques (also B 2)	Provisional Exemption
		Subject 13: Paediatric Optometry (also B 2)	Provisional Exemption
Part B 2	Binocular Vision	Subject 7: Vision and Ageing (also B 1)	Provisional Exemption
		Subject 10: Ocular Motility and Binocular Vision	Provisional Exemption
		Subject 13: Paediatric Optometry (also B 1)	Provisional Exemption
Part B 3	Contact lenses	Subject 11: Contact Lenses	Provisional Exemption
		Subject 12: Investigative Techniques (also B 1)	Provisional Exemption
Part B 4	Visual Perception	Subject 4: Visual Perception	Provisional Exemption

Part C: General Health and Ocular Abnormality.

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part C 1	Biology	Subject 15: Anatomy and Histology	Provisional Exemption
		Subject 16: Neuroscience	Provisional Exemption
		Subject 17: General Physiology and Biochemistry	Provisional Exemption
		Subject 18: General Microbiology and Immunology	Provisional Exemption
		Subject 19: General Pharmacology	Provisional Exemption
Part C 2	Ocular Biology	Subject 21: Epidemiology and Biostatistics	<u>Not adequate for exemption</u>
		Subject 22: Ocular Anatomy and Physiology	<u>Not adequate for exemption</u>
		Subject 23: Ocular Pharmacology	<u>Not adequate for exemption</u>
Part C 3	Ocular Abnormality	Subject 20: Pathology and General Medical Disorders	<u>Not adequate for exemption</u>
		Subject 12: Investigative Techniques	<u>Not adequate for exemption</u>
		Subject 14: Refractive Surgery	<u>Not adequate for exemption</u>
		Subject 24: Abnormal Ocular Conditions	<u>Not adequate for exemption</u>

2. Formal Accreditation

Formal recommendation to the European Diploma Board of Management for exemptions from sections of the European Diploma can only be made after a satisfactory visit by the Accreditation Panel. The purpose of the Accreditation Visit is to verify the information in the documents and to ensure that all relevant European Diploma competencies have been achieved by all graduates of the programme.

3. Accreditation Visit

The programme management team are invited to request an Accreditation Visit and to propose a date within the teaching year when students are present and all three years of the teaching programme are being delivered. It is hoped by the Panel that the period October- November 2011 might prove convenient.

4. Details of the Accreditation Visit

The Accreditation Visit will follow the format described in Part III of the Accreditation Guidelines. Please note that the accommodation and travel expenses of the Visiting Panel are to be met by the University.

Amongst other things, the Visitors will give particular attention to:

Part A:

- The range of optical appliances dispensed.
- The scope/level of experience gained internally and at the external placements.

Evidence will be sought from:

- Discussions with students and employers.
- Logbooks/records of students' patient experience.

Part B:

- The scope/level of paediatric and geriatric optometry/low vision.
- The range and the effectiveness of the methods of monitoring students' external patient experience.

Evidence will be sought from:

- Discussions with students, staff and employers.
- Student logbooks, the Clinic appointment book, student timetables.

Part C:

- The extent of tuition in general biological sciences.
- The extent of tuition in relevant pharmacology and general and ocular disease.
- The input to the programme from the eye hospital and ophthalmology.

Evidence will be sought from:

- discussions with staff and students.
- student timetables, student logbooks.

Section 3 - The Visit

The Visit took place from 23nd to 25th November 2011 at the Palacky University, Olomouc. The programme is attached as **Appendix C**.

Meeting with the Dean and the Head of Department of Optics

The Visitors met with the Dean of the Department of Science Professor RN Dr. Sevcik and the Head of the Department of Optics Professor RN Dr. Hradil. They explained that each Department in the School had freedom to decide on the courses which were supported. Currently there was a low interest in Physics and student numbers were small. However, Optometry with its high visibility in the community was attractive to and popular with students which resulted in a pool of 100 applicants. The University was keen to lead the development of optometric education in the Czech Republic.

There were two other institutions teaching optometry in the Republic, in Brno and Prague. There appeared to be little co-operation between them.

They felt that there were difficulties in extending the Palacky course into new areas such as pharmacology but were keen to match it to the European Diploma.

There was a need to secure the scientific base of optometry by the development of a PhD programme.

The importance of a good working relationship with the Czech National professional association was emphasised.

There appeared to be some cultural resistance to the principle of formal student representation on university committees although there appeared to be good access to staff by individual students.

Meeting with the Head of Optometry

Some form of optometry has been taught at the University since the 1980's. The preparation of the new course started in 2003 in connection with the changes in legislation and this resulted in the current BSc course in Optometry commencing in 2005. It was developed from a technical optics course started in 1986 which became a full time course in 2004. A strong link has been developed with Anglia Ruskin University in the UK.

The current course is three years with 25 students in the first year, 34 in the second and 20 in the third. Each year is divided into groups of 5 – 7 for clinical teaching. In addition there is a 2 year full time Master's course which accepts around 10 students with a BSc qualification. There are six 15 week semesters which include 13 weeks of teaching. The students come from a variety of backgrounds, some directly from high school, some after a gap year and some who have already qualified as opticians. Both the BSc and MSc courses are government funded. There is no provision for conversion courses to allow opticians and optometrists, who qualified before the BSc was introduced, to upgrade their qualifications.

There are five departmental teaching staff consisting of three full time and two part time members, equivalent to four full time equivalents. The part time staff have been appointed recently and they both have graduated from the Master's course. In addition current Master's degree students are involved in teaching undergraduate students in clinics, under supervision from the two full time optometrists RNDrPluhacek and Ms Musilova, both of whom practise as optometrists part time.

In addition teaching support is provided by members of the Department of Physics and the Medical Faculty and the Faculty of Health Sciences. The latter two faculties give lectures in 16 subjects. The students go to the Medical Faculty for laboratory and practical work. Physiological Optics is taught in house. Physics, maths and optics are taught as common courses with students from other courses. A list of internal teaching staff is attached as **Appendix D**. External professional staff is used for some specialist teaching such as gas permeable contact lenses.

There did not appear to be any structure for regular meetings of the academic staff nor any formal arrangements for teaching support although there are seminars and there is a teaching evaluation every 3 – 4 years.

The teaching programme is stable with only minor changes in the last two years.

There is externship experience in both the second and third years. In the second year two weeks are spent in practice, one week on technical experience and one week on refraction. In the third year there is a two week period in practice which includes dispensing, eye examination and contact lens experience. A further two weeks is spent observing patients in an ophthalmological clinic. A visit to the Johnson and Johnson Vision Care Clinic in Prague is also included.

The Department has received a substantial grant of 6,000,000 CZK, equivalent €240,000, financed by the European Social Fund and the Czech Ministry of Education. The grant was for the project "Optometry for future" focused on the development of an optometry teaching programme. This is due to be completed by May 2012. A further inter-departmental project is then due to start

supported by the European Social fund and the Czech Ministry of Education with a grant of 16,000,000 CZK, equivalent to €650,000.

Tour of Facilities

The department is situated on the fourth floor of a modern building sharing the space with physics. There is a clinical area which is used for both practical work for first and second year students and for real patients in the third year. There are six well equipped cubicles with trial cases and computerised test charts. Mallet units and Polar tests are available. There are six slit lamps available for use and a field screener which at the time of the visit was awaiting repair. Students do not have their own instruments and only four ophthalmoscopes and retinoscopes were available for clinical practice. There appeared to be a reliance on teaching 90D lens retinal examination although diagnostic drugs cannot be used. A list of clinical equipment is attached as **Appendix E**.

There was also a clinic for use by third year students only this was a large room with two combi units. Unfortunately there was no divider or screen to separate the two stations which meant that the light could not be independently dimmed and gave the patient no privacy.

