

# *Standards of Exam Administration-- LLQP*

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*Prepared for Durham College and FSCO*

# ABSTRACT

This report on Standards of Exam Administration for the LLQP focuses on six issues.

1. Administration standards for a paper-based exam.
2. Guidelines for ensuring the physical security of paper-based exams and their items.
3. Accuracy standards for scoring a paper-based exam.
4. Standards for reporting exam performance.
5. Ongoing monitoring of compliance with standards.
6. A Review of Durham's position relative to the standards.

Our aim is to identify generally accepted standards for Exam Administration, as well as identifying practices that exceed generally accepted standards. The guiding principle for the standards is "due and reasonable care" which entails anticipating likely processes and problems, creating written standards to guide them and monitoring compliance. The standards themselves blend a review of documents, research studies, industrial psychology principles, three site visits and interviews with other organizations involved in credentialing in financial services.

Overall, there are **118 generally accepted standards** identified in this report. Durham College fully meets 80% of these standards and partially meets an additional 15%. Only six generally accepted standards (5%) are unmet.

We also identify **103 exceptional standards** that pertain to Durham's activity. Durham College fully meets 42% of these exceptional standards now and partially meets another 42%. Some 17 exceptional standards (16%) are unmet. Do bear in mind that some of the exceptional standards have costs that are considerable relative to their likely benefit.

Almost without exception, Durham intends to fully meet the partially met and unmet standards that are within its mandate. For unmet standards that are outside its current terms of reference or that are matters of policy dictated by FSCO, Durham College is willing to discuss the costs of implementing these changes and seek approval and funding for those that are ultimately deemed desirable to implement.

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# 1.0 INTRODUCTION

## 1.1 Background

**Standards of Exam Administration** are a concern to all stakeholders involved with the LLQP in Ontario. The Financial Services Commission of Ontario (FSCO) as the responsible licensing body has the ultimate concern. Durham College as the body contracted to administer and execute the examination process shares the concern that the exam administration process be as good as possible.

Thus Durham College contracted this review of “Standards of Exam Administration” for paper-based exams as a parallel to its work on computer-administered exams. The Brondesbury Group was engaged to conduct this review and to report on its findings. Findings are based on a review of documentation from examination sites, standards published in professional literature and site visits to three examination centres.

Our role is to develop a model of the examination process based on generally accepted standards. In some instances, we will identify processes or activities that lead to a model that exceeds generally accepted standards. Our review will focus on six issues.

1. Administration standards for a paper-based exam.
2. Guidelines for ensuring the physical security of paper-based exams and their items.
3. Accuracy standards for scoring a paper-based exam.
4. Standards for reporting exam performance.
5. Ongoing monitoring of compliance with standards.
6. A Review of Durham’s position relative to the standards.

## 1.2 General Comments on Examination Standards

**The guiding principle in the literature on standards is “due and reasonable care”.** This entails a process that:

- Reasonably anticipates major activities and problems;
- Is written down and replicable by others; and
- Is monitored to ensure that it is followed.

There are a few other key themes in the literature that bear mention.

- It is impossible to anticipate every eventuality.
- Fairness and transparency are the underpinnings of standards.
- Every control activity has a cost. The ideal process balances costs and control.
- Standards are the responsibility of all stakeholders – not just the party administering the exam.

We would also like to note that the generally accepted standards published in the “Standards for educational and psychological testing” of the American Psychological Association (plus AERA and NCME) are so broad that they could be stated in a page or two and would be of little value for telling exam administrators what to do. It is safe to say that Durham College’s procedures far exceed those general standards.

With that in mind, we developed our standards based on a combination of behavioural principles in industrial psychology, a review of the literature on test administration and prevention of cheating, and a review of documented practices of other organizations administering credentialing examinations for financial services in Ontario.

To guide our discussion of standards, we have developed three broad process models: Exam administration, Exam security and Scoring Accuracy. These three models are necessarily inter-related and some standards are repeated in more than one spot to ensure completeness.