There was a dispensing room and an adjacent workshop.

Meeting with Non Professorial Teaching Staff

The meeting was with four part time members of staff, one each from the Faculty of Health Sciences (MSc Šárka Ježorská, PhD) and the Faculty of Medicine (MSc Martina Partschová) and two recent graduates from the Optometry Department who also had a Masters degree from Brno (MSc Lucie Glogarová and MSc Eliška Hladíková. Both were part time lecturers and simultaneously post graduate optometry students).

The lecturer from the Faculty of Health Sciences taught psychology and communication including developmental psychology to the first and second year students. Lectures to the first year covered the general area followed by communication and ethics to the second year. She found the students to be interested, good communicators and of high intelligence.

The Medical Faculty lecturer taught medical biology and genetics to first year students. Optometry students were taught separately from medical students. She was only involved in teaching theory. She found the students had a better basic education and were more interested in their studies than other student groups she taught. There were no scheduled meetings with the Optometry Department to review the course but it was reviewed by the Medical Faculty.

The first optometry lecturer/post graduate student (L. Glogarová) taught for 6 – 8 hours a week. Her subject areas were visual correction and physiological optics.

The second optometry lecturer/postgraduate student (E. Hladíková) was involved in teaching spectacle technology twice a week together with four hours of lecturing on visual correction, she had previous experience in practice. She was supervising a student project comparing the results from Goldman and i-Care tonometers.

There was general opinion that the standard of equipment in the Department had improved. Staff were given opportunities to attend courses which were funded by the Department. They also thought there was an increase in the number of people who were having a sight test by an optometrist rather than an ophthalmologist.

Meeting with Clinic Manager

Clinics for real patients were held on a Wednesday from 08.00 until 14.45 with four groups of five students. Patients come from within the University, staff and students together with members of the general public. The clinic is advertised externally. There is a ratio of one student to a patient with supervision by MSc students who are overseen by lecturers. Normally there are four patients for five students, one student acting as a reserve.

Students are expected to see 18 real patients in their third year with a minimum of ten in the clinic, the total may be made up from those seen during externships. There is a mixture of primary care, contact lens and speciality patients.

90 minutes is allowed for an eye examination. A prescription is issued in about 50% of cases, although no figures are kept to justify this, these patients then go to the dispensing room. If the examination is incomplete a further appointment is made with the same student, if this is possible.

A routine examination consists of taking history and symptoms, acuities, binocular vision, confrontation, objective examination using an auto-refractor, subjective, balancing, keratometer and anterior section examination. Examination of the retina is only undertaken for some patients, estimated at 50%.

Contact lens fitting is limited to the first fitting and the patients then passed to an optical shop for ongoing care. The staff found that trying to provide aftercare presented problems. The lenses fitted were almost exclusively soft.

Contact lenses are fitted by second year students on each other and they are expected to fit 5 pairs of soft lenses and 2 pairs of RGP lenses. It is expected that further experience should be gained during externships. A total of 12 contact lens patients is required.

There are visual field practical assessments in the second year but this is not a requirement in routine real patient examinations. Low vision practicals are provided in the eye clinic.

Optometrists are unable to make formal referrals and can only recommend to patients that they see an ophthalmologist. Generally letters are not sent, when they are, they are given to the patient and the patient signs for receipt of the letter.

A master sheet is used for recording clinical information and for assessment in the clinic.

The arrangements for the externships are that students find their own placements. The supervisor must be a registered optometrist and there is a minimum list of consulting room equipment. Second year student placements are in the second semester for ten working days. Students undertake refraction and contact lens work and are expected to see 12 contact lens patients and 18 patients for refractions subject to the minimum requirements for those seen in University clinics as set out above. Recently more comprehensive and accurate checks have been made of the externship arrangements.

Third year students undertake two placements of two weeks each in the final semester. This includes visits to the University hospital clinic as well as external ophthalmological clinics.

Students have access to the clinic areas for practice on each other outside normal hours.

Meeting with an Ophthalmologist with input into the Course.

Dr Chrapek is a vitreo-retinal surgeon who is one of eight ophthalmologists who teach optometry students. He also teaches general medical students. He was of the opinion that optometry students have a basic knowledge of ocular anatomy and physiology which is supplemented by ophthalmology lectures. He felt that it was useful for students to know about the use of drugs but not to use them in practice. The students had difficulty in using a 90D lens for fundus examination. They observed a wide variety of patients but individual records were not kept. The students showed interest in the recognition of disease.

He thought that co-operation between ophthalmologists and optometrists was valuable and there were opportunities for them to work together in private clinics. Optometrists should concentrate on refraction and the anterior section but ophthalmoscopy and investigation of the posterior segment was not appropriate.

Meeting with First Year Students

The six first year students were all female, one had studied optics in Prague and came from an optical family, two had a healthcare related background, one from a business academy and two had attended an open day. Apart from the student with an optical background all had a gymnasium education. So far the course had met their expectations.

They said that they spent about 23 hours a week in formal lectures and practicals and a further 2 – 3 hours a day in private study. Of the 25 students five or six were male.

So far they had had tests but not examinations to assess progress.

The course was state funded and there was a contribution towards living costs.

They thought that the library provision could be improved. They found the entry process was designed for gymnasium students and was restrictive. This possibly prevents potentially good students gaining admission.

There was no personal tutor system or student representative committee in the department.

Meeting with Second Year Students

The six students came from a variety of backgrounds, ranging from two who had been interested in physics, maths and optics but had subsequently heard about optometry, two who had come via open days and a visit to the University, one who thought that optometry offered a job with good prospects and had heard that Palacky University had a good reputation and one who had studied as an optician and wanted to increase his competencies. 36 students started the course, two had dropped out leaving a current total of 34.

They thought that the first year had covered a wide area and had given them a broad education. They were finding the second year more focussed. They said that they had about 20 hours formal teaching and practicals and a further 10 hours preparatory work. They found the staff to be very flexible and helpful.

They mostly used Czech text books although there was only a limited range available, they also felt that the library was limited. There were two or three copies of the text books which were available and these could be borrowed.

Examinations matched the syllabus and their view was that they were fair. They thought that the optional subjects gave them the opportunity to extend their competencies.

They clearly understood the difference between a refraction and eye examination.

Meeting with Final Year Students

The final year students came from a variety of backgrounds. Some had qualified as opticians while others had joined the course as an alternative to medicine. Their motivation varied from an interest in helping people to good career and business prospects.

They were concerned about their future scope of practice and nervous about taking responsibility. It was clear that they did not fully understand optometry as a profession both in the Czech Republic, in Europe and globally.

During their second year externship they undertook refraction and dispensing under supervision working alongside opticians and optometrists. They undertook contact lens fitting with soft lenses only. Arrangements for the timing of externships was flexible and could be one day a week on a regular basis or en bloc.

They found working with an ophthalmologist very useful and helpful. The visits were organised to give them experience in different specialities such as retina, glaucoma and surgery. Children and low vision cases were seen during the time at the hospital.

They confirmed that they did not use ophthalmoscopes very much but preferred using a Volk lens. Contact lens teaching was good but they thought that there should be more emphasis on ophthalmic lenses. They thought that the teaching of binocular vision and visual fields was adequate.

Meeting with Recent Graduates

The six recent graduates all had trained as opticians and subsequently had either taken or were in taking the MSc programme at Palacky.

The first had qualified as an optician in 2004 and completed the BSc in 2011 and was now on the Masters course. Practice included primary eye care/refraction. No ophthalmoscopy was performed. The second had qualified as an optician in 2007, BSc in 2010 and now an MSc. He worked at a store in Slovakia undertaking primary eye care work including binocular vision and fitted contact lenses. Ophthalmoscopy was undertaken occasionally. The others all had a similar mode of practice with one carrying out refractions in a hospital. There was an emphasis on examination of the anterior

segment without ophthalmoscopy. At least one who undertook contact lens work did not use fluorescein although they had used it during the BSc course.

If they suspected a pathological problem they would tell the patient to go see an ophthalmologist.

They all felt that the course had prepared them well for work in practice although they were not allowed by law to use the full scope of their competencies.

Between a half and two thirds of the Bachelor graduates go on to do a Master's which extended their knowledge, showed them comparative clinical approaches in particular in binocular vision.

They suggested that more use of English in the course would be helpful, that more experience was needed with RGP lenses and that ophthalmoscopy should be part of the primary eye care examination.

Their overall view was that their experience at the University had been a great opportunity for self development.

Meeting with Current Student Practice Placement Supervisors

The meeting was with three supervisors of students: one qualified as an optometrist in 1992 and worked mainly in contact lens practice, one had a BSc in optometry from Palacky and the third had both a BSc and MSc from Palacky.

They thought that students had been well prepared for refraction and contact lens work and were good communicators. In one practice the students averaged two refractions and dispensings a day and one or two contact lens fittings in a week. In the second there was an involvement in all practice activities and the students saw an average of six patients a day, a mixture of refraction, dispensing and contact lens work. In the third practice two or three students a year spent two weeks refracting, fitting contact lenses and dispensing. There was also an opportunity to see abnormal ocular conditions. On average three refractions a day were undertaken.

The students were all supervised although there did not seem to be any protocol for this. The standard form of examination was:

- History
- Symptoms
- Vision
- Autorefractor
- Slit Lamp
- Lens selection
- Fitting contact lenses with a trial outside
- Rechecks using an autorefractor

Fluorescein was only used routinely in one practice and in another only when an ophthalmologist was present.

The supervisors had contact with the Department during the year although this did not seem to be on a formal basis.

Visit to Lectures, Practicals and Clinics

A number of lectures were visited, they were on time, well attended and appeared to be well prepared by the teachers although language differences prevented full understanding of the content. Students were engaged and involved.

Practical training in spectacle technology – Group 3, 2nd year students

There were 6 female students in the workshop area who were cutting formers by hand, edging lenses using an Essilor Kappa machine and soldering frame parts. The area was well equipped and the students appeared interested and motivated. They were supervised by one of the new members of staff. Assessment was continuous together with written and practical examinations.

The dispensing area had a small but comprehensive range of spectacle frames which were used for real dispensing. A range of different manufacturer's lens catalogues were available giving a wide choice of lens types and materials. About 90% of prescriptions were made up in house the more complicated jobs being sent out to a laboratory. It was expected that students would measure and fit most types of lenses into a range of frame types although this could not be guaranteed. Although there was no digital lens and frame demonstration and measuring equipment but an EssilorVisiooffice was due for delivery in December 2011.

Teaching was supplemented by a visit to a lens manufacturer in the third year.

Clinical training Group 3, 3rd year students

There were five pairs of students spread over two rooms, which included a room with two combi unit stations. The students were being supervised by Master's students. At that time there were four real patients (all patients were students of non-optometry branches of Palacký University). There were no indirect headsets and the only field screener, a Medmont, was awaiting repair. The students were involved, interested and attentive.

Discussion

A number of matters which needed clarification arose before and during the visit. These were discussed in detail with the Head of the Optometry Department.

The number of credits allocated to important areas of the syllabus seemed to be inadequate while other less important subjects carried a high number of credits. It was explained that this was because of the historical structure of the course and way in which the 180 credits had been allocated, including optional subjects and supplementary subjects (**Appendix F**). The Department intended to rationalise this in the near future to properly reflect the importance of the subject and the teaching time allocated to it.

There was concern that there was limited clinical experience in fitting RGP lenses and also about the use of fluorescein. Apparently RGP lenses are rarely used in the Czech Republic but in addition to the practice that the students have on each other arrangements are made for an external clinician to visit and there are two, two day visits to the Johnson and Johnson Vision Care Clinic in Prague. In general contact lens teaching consists of lectures, seminars and practicals. Fluorescein is used

routinely in contact lens work in the Department but there is an issue about the legality of its use externally by non medically qualified people. (It should be noted that this appears to be a problem in other European countries where optometrists and opticians are legally allowed to fit contact lenses.)

It had been noted that retinoscopy and ophthalmoscopy had not been used on every patient in the clinics. There was more reliance on autorefractors for objective refraction. A few ophthalmoscopes were available but not used on a regular basis. This may have been because of a legal restraint which limits optometrists to examining the anterior segment of the eye only. However, it was felt that students should be taught to be proficient in both retinoscopy and ophthalmoscopy as the hope would be that the law in this respect would eventually be changed. Students did not buy their own instruments because of the cost.

Competencies were tested at the end of each semester in each subject. Student attendance was monitored, students were required to attend seminars, laboratory and practical sessions or they had to make up those that were missed. Attendance at lectures was optional. Practical examinations had to be completed before the theoretical examinations. Competencies were assessed by examiners subjectively but it was planned to move towards more objective station OSCE type examinations. Dr John Siderov from Anglia Ruskin University is helping with this process. As part of the competency approach, lectures and practicals took place back to back. Visual correction and contact lenses were finished before the second year externship and there was a structured and logical progression from subject to subject. Students were required to pass assessments before progression. If a subject was failed it would have to be repeated the following year. Only two attempts were allowed before the students had to extend the course from three to four years. Three resits were allowed for each subject. 18 eye examinations had to be completed satisfactorily, at least 10 of these internally, the remainder under supervision externally. Also 12 Contact Lens fits. Supervisors were required to undertake CET. The final practical assessment included refraction, binocular vision, slit lamp, contact lenses, and optical dispensing.

The Visitors were concerned that there was no guarantee that in Part that students would have experience in dispensing a wide enough range of lens and frame types and materials. This could be remedied by recording the work done by the students during their externships.

There was also concern about the lack of experience with RGP contact lenses although reassurances had been given about the steps that had been taken to provide extra tuition and experience.

The main concerns centred around Parts C2 and C3. There appeared to be limited tuition and training. Whilst there appeared to be adequate ophthalmological experience the Visitors were not convinced that this was acceptable without sufficient training in and regular use of ophthalmoscopy.

It was unclear where refractive surgery was taught, it was subsequently explained that this took place in Visual Correction 2 but would be moved to Visual Correction 1. It was also included in lectures on Corneal Topography.

Epidemiology was general and public health orientated, it did not appear to be adequately related to the eye and vision. Biostatistics was not included.

Ocular anatomy and physiology was adequate but had only one credit. This anomaly is discussed earlier in this report.

There was insufficient time allocated to ocular pharmacology although the Visitors were told that students were expected to extend their knowledge through private study, using textbooks and the intranet.

Final Discussion and Recommendations

The Visitors then discussed their recommendations and conclusions and on the final morning the following statement was made to the Head of Department:

Statement and Summary of Visitors' Recommendations for Exemption of Graduates from the Examinations of the European Diploma and the Formal Process of Accreditation

The Visitors would like to express their appreciation to the Head of Department, his staff and students for their welcome and very positive support to the Visitors during the Visit.

We have been very impressed by the work that has been done in developing the course, the enthusiasm and dedication of the staff and the commitment and keenness of the students and their external supervisors.

Our conclusions and recommendations to ECOO are as follows:

The European Diploma in Optometry is a four part qualification with three written and practical parts and a Portfolio of clinical experience. It is our recommendation that the students on the BSc Optometry Programme at the Palacky University, Olomouc, Czech Republic should be exempted from the following parts of the Diploma.