### 1.3 Organization of this Report

This report consists of four chapters preceded by a one-page Abstract and a Table of Contents. This Introduction is the first chapter. The remaining chapters are:

- **Process Overview (ch.2):** This sets out standards for overall administration and the security of paper-based exams.
- **Special Issues (ch.3):** Four special issues that affect the overall quality of outcomes are discussed here, namely, scoring accuracy, prevention of cheating, reporting and ongoing compliance monitoring.
- **Durham College Standards (ch.4):** This is an overall statement of Durham's position in meeting or exceeding generally accepted standards, but there is no site-specific report. As well, with only three site visits, we have not had an opportunity to observe whether they meet some of these standards or not. Regardless, Durham College's intention of meeting or exceeding each of the standards mentioned in this report is included in this chapter.

Please note that standards will often be stated in the form of a set of brief bullet points, rather than in a series of narrative paragraphs that fully develop each standard. As well, since these standards are really just lists, there is no overall summary or highlight section for each chapter.

## 2.0 PROCESS OVERVIEW

This chapter sets out standards for overall administration and security of paper-based exams. The two topics are tightly related, but we use two different process models to emphasize different key issues. Process models deal with three stages of the examination process: pre-exam, exam and post-exam.

### 2.1 Exam Administration

This sets out general standards of administrator preparation, candidate intake, administering examinations and following-up on the examination process. Security of paper-based test booklets and answer sheets is discussed in section 2.2.

Note that generally accepted standards are stated in small letters, while an 'Exceptional version' of the general standard is identified by a capital letter. *(See 1-c and 1-C below as an example.)*

#### Pre-exam

##### 1. **Proctor preparation.**

- a. Proctors are trained to know their responsibilities before, during and after the examination.
- b. There are written instructions to guide a proctor's activities.
- c. A new proctor's readiness to supervise an exam is assessed by a supervisor.
- d. There is a core group of trained proctors sufficient to provide an 'alternate' if a scheduled proctor cannot attend.

##### **EXCEPTIONAL STANDARDS**

- A. Proctors sign a formal Confidentiality agreement.
- C. New proctors perform their duties on-the-job while watched by a supervisor that signs-off on their readiness.
- D. Including a site supervisor that doesn't usually proctor, there are two or more alternate proctors available.