Part A – on condition that students can demonstrate that they have completed dispensing to real patients of a range of lenses including single vision, bifocal and varifocal lenses.

Part B – approved provided that in Part B3 students attend further tuition in RGP contact lenses for example the present Hecht course or equivalent training.

Part C – Part C1 approved, Part C2 not approved, Part C3 not approved

The European Diploma requires a level of clinical experience with unselected patients which is greater than that attained during the undergraduate course and, therefore, there should not be exemption from the portfolio.

This statement is subject to the approval of the Board of Management of the European Diploma, the ECOO Executive Committee. The final report on the pilot accreditation process which will be made to ECOO at the Spring 2012 meeting.

It is also our recommendation that this approval should not apply retrospectively to students who graduated before 2012, that this decision is valid for a fixed period to be decided, probably five years, or at an earlier date if there are substantial changes to the course.

In producing the final report on the Accreditation Pilot we would ask the School to submit a report setting out its views on the whole Accreditation Scheme including suggestions as to how the process might be improved.



The European Council of Optometry and Optics

Pilot Accreditation Process

For Exemption from the Examinations

and Portfolio of

The European Diploma in Optometry

Report of a Visit to the

Department of Optometry and Visual Science

at

Buskerud University College

Kongsberg, Norway

13 – 15 March 2012

Visitors

Robert Chappell

Feike Grit

Adrian Jennings

Daniela Nosch

Introduction

At its Autumn meeting in 2009 the General Assembly of the European Council of Optometry and Optics (ECOO) agreed to ask the Board of Management of the European Diploma in Optometry (the Diploma) to undertake a pilot project to investigate the feasibility of designing a process which would allow member countries to apply for their courses in optometry and optics to be benchmarked and subsequently accredited against the Diploma. The accreditation could be full or partial.

A small working group, Frank Buijs, Bob Chappell and Adrian Jennings designed a scheme in three sections which is attached as **Appendix A**. Four countries are currently participating in the scheme, the Czech Republic, Germany, Switzerland and Norway.

The third pilot accreditation process has now been completed at the Buskerud University College, Kongsberg, Norway. This report sets out the process that has been used from the initial application to the conclusion of the Visit and the recommendations of the Visitors.

The outline of the process and the timescale was:

Following the agreement to establish the pilot project Buskerud University College indicated that they would like to be part of the scheme. They had based their syllabus on that of the European Diploma and welcomed the opportunity to test how far they had achieved this. Due to the workload involved in completing the self assessment form the progress has been rather slower than both Buskerud and the working group had hoped. Nevertheless, the completed application was extremely well written and had very helpful and comprehensive supporting material for Part C, the Visit itself.

Unlike the previous two applications the group did not make a preliminary visit to Buskerud, in retrospect this would have been helpful to both the University College and the Visitors.

The outline of the process and the timescale was:

26.10.2009 First questions asked by Buskerud about the structure of the Accreditation Document: Was the first step to just submit Part B, the self assessment form or also to send the information requested in Part C?

06.11.2009 Request to Buskerud to initially complete Part B, the self assessment document.

29.03.2011 Invitation from Buskerud to visit the contact lens examinations. After discussion it was agreed that this was not a normal part of the accreditation process and would establish an unnecessary precedent. The invitation was declined.

01.04.2011 A partially completed self assessment form was received together with a programme specification and course information.

13.04.2011 Final version of self assessment form and programme specification received.

30.09.2011 Buskerud notified of timescale for formal response and proposed visit in Spring 2012.

27.01.2012 Proposed timetable sent to Buskerud.

27.02.2012 Visitors meeting to consider their provisional opinion. This had been delayed due to flight cancellations due to snow and very low temperatures.

02.03.2012 The Department was informed of the provisional opinion of the Visitors as to the extent of the exemption for the Buskerud Optometry Graduates who had completed the BSc programme in combination with the subsequent year of clinical experience and the Contact Lens Diploma.

13.03.2012 Formal Accreditation Visit to Buskerud University College by Bob Chappell, Feike Grit, Adrian Jennings and Daniela Nosch.

15.03.2012 A summary of the Visitor's Recommendations for Exemption presented to the Head of Department of Optometry and Visual Science at the Buskerud University College.

The visitors would like to express their thanks to Dr Bente Monica Aakre, Head of Department, and other members of staff for their enthusiasm, support, co-operation and understanding in undertaking this pilot accreditation.

The report is divided into three sections and sets out the process from the initial enquiry to the formal visit.

Section 1 – The Accreditation System

Having made the decision to participate in the Pilot Scheme and some minor clarifications about the order in which the information should be presented, the Department proceeded with the completion of Part 2, the self assessment form, without further discussion.

In retrospect and having arranged preliminary visits to both Olten and Olomouc it would have been helpful for both Buskerud and the Panel to have met beforehand to discuss the completion of the self assessment form and to identify potential problems. This might have reduced the information that was requested following receipt of the form and could have made the provisional opinion on exemption easier.

The preliminary visit has now been incorporated in the scheme.

Section 2 – The Self Assessment Form

In April 2011 the completed Self Assessment Document, **Appendix B**, was received together with an English translation of the programme specification, **Appendix C**.

A meeting of the Visitors then took place in The Netherlands in February 2012 when the Document was examined in detail together with the Preliminary Information requested in Part 3, **Appendix D**. This resulted in a significant number of questions which were subsequently sent to the Department for response before the Visit took place.

On the basis of the information available to the Visitors decisions were made on the level of provisional accreditation for each of the subject areas of the ED.

The provisional opinion on accreditation appears below. There was difficulty in deciding on a number of clinical and practical competencies because of lack of information. However, it was thought that this information might be found in the log books. It was, therefore, agreed that some of the provisional approvals should be subject to a satisfactory review of the log books. This is expressed as the following reservation indicated by a * in the table. The reservation would read: 'a decision about the extent to which the various log books meet the practice experience requirements of the European Diploma will be made after inspection of the completed log books and discussion with students, supervisors and staff'.

Response of the Accreditation Panel to the Self-Assessment document and other information provided by the Department.

1. Provisional opinion as to exemption for Buskerud Optometry Graduates from the Examinations of the European Diploma.

This provisional opinion is based on the Panel’s analysis of the documents supplied. Evidence found during the Verification Visit may result in changes in the Panel’s recommendations. Formal exemption can only be given after the Verification Visit.

Part A: Optical Technology

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part A 1	Optics	Subject 1: Geometrical Optics	Provisional Exemption
		Subject 2: Physical Optics (also A 2)	Provisional Exemption
		Subject 5: Optical appliances (also A 2)	Provisional Exemption
Part A 2	Optical Technology	Subject 2: Physical Optics (also A 1)	Provisional Exemption
		Subject 3: Visual Optics	Provisional Exemption
		Subject 5: Optical appliances (also A 1)	Provisional Exemption
		Subject 6: Occupational optics	Provisional Exemption

	<u>Knowledge base</u> for the European Diploma competencies
	<u>Clinical/practical</u> aspects of European Diploma competencies

Part B: Management of Visual Problems

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part B 1	Refraction	Subject 7: Vision and Aging (also B 2)	Provisional Exemption
		Subject 8: Refraction	Provisional Exemption*
		Subject 9: Low vision	Provisional Exemption*
		Subject 12: Investigative techniques (also B 2)	Provisional Exemption*
		Subject 13: Paediatric Optometry (also B2)	Provisional Exemption*
Part B 2	Binocular Vision	Subject 7: Vision and Aging (also B 1)	Provisional Exemption
		Subject 10: Ocular motility and Binocular Vision	Provisional Exemption*
		Subject 13: Paediatric Optometry (also B 1)	Provisional Exemption*
Part B 3	Contact lenses	Subject 11: Contact lenses	Provisional Exemption*
		Subject 12: Investigative techniques (also B 1)	Provisional Exemption
Part B 4	Visual Perception	Subject 4: Visual Perception	Provisional Exemption