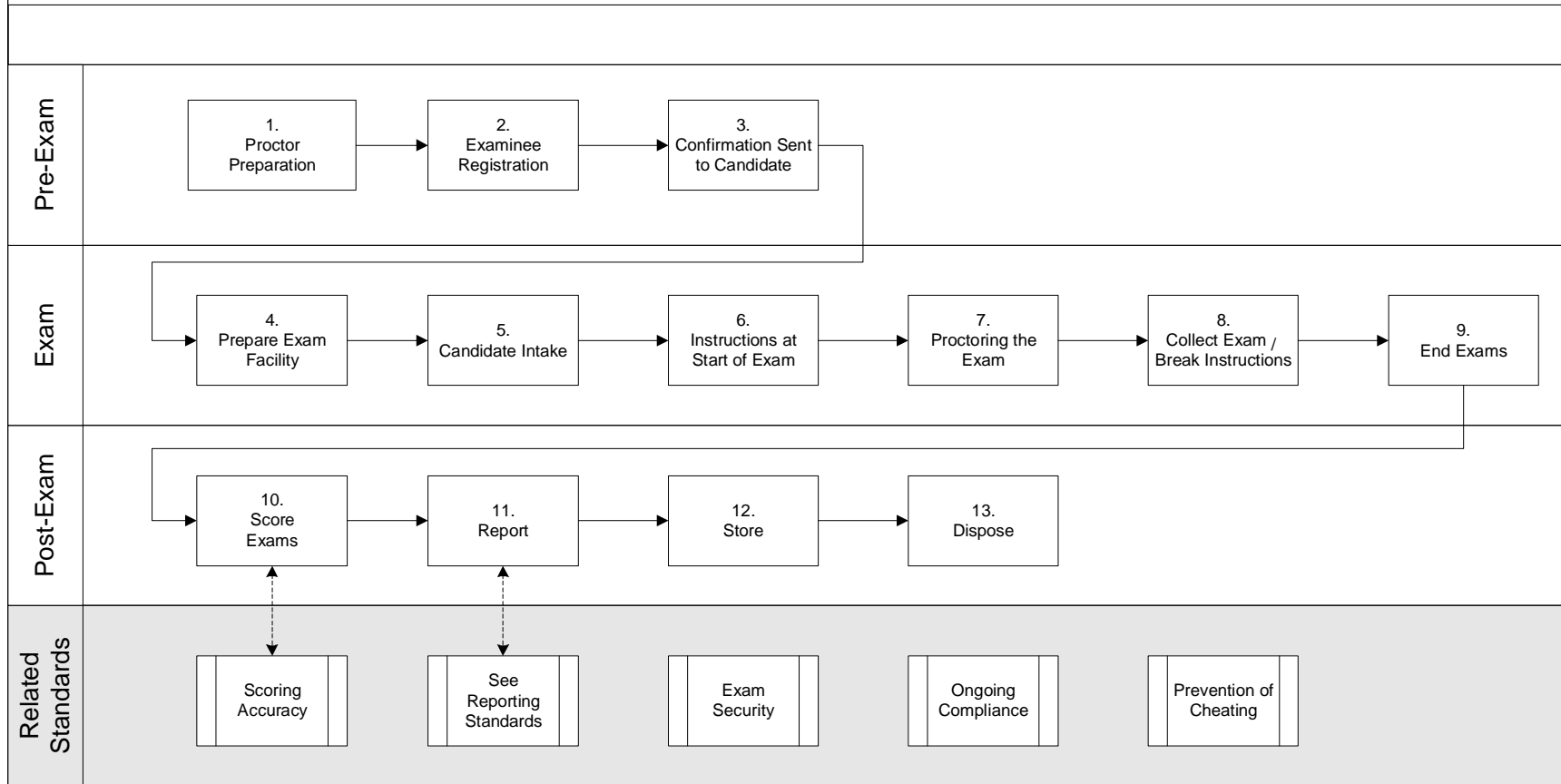
##### 2. **Examinee registration** for the exam. Examining body requires:

- a. Completed standard registration form containing identification and contact information.
- b. Statement of desired test location, plus desired and alternate date and time.
- c. Proof of eligibility in the form of a signed statement on the form.
- d. Full payment for the exam.
- e. Receipt of registration materials at least two weeks prior to the exam.

##### **EXCEPTIONAL STANDARDS**

- C. Photocopy of certificate from course provider must be enclosed.
- E. Registration within less than two weeks of exam date is permitted.

## 2.1 Exam Administration





### 3. Confirmation sent to candidate.

- a. Printed confirmation sent to candidate in a timely manner including date, time & instructions to the location.
- b. Examinee is provided with advance information about the examination process including: arrival time and procedure, exam format, materials allowed in the exam (#2 pencil & non-programmable calculator only), exam timing, bathroom break policy and warnings about cheating (definition, prohibition, penalties).
- c. Highlight need to bring government-issued picture identification, second identification and original certificate of eligibility to write the exam from their course provider.

## Exam

### 4. Prepare exam facility.

- a. Select an exam room that is subject to a minimum of distraction and disruption.
- b. Arrange to accommodate people with disabilities.
- c. Arrange seating to prevent examinees from looking at other exams or talking to other candidates during the exam.
- d. Identify a space away from examinees to store examinee items not needed during the exam (*e.g., purse, books, etc.*).
- e. Bring #2 pencils and non-programmable calculators for those who don't have them.
- f. Check washroom facilities for possible evidence of intended cheating.
- g. Ensure there is at least one proctor per 30 examinees present in the room.

#### **EXCEPTIONAL STANDARDS**

- A1. Avoid rooms with classes in adjoining rooms.
- A2. Select rooms with minimal visibility to/from corridors, parking lots, streets or other distractions.
- C1. Pre-assign seating to ensure adjacent examinees complete different forms.
- C2. Ensure at least 1 metre of space between examinees.
- F. Reserve a single stall lockable bathroom for examinee use during the exam.
- G. Provide one proctor per 10-15 examinees.

### 5. Candidate intake.

- a. Limit access to testing room to those verified as proper examinees.
- b. Check identity of examinee.
- c. Check eligibility to write the exam – usually presentation of exam registration confirmation.
- d. Ensure examinee has #2 pencil and non-programmable calculator.
- e. Examinee is directed to leave all possessions at storage area except pencil & calculator.
- f. Examinee is directed to an assigned seat.
- g. Late arrivals are accepted for a limited time after the exam has started, but no additional time is given for the exam.

### **EXCEPTIONAL STANDARDS**

- B. Require two pieces of identification including government-issued picture identification.
- C1. Require original eligibility certificate from course provider that has not expired plus registration confirmation.
- C2. Examinee signs "Release of information" after eligibility and identity are verified. Signature provides additional check.
- G. Late arrivals are accepted for up to 30 minutes after the start of the exam.

## **6. Instructions at start of exam.**

- a. Exam booklets are passed out after all timely arrivals are seated.
- b. Exam instructions are standardized (including signage at front of room).
- c. Instructions are both read by the examinee and announced by the proctor.
- d. Instructions include the following topics:
  - ◆ start-stop time – post in a visible position up front,
  - ◆ break times for full exam – recommend 15 minutes between 2-hour sessions,
  - ◆ bathroom break policy – not during late arrival period, one-at-a-time and accompanied thereafter,
  - ◆ food & drink policy – none allowed except for those with medical conditions,
  - ◆ handling of questions for proctors – only clarification of administrative procedures – raise hand and wait,
  - ◆ use of test booklet as scrap paper – only scrap paper available and must be handed in,
  - ◆ policy on cheating including definition of cheating and penalties – see chapter 3 on cheating penalties,
  - ◆ how to fill-in a multiple choice item – show correct fill and examples of incorrect fill;
  - ◆ instruct examinees to fill-in the answer sheet as they go and not wait for the end – point out impact if out of time;
  - ◆ penalty for guessing -- there is no penalty for wrong answers but of course no points are awarded,
  - ◆ policy on departure after early completion – not allowed during late arrival period – allowed thereafter, but once the exam is handed-in it cannot be viewed again.
- e. Ensure that exam booklet and answer sheet are identifiably linked to a single examinee.

### **EXCEPTIONAL STANDARDS**

- C1. Unchanging instructions are printed on the front of the test booklet at minimum.
- C2. Changing instructions (e.g., exact start and stop time) are visible at the front of the room on a board or flipchart.
- C3. Examinee signs a statement in the test booklet that instructions have been read and understood.
- D1. A large clock is visible to examinees at the front of the room and proctor points this out in instructions.
- D2. After instructions on filling in a multiple choice item, examinee fills-in a dummy example in their test booklet or on their answer sheet. Proctor verifies that this is correctly filled-in, ensuring that no one can claim they didn't understand the instructions.
- E. Examinee puts name and/or identification number on both the test booklet and the answer form.

## 7. **Proctoring the exam.**

- a. Procedure for dealing with emergencies or other test interruptions should be available to proctor in written form.
- b. Proctors should vary their standing position (front/back of room).
- c. Proctors should circulate among the examinees at least once every 15 minutes.
- d. Proctors should not engage in activities that distract from watching the examinees (e.g., reading, talking, etc.).
- e. Proctors should only answer questions that deal with administrative issues like breaks.
- f. Late arrivals should be signed in quietly and they should be directed to read the test instructions and sign-off on them.
- g. Post remaining time at 30 minutes, 15 minutes and 5 minutes. Announce 5 minute warning at minimum.
- h. Ensure that any person taking a washroom break is accompanied, but not necessarily by a proctor.
- i. The exam room must never be left unattended.
- j. Document any noise or disruptions, as well as complaints about heat, light & noise levels.
- k. Provide written procedures for how to respond when someone is suspected of cheating. Procedure should include a warning and/or seat change as part of 'progressive discipline' and how to deal with further suspect activity.
- l. Document any suspected cheating activity in detail.