Part C: General Health and Ocular Abnormality

Europe Diploma Examination Sections		Self-assessment Document Competency Areas	Provisional Opinion
Part C 1	Biology	Subject 15: Anatomy and Histology	Provisional Exemption
		Subject 16: Neuroscience	Provisional Exemption
		Subject 17: General Physiology and Biochemistry	Provisional Exemption
		Subject 18: General Microbiology and Immunology	Provisional Exemption
		Subject 19: General Pharmacology	Provisional Exemption
Part C 2	Ocular Biology	Subject 21: Epidemiology and Biostatistics	Provisional Exemption
		Subject 22: Ocular anatomy and Physiology	Provisional Exemption
		Subject 23: Ocular Pharmacology	Provisional Exemption
Part C 3	Ocular Abnormality	Subject 20: Pathology and General Medical Disorders	Provisional Exemption
		Subject 12: Investigative techniques	Not Adequate for Exemption
		Subject 14: Refractive Surgery	Provisional Exemption
		Subject 24: Abnormal Ocular Conditions	Not Adequate for Exemption

*a decision about the extent to which the various log books meet the practice experience requirements of the European Diploma will be made after inspection of the completed log books and discussion with students, supervisors and staff

2. Formal Accreditation

A formal recommendation to the European Diploma Board of Management for exemptions from sections of the European Diploma can only be made after a satisfactory visit by the Accreditation Panel. The purpose of the Accreditation Visit is to verify the information in the documents and to ensure that all relevant European Diploma competencies have been achieved by all graduates of the programme.

3. Accreditation Visit

The programme management team are invited to request an Accreditation Visit and to propose a date within the teaching year when students are present and all three years of the teaching programme are being delivered. It is hoped by the Panel that early March 2012 might prove convenient.

4. Details of the Accreditation Visit

The Accreditation Visit will follow the format described in Part III of the Accreditation Guidelines. Please note that the accommodation and travel expenses of the Visiting Panel are to be met by the University.

Consideration was given to the self assessment document, the detailed syllabus and the preliminary report submitted by the Department, all of which were very comprehensive. Comments and questions arising from these were:

- It was clear that the accreditation which is being requested is for a combination of the BSc degree, the year of clinical experience that follows graduation and the contact lens qualification.
- As with the previous applications it was difficult to make judgements from the credit weightings.
- The term 'peer assessment' appeared several times in the documents – it was not clear what this means.
- The grading system has five pass grades and only one fail grade. How is this structured and what are the arrangements for resits?
- What is the marking scheme used for examinations?
- Is there a selection procedure and what is the entry standard?
- What do entry grade standards mean and why have they dropped over the last few years?
- More information about the legislative structure for optometry, including registration, the number of optometrists and other eye care providers, and any limitations on examining children would be helpful.
- Does the BSc qualification give immediate rights to use diagnostic drugs?
- What does the Master's course include over and above the BSc course?
- What % of optometrists have a contact lens qualification?
- Why are there virtually no failures in the contact lens examination?
- How has the staff/student ratio been reduced and how is the ratio calculated?
- What extra pharmacology is included in the contact lens course?
- How detailed are the log books?
- How are the log books assessed?
- What is meant by saying the course is competency based?

- How are competency assessments carried out?
- What are the criteria for selecting practices for externships?
- What are the criteria for training supervisors?
- Is there a protocol for supervisors to follow when assessing students?
- What is the scope of the eye examination undertaken by second year students during their externships, are all the relevant competencies assessed beforehand?
- What does 'self assessment' mean?
- There is the intention to re-organise the syllabus in some areas, how will this affect the current students? How significant are the changes?
- There are a number of subjects where a practical competency is only covered by a written examination rather than a practical assessment – is this in fact the case?
- How is the 30 week third year internal clinical experience organised?
- What are the arrangements for dispensing to patients seen in the internal clinics?
- What arrangements are there for students to see real pathological cases, is there an opportunity to attend eye clinics?
- What is the role of external examiners, how are they appointed?
- There does not appear to be an assessment of binocular vision, Volk and gonioscopy lenses.
- There does not appear to be a practical examination or assessment for Refraction 3.
- Apart from RGP lenses there does not seem to be any evaluation of competencies.
- *Subject 5 Optical Appliances* – Are students required to dispense a range of frame types and lenses?
- *Subject 8 Refraction 1* –What is the range of clinical examination stations?
- *Subject 8 Refraction 2 to 7* –What are the criteria for assessment of communication skills?
- *Subject 8 Refraction 14* –How is this assessed practically?
- *Subject 8 Refraction 15* – Why is the assessment only based on one patient?
- *Subject 9 Low Vision 4* – What does X out of 50 mean?
- *Subject 11 Contact Lenses* – Is paediatric work included?
- *Subject 11 Contact Lenses* – Are real patients seen in practice externally during the course? If so, how are they supervised?
- *Subject 11 Contact Lenses* – The number of both practical and clinical fittings are very small particularly in relation to RGP lenses.
- *Subject 12 Investigative Techniques 1* – Why are ages 7, 10 and 15 selected?
- *Subject 12 Investigative Techniques 2* -Why is the minimum number of patients observed on slit lamp, direct and indirect ophthalmoscopy set at 1?
- *Subject 12 Investigative Techniques 16* –Why is there no practical experience and assessment of the use of specialist charts?
- *Subject 14 Refractive Surgery 1 to 6* – Apart from lectures, do students get an opportunity to observe refractive surgery e.g. by attendance at clinics or video.
- *Subject 24 Abnormal Ocular Conditions 3 to 6* –There are no clinical assessments, only written examinations – what form do these take?
- *Subject 24 Abnormal Ocular Conditions 18* –Managing sight threatening disease goes beyond first aid – how and where is this covered?

The Visitors would like to have available for inspection:

- Minutes of feedback meetings between staff and students.
- Copies of log books for undergraduate and contact lens students.
- Access to the central log book reports.

Section 3 – The Visit

The meeting took place from 13 – 15 March 2012 at the Buskerud University College, Kongsberg, Norway. The programme is attached at **Appendix E**.

Meeting with the Rector, Dean and Head of Department

The visitors met with the Rector, Ms Kristin Johnsen, the Dean, Dr Heidi Kapstad and the Head of the Optometry Department, Dr Bente Monica Aakre.

The Rector welcomed the Visitors and outlined the history of the establishment of the optometry profession in Norway in 1977 and the long history of professional education at the University College and its predecessors. The University Colleges were formed as part of the higher education system in Norway in 1994 when optometry became part of the Buskerud University College. In 2004 the Bologna process was introduced enabling the establishment of a Bachelor degree for optometry. Following this, an application was made to offer Masters and PhD programmes.

The College has its own internal quality standards and accreditation system, in addition there is a national accreditation system. The College believes in research, both theoretically and practically based, education. The Dean explained that the Faculty of Health Sciences has a comprehensive research plan with external grants. Optometry plays an important part in this.

Speaking about the development of optometry, Dr Aakre said that currently continuing education is voluntary. The optometrists who supervise the externship for second year students do not have to undertake compulsory training. However, a comprehensive voluntary course has been introduced which has had a good take up and it is intended to make this compulsory. A high percentage of the profession had taken the top up course to allow them to use diagnostic drugs.

Looking to the future, there was the intention to move the external practical experience from the second to the third year so that students could get greater experience in the use of diagnostic drugs. Basic contact lens education would also be moved into the three year course. A Master's degree would be offered for advanced clinical studies. The Dean outlined opportunities to participate in community health service programmes which are being promoted by the Norwegian Government. The number of students would remain stable or increase, Ministry of Health research suggested that with the increasing number of female optometrists the numbers in training would need to increase.

Tour of Facilities

The Department is housed in a modern building in Kongsberg. There is a suite of clinics and laboratories for teaching and well equipped research facilities. Lecture rooms are shared with other courses. Staff have their own individual offices. An equipment list is attached as **Appendix F**.

There is a well equipped pre-clinic laboratory with ten stations for refraction. The third year patient clinic was well organised with a reception area and two suites of five clinical examination rooms which are also well equipped. A fundus camera and Optomap are in a separate instrument room. Another room is dedicated to contact lens work with one examination station and a comprehensive range of disposable and RGP lenses.

Dispensing is taught in a large well equipped laboratory with both hand edging and automatic machinery, focimeters, frame repair and facial measurement equipment.

The library contained a comprehensive collection of books on optometry and related subjects which students can loan. Most books were in English, only a few books were in the Norwegian or German

language. There are also a number of computer terminals. There is also a bookshop where students can purchase text books from a comprehensive range of titles, again mainly in the English language.

Observation of Teaching and Learning

Third Year – eye examinations of external patients

The reception desk was manned by two students. Patients are seen during four one and a half hour sessions from 08.15 to 14.00 on Tuesdays and Thursdays. The timings are staggered by fifteen minutes which enables the supervisor to be present at the start of each examination. Five patients are booked for each session making twenty a day. The appointment book showed that this was being achieved on most days. Where patients require dilation they are rebooked if there is not time to do so on the first appointment. The age range of patients was said to be from six to ninety. On the day there was one twelve year old child booked.

There is one supervisor for two examination rooms with one student carrying out the examination and another observing and taking notes. At the end of the clinical examination, the supervisor will give feedback to the students, however there are no pass/ fail criteria during these regular outpatients clinics.

Room 1: A female patient who was having her near point of convergence checked with an RAF rule and confrontation was carried out with fingers.

Room 2: A middle aged male patient having his vision checked on a single line Logmar chart and pupil reactions with a pen torch.

Room 3: a middle aged male patient having his central fundus checked with a 90D loupe.

The two Visitors had a discussion with a male student who was waiting for his student colleague to complete taking a fundus photograph on their patient. He had already seen fourteen patients with three weeks of the clinics remaining. He thought that all his colleagues would reach the fifteen patient target. Generally they did fields on “at risk” families. Diabetics should be dilated at the first examination. Where glaucoma was suspected patients are dilated, pressures repeated and visual fields undertaken. However, there did not appear to be protocols for the use of diagnostic drugs or visual field screening. He was aware of the ISNT Rule.

Where referrals are necessary these are made direct to a local ophthalmologist in a private clinic or at the nearest hospital in Drammen, 40km away. Students write the referral letters under supervision.

Students keep a copy of the results and enter data directly into the consulting room computer as the examination progresses. The record is modified as necessary after discussion with the student. It is subsequently reviewed by the supervisor..The electronic record can be amended up to seven days after the examination took place – thereafter, all clinical information will be locked in the system. The sequence of entry of data is not ideal. Sketches and fundus photographs cannot be input at present.

Maths Tutorial First Year–Lecturer Otto Warraas

18 Students were working alone and in pairs on maths problems. Attendance is voluntary. The course follows the whole of a set book.

The lecturer was very approachable. He commented that the syllabus was perhaps a bit more extensive than was necessary. He was aware that the students find the topic difficult but with help

and encouragement most do pass the examination. It was rather an arduous timetable for the students, Maths from 08.15 to 11.00

Anatomy and physiology of the eye (revision for final examination) – contact lens course. Lecturer Professor Dick Bruenech

This was a post-graduate Contact Lens course with about 21 students present. Mock questions were reviewed in preparation for the Contact Lens examinations the following week. There had been another session the previous day.

It was a well organised session with Powerpoint questions, possible answers revealed and discussion encouraged about whether and why each possible answer was correct or not. There was a good rapport with the students cleverly avoiding embarrassing the poorer students. There was excellent spontaneous use of the blackboard to explain and illustrate points as they arose.

Lecture on pupils – third year students – Jorunn Lid

There was a full lecture room. Students had a comprehensive hand out of the power point presentation. The lecture was interactive, students were attentive, took notes and asked questions. The demonstration of pupil abnormalities would have been enhanced by the use of videos of real patients.

Ophthalmic Optics Lecture First Year – Bonnie Uchermann

The lecture ran from 8.15-10.00 and was followed from 10.15 to 12.00 by a Dispensing lab. There were 39 students present. No handouts were in evidence although, subsequently, the lecturer confirmed that lecture notes were available on the intranet, it is up to the students to print them off, or not. Some students were taking notes but many were sitting without a note pad in front of them.

The topic was marking up lenses and adding markings for rimless drilling. Visual aids were good with a Powerpoint presentation to illustrate axis and optical centre setting. A camera was used to show the actual lens with its markings.

There was one question from a student with a little follow up discussion. The students were quiet and mostly attentive, one was observed texting!

Dispensing optics laboratory – first year students

Students undertake a number of different tasks including checking, marking and setting lenses, glazing different types of frames, including rimless, plastic and metal frame repairs. Glazing experience included automatic and hand edging. Rimless drilling was being demonstrated with the use of a video camera to allow a group of students to see the process. There was a good range of single vision lenses in a filing draws arranged to allow appropriate powers, single vision and toric, for selection to suit the different tasks. Students had access to the workshop outside teaching hours to enable them to complete the various tasks are then assessed by two members of staff.

Equipment for facial measurements included software based systems which enabled double checking of results.

It was disappointing that no bifocal or varifocal lenses were available to enable students to gain experience of glazing and dispensing these lens forms. This is apparently due to cost. It was suggested that manufacturers might be willing to make rejects available as is the case in other countries.

Overall opinion of teaching

Lectures and tutorials: Some lecturers engage the students attention and are inspirational, others are a bit less inspiring. The culture of very long sessions with the same lecturer makes it difficult for the students to maintain concentration (and is probably educationally inefficient).

Clinic experience: the idea of direct entry of clinical data is excellent. However for teaching purposes the computer screens need to run in thesequence that the student usually performs the various tests and to besufficiently detailed for each stage of reaching a conclusion to be apparent. It is unfortunate that fundus photos and sketches cannot be included at present.

Meeting with First Year Students

The students came from a variety of backgrounds, some from conventional education, some topping up their qualifications and two, including a mechanical engineer, changing their careers. Experience had been gained working in an optical shop. They were almost at the end of their first year.

The students commented that they had found the first year more difficult than expected. In particular they found mathematics difficult and questioned the need for so much of it. The entry requirements do not include compulsory science subjects. Extra courses and help were provided to make good any deficiencies. There was good rapport with the staff and there is provision for student representation on committees. There was the opportunity to comment on staff performance once a term through a questionnaire.

Retinoscopy is taught in the second semester. The majority of text books are in English and help is given to help students understand technical terms.

The students thought that they spend about 20 – 25 hours a week on formal studies and the same privately.

Examinations were held at the end of the first semester and they estimated that there was a 20% failure rate. The modules that had been failed were to be retaken after the second semester examinations. If the module exam is failed, there are two chances for a re-sit. Having failed both re-sits, the Semester has to be repeated.

Meeting with Staff

The staff are mainly optometrists with other specialists teaching: anatomy and physiology, pharmacology, maths and physics, ophthalmology. They are mainly full time. A full staff list is attached as **Appendix G**.