### **EXCEPTIONAL STANDARDS**

- C1. Proctors should check answer sheets for correct fill of bubbles and instruct those with problems.
- C2. Proctors should check answer sheets and test booklets for correct identification.
- C3. Calculators should be checked to ensure they are not programmable. Covers should be checked for notes.
- J1. Administration should provide a standardized form for environmental complaints.
- J2. Incidents that constitute severe administrative irregularities (e.g., Construction going on outside) should be reported.
- J3. Earplugs available for noise complaints.
- L1. Administration should provide a standardized form for documenting suspected cheating.
- L2. Incidents of suspected cheating should be reported to the credentialing authority.
- L3. Videotape all examination sessions.

## 8. **Collect exams/Break instructions.**

- a. Examinees can hand in completed exams at any time after the late arrival period.
- b. Proctor ensures identification fields on answer sheet are properly completed and match registration information.
- c. Proctor counts the pages in the exam booklet to ensure that all pages are still in the booklet.
- d. Exams and signature forms are placed in a locked box that is always attended until they can be transported.

### **EXCEPTIONAL STANDARDS**

- A. Ensure no contact between 'early completers' and those taking a washroom break.
- B. Proctor also checks the answer sheet for correct fill of bubbles and instructs those with problems.
- C. Examinee signs that exam is now complete and received by the proctor. Examinee then permitted to leave.

**9. End exams.**

- a. Announce “time-up”. Ask examinees to put their pencil down and turn over their test booklet and answer sheet.
- b. Follow procedures outlined in step #8.

Post-Exam

**10. Score exams. (See “Scoring accuracy” path for standards.)**

- a. Score the exams using the Scantron.
- b. Exams should be scored in a timely manner – within 5 business days of completion.
- c. Statistical analysis procedures are available to evaluate the probability of response pattern similarities when examinees are suspected of cheating.

**EXCEPTIONAL STANDARDS**

- B. Exams are scored within one business day of completion.
- C. Incidents of suspected cheating detected by statistical analysis should be reported to FSCO.

**11. Report. (See “Reporting standards” for more detail.)**

- a. Send individual performance information to the examinee in a timely manner – within 2 weeks of completion.
- b. Send periodic performance reports to course provider.
- c. Send periodic performance reports to FSCO.

**EXCEPTIONAL STANDARDS**

- A1. Notice should also include procedure for challenging the score, time limits for a challenge (30 days), and if appropriate, conditions for re-writing the exam.
- A2. Performance information is sent within 5 business days or less.
- C1. Incidents of severe administrative/process irregularities should be reported to FSCO (e.g., fire drill, construction).
- C2. Incidents of suspected cheating should be reported to FSCO.

**12. Store test booklets and Scantron answer sheets. (See section 2.2 on “Exam security” for detail.)**

- a. Retain booklets and answer sheets during “challenge” period when re-scoring can be requested.
- b. Challenge period should be well-defined and limited to 1-3 months.

**13. Dispose of test booklets and Scantron answer sheets. (See section 2.2 on “Exam security” for detail.)**

- a. Dispose of test booklets and answer sheets after “challenge” period.

**EXCEPTIONAL STANDARDS**

- A. Store image of answer sheet on CD.