The meeting was with twenty two members of staff. The staff said that they were involved in decision making processes and there was the opportunity for open discussions within a formal structure with delegated responsibilities. They also have an input into scope of practice discussions at a national level. The Norwegian Association had played an important role in the development of optometric education, funding staff development including PhD studies in the UK and other countries and in supporting participation in the PCO Master's course. The staff have a history of involvement in policy development with both their National Association, the European Council of Optometry and Optics and the European Diploma in Optometry.

A new Master's degree in specialised clinical topics has been developed. The bachelors modules are reviewed every year and relate to both national and global developments in optometric education and practice.

The current tutorial system provides for one tutor for each year. However, there had been some discussion about personal tutors in the future partly because the failure rate was increasing.

All the staff have Master's or PhD degrees and there is current funding for four PhD students.

The staff thought that the quality of students had reduced and that their attitudes were less open minded. A voluntary summer school in mathematics before degree starts has been organised to help with those students who think that their mathematical knowledge is weak. There is also the opportunity for intensive training in physics. Students have intranet access to notes and presentation before lectures and they are encouraged to read articles in journals. Some students came from other Scandinavian countries.

The use of diagnostic drugs was not as widespread as it could be, it often was seen to be time consuming and inconvenient. There was also disappointment that while there is a good relationship with some individual ophthalmologists there is no co-operation with organised ophthalmology.

Meeting with Second Year Students

The second year students were in the first week of their externship in the second semester with a further ten to eleven weeks left. They are expected to watch thirty eye examinations, undertake fifty themselves together with fifty dispensings, including frame selection, measurements, glazing and fitting the completed spectacles. All the students had had the opportunity to undertake some of these tasks and said that they were gradually being introduced to working with patients under close supervision. They were expected to become familiar with all aspects of work in practice including reception work, ordering and checking.

The scope of the eye examination they are expected to undertake includes refraction, binocular vision, ophthalmoscopy and non contact tonometry. Some students share a consulting room with an optometrist, others had their own room. It became apparent that not all practices had a visual field screener. The students had a good understanding of the role of optometry.

They spent about twenty five hours a week in formal study and a further twenty five hours in private study. They felt that they would benefit from more formal study time and in particular more exposure to ocular pathology.

Meeting with Staff Responsible for the Clinic and External Practice

The meeting was with Ms Cecilie Bjorset, Ms Jorunn Lid and Ellen Svarverud

It was explained that the concern of the Visitors is to ensure that the worst student is competent.

In answer to a question about the competency of the second year students to undertake their externship in the fourth semester, it was explained that retinoscopy is tested at the end of the third semester before Christmas. The students are expected to undertake twenty five eye examinations on fellow students, but only one is assessed by a supervisor. They are expected to undertake refraction, cover test and direct ophthalmoscopy. There is also a requirement to produce three fundus drawings of fellow students. If the assessment is failed the student will not be allowed to undertake the externship until successfully able to complete the examination.

The same external supervisors are not used every year, some may not be recommended if the feedback is negative. As previously mentioned a course for supervisors is available. Supervisors are expected to check ophthalmoscopy and the routine technique.

Third year clinics for external patients are held twice a week for twenty weeks. Students are expected to undertake fifteen full eye examinations and observe a further fifteen. In addition they screen school children and visit a home for the elderly. There are workshops for the demonstration of ocular pathology. No charge is made for people under eighteen, those over eighteen are expected to pay.

There is a policy document for decision making about the quality of eye examinations and a final examination by OSCE. However many of the assessments seemed to reflect the examiners' subjective impression rather than be based on any defined and agreed criteria. The final examination has set criteria that are known to the students beforehand. There did not appear to be a policy regarding the use of diagnostic drugs or visual field examination.

Low vision evaluation is undertaken by optometrists. The outcome of school screening is a referral rate of about twenty per cent from eight hundred pupils screened.

Meeting with Recent Graduates (Graduated 2011)

The graduates said that they had had no difficulty in finding employment. With one exception they wanted more experience through more education and were intending to take the contact lens course or the new Master's degree.

One worked for a private company specialising in low vision and received referrals from hospitals, ophthalmologists and optometrists. She undertook routine examinations in addition to the low vision work. CET was undertaken including attendance at the PAC conference in the UK. One worked in private practice, used drugs regularly on children and had undertaken about ninety eye examinations although there had been no referrals. Another always asked for a response to referrals and generally received them. Time was restricted to thirty minute appointments and he was not keen on using diagnostic drugs, time was short and historically other optometrists did not use them. A fourth worked in private practice with 6 optometrists and three consulting rooms. Three hundred and fifty patients with forty minute appointments had been seen. A full range of optometric examinations were undertaken including visual fields, Optomap, OCT and tonometry. Diagnostic drugs were used as necessary. Ten to fifteen referrals had been made. CET courses were undertaken.

They thought that it would have been helpful to have more exposure to ocular pathology during the course. The second year externship was very useful experience for the final year clinics. Tutorials had also been useful.

There seemed to be confusion about whether or not the law allowed optometrists to dilate children under five years old. The opinion was that this needed approval by an ophthalmologist. Or was it a guideline issued by the Optometrists Association?

Meeting with an Ophthalmologist

Dr LivDrolsum is a professor of ophthalmology at the University Hospital in Oslo, she specialises in the anterior segment. She has been teaching optometrists since 2001 and on the contact lens course since 2006. The syllabus is provided by the Department, more time is devoted to abnormal ocular conditions than for general medical students and optometrists are more optically orientated which is important in contact lens work. Optometrists also need to be able to make judgements about referrals. Ophthalmologists in Norway find optometrists useful and are satisfied with their case finding, especially glaucoma which is important. She was open to the idea of students attending clinics in hospitals for pathology experience. Five or six optometrists work with ophthalmologists and optometrists in the University Hospital.

Discussion on Accreditation of Ocular Abnormality (Part C3)

Ellen Svarverud, Cecilie Bjorset, Per Lundmark, Vibeke Sundling, Ann Ystenaes, Bente Monica Akre

There is a challenge in getting ophthalmologists to co-operate in teaching abnormal ocular conditions. This is possibly due to problems caused by orthoptists. However, optometrist members of staff are qualified to teach ocular pathology. It was suggested that whilst this may be true there are real benefits for students to be able to observe pathology in hospitals or private ophthalmological clinics under the supervision of ophthalmologists.

Three ophthalmologists do teach on the course giving one or two lectures each. A number of workshops are taught by the optometric staff. There are four lectures for second year students before their clinical practice externship.

There are nineteen three hour lectures plus workshops in the third year together with opportunities to identify pathology from photographs. The examination in ocular pathology includes VIMOCs.

It was estimated that a higher proportion of pathological cases were seen than would normally be seen in private practice.

Meeting with Head of Department to Clarify Issues from Day One

Second Year Externships

There is currently no sampling of log book patient examinations. However, the contract with supervisors does include the right to check patient records. There is the intention of carrying out a random check of records in the current semester.

Dispensing includes all types of frames and lenses and students are expected to undertake specific tasks to ensure that a full range of experience of lens types is included but not necessarily all types of frame materials. Where a practice has no access to glazing equipment arrangements are made for experience to be gained in a prescription laboratory. This was confirmed from the current student placement lists.

Third Year Clinical Experience

Third year student records are entered on a data base and the entry checked by the supervisor but were not subject to further review. A number of records were checked by the visitors and concern was expressed that not all patients received a full routine examination including subjective phoria tests and tonometry. Patient records can be reviewed by students on the secure database, these are locked and can only be partially reprinted. Students rely on the notes they make during the examination. Referral letters can be reprinted.

The Visitors reviewed a number of patient records on the data base, these were randomly selected. Returning patients are effectively new patients to students and should be given a full examination. One example of this was a patient given a partial examination when returning after fifteen months, no fundus examination had been undertaken. No record showed a complete routine eye examination. Another showed that a diabetic had not been dilated. It was agreed that protocols were not strict enough. Not enough data is being recorded to provide evidence that adequate eye examinations are being done.

Portfolio (Log Book)

Record keeping is based on the clinical guidelines issued by the Norwegian Association. The Portfolio (log book) is new and some optometrists taking the contact lens examination had not yet completed it. In the future the expectation is for the log book to be completed on time. It was noted that some practices did not have a visual field screener and relied on confrontation or referral to another optometrist or ophthalmologist.

It was agreed that the log book should be lifelong commencing in the first year of the course and would constantly evolve as the scope of practice develops.

Research and higher qualifications

Ten to fifteen students were undertaking an MPhil. The MSc in advanced clinical studies would commence in September 2012. It would be a two year full time course but could be completed by module. It includes anterior and posterior eye disease, paediatrics and contact lenses. Subject to Government approval this would lead to a nationally recognised specialist qualification after two years clinical experience. The first year would consist of research methodology and contact lenses with pathology and paediatrics in the second year.

There are two hundred and ninety optometrists with the PCO Master's qualification including some from other Scandinavian countries.

Meeting with Optometrists on the Contact Lens Course

The students were in the final part of the course with examinations the following week. Some had found difficulty in completing the log book on time. There was a particular difficulty in completing the number of examinations required on children under five. Some overcame this by examining children of friends.

It was difficult to find RGP lenses. As far as experience outside the course there was no guidance from the Department, it was up to the practice supervisor.

There are no courses for fitting specialised lenses. Optometrists fit keratoconus and one optometrist had fitted Ortho K lenses to eleven and twelve year old children. This is covered in lectures but the clinical experience was gained in practice from other optometrists.

There was general agreement that the Log Book was an important part of increasing clinical experience through working with experienced colleagues. All the students used diagnostic drugs. Some carried out field checks on all patients, others as necessary and one worked in a practice with no field screener.

Meeting with Third Year Students

The students had a clear understanding of the healthcare role of optometry. They mentioned seeing cataract operations on U tube and myopia research. They said that they used diagnostic drugs regularly. There is a reliance on the cover test for identifying binocular vision problems. It was not clear how often field checks were carried out; one student said on every patient, another said only four or five times.

Dispensing experience had been gained in their second year placement, generally in practice but one had done this at Rodenstock. They had had to buy their own clinical equipment and worked in practices during holidays.

They felt that there was too much emphasis on mathematics and would like more experience in clinical practice. Inclusion of contact lenses in the third year was popular.

Their overall workload including the final year project is about ten hours a day.

Meeting with External Supervisors

The supervisors had qualified in:

1979, a PCO Master's in 2000 and a practice owner since 1984 and had supervised six students
1987, a contact lens qualification in 1993 and diagnostics in 2010 and had supervised four students
1989, a Manchester degree in 1994, PCO Master's in 2000, a practice owner since 2002 and had supervised 5 students
1995, a contact lens qualification in 1997 and diagnostics in 2008 and worked with low vision.

They thought that the course for supervisors had enabled them to take a more structured approach to supervision than in the past. There is value for optometrists in supervising a student, it encourages a focus on professional development and an increased scope of practice.

Students are given a broad experience of customer service, dispensing and refraction. They are expected to gain daily experience in the workshop. If this is not available in practice they spend two to three weeks in a prescription laboratory. They would be expected to spend fifty per cent of their time on eye examinations and would be introduced to Volk lenses and the use of slit lamps. All students saw in excess of fifty eye examinations and all gained experience in referrals. Two of the practices did not have a visual field screener and relied on confrontation. Three had two consulting rooms. One supervisor preferred not to see children and referred them.

Suggestions for improvement were to increase teaching and exposure to ocular pathology, more emphasis on patient management and communication.

Meeting with the Contact Lens Module Leader

It was clarified that the contact lens students obtained practical experience with real patients under supervision in practice. However, there is no required instrument list for practices that fit contact lenses. It was noted that whilst the Norwegian Association specified requirements for the clinical examination and fitting of lenses, it did not specify the equipment that is necessary. It was suggested that the Department should discuss this with the Association.

There was also concern that clinical experience on the course is limited to daily disposable soft lenses and the students fitting each other with RGP lenses. Although the use of disposable lenses may be widespread in Norway, there is still a significant number of patients who will require a different type of lens. At the very least students should have the opportunity to fit conventional soft lenses with an extended parameter range in the clinics.

There was discussion about the intention to move contact lenses into the third year of the Bachelor's course moving specialist qualifications into the new MSc course. This was seen to be a positive move but has implications for the future of the LogBooks and the perceived need for the P-G contact lens course.

Visit to the Research Facilities

The Visitors were given a tour of the research facilities which are both extensive and impressive.

Research is of international standard, and includes visual ergonomics, neuromuscular organization of the oculomotor system, developmental vision, and age-related changes in vision. Research methods include electrophysiology, electron microscopy, experimental and clinical psychophysics, high resolution retinal imaging including adaptive optics and genetics.

Discussion and Identification of Deficiencies

The Visitors were not satisfied with the consistency of eye examinations, the quality of the record keeping and the assessment of the records. It is not appropriate for students, in the early stages of their training, to make judgements about the necessity or otherwise of particular tests. This is for two reasons:

1. The students should become skilled at doing all the tests involved in a routine eye examination.
2. The patient should receive a comprehensive eye examination at each visit.

The log books for the 2nd and 3rd year and the year between graduation and the Contact Lens Course are rarely complete and are, therefore, unsatisfactory. However, we found the contact lens log book to be satisfactory.

Part C3 has not been proposed for accreditation because Subject 12, Investigative Techniques, does not include assessing competency in headset indirect binocular examination of the fundus. The regulations for the practical examinations for the Diploma make it clear that this is one of the examination stations. We appreciate that students are aware of this technique but to meet the requirements of the Diploma they must also be competent in its use. All other subjects in Part C3 are satisfactory.

Statement and Summary of Visitors' Recommendations for Exemption of Graduates of the Department of Optometry of the Buskerud University College from the Examinations of the European Diploma and the Formal Process of Accreditation

The Visitors would like to express their appreciation to the Rector, Dean, Head of Department, her staff and students for their welcome and very positive support to the Visitors during the Visit.

We have been very impressed by the organisation of the course, the dedication of the staff and the commitment and enthusiasm of the students and their external supervisors. In particular we thank the Department for the detailed and comprehensive reports that have been submitted.

Our conclusions and recommendations to ECOO are as follows:

The European Diploma in Optometry (ED) is a four part qualification with three written and practical parts and a Portfolio of clinical experience. It is our recommendation that the students on the BSc Optometry Programme at Buskerud University College should be exempted from the following parts of the Diploma.

Part A – Without condition

Part B – on condition that the Contact Lens Qualification has been awarded.

Part C1 and C2 – Without condition

Part C3 – Not exempted

Portfolio – Not exempted

This is subject to the approval of the Board of Management of the European Diploma, the ECOO Executive Committee and the final report on the pilot accreditation process which will be made to ECOO at the Spring 2012 meeting.

It is also our recommendation that this approval should not apply retrospectively to students who graduated before 2012, that this decision is valid for a fixed period to be decided, probably five years, or at an earlier date if there are substantial changes to the course.

In producing the final report on the Accreditation Pilot we would ask the School to submit a report setting out its views on the whole Accreditation Scheme including suggestions as to how the process might be improved.