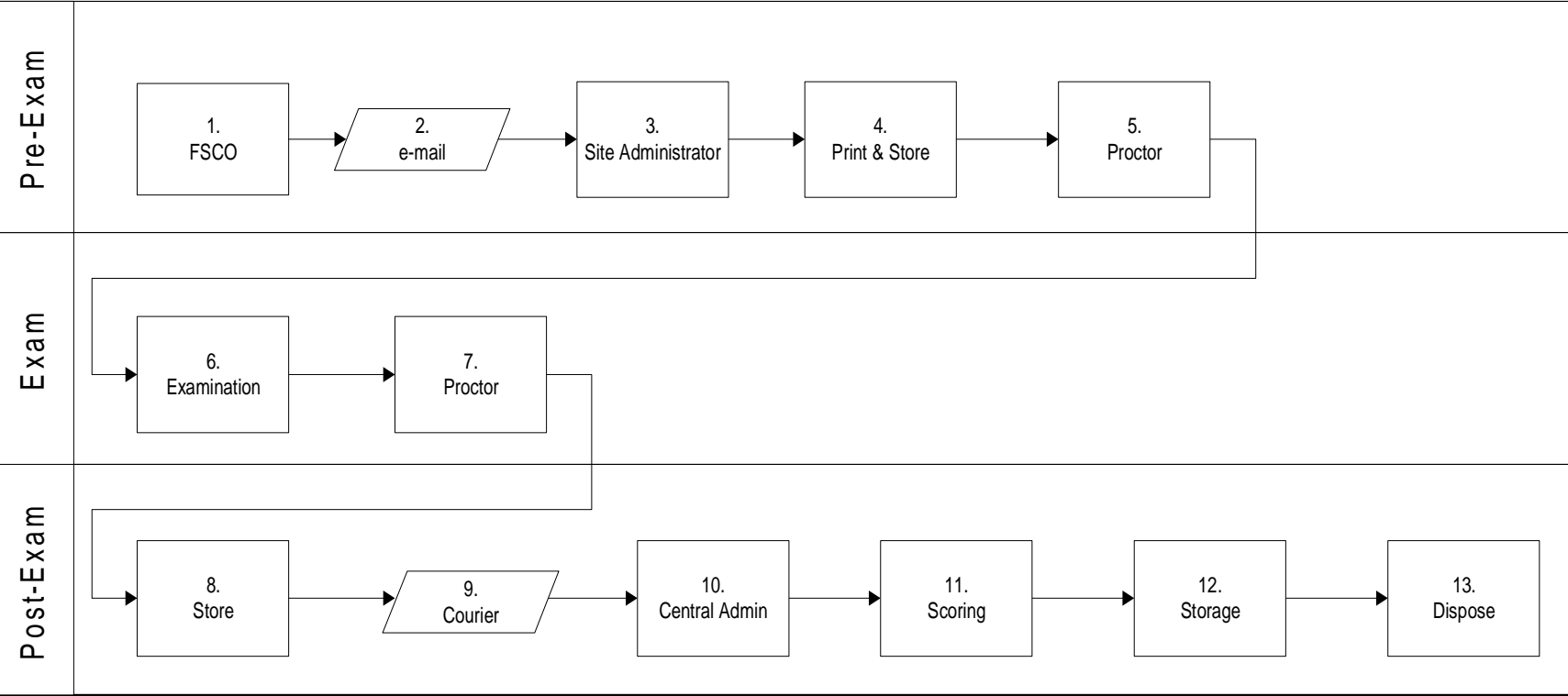
## 2.2 Exam Security

This sets out general standards of security for paper-based test booklets and answer sheets. Note that generally accepted standards are stated in small letters, while an 'Exceptional version' of the general standard is identified by a capital letter. *(See 3-a and 3-A below as an example.)*

### Pre-exam

1. **FSCO.** Security of exam questions and answer keys at FSCO.  
Security of exam questions and answer keys at FSCO is outside the scope of this study. Nonetheless, a reasonable analysis of the security process dictates that we identify the possibility of risks arising in the course of item writing, construction of forms and transmission of forms to examination sites. We assume that FSCO has documented security standards consistent with the principle of "due and reasonable care" set out in chapter 1.2, but if not, such standards should be developed.
2. **E-mail.** Secure transmission of forms to exam sites.
  - a. Exam forms are transmitted to the examination site in a password-protected file.  
**EXCEPTIONAL STANDARDS**
    - A1. File is encrypted (128-bit) as well as password-protected.
    - A2. File is transmitted over a PKI-protected system (Public Key Infrastructure) that insures the message has not been intercepted (privacy), that the sender is who they purport to be (authentication) and that the file has not been altered in any way (integrity).
3. **Site administrator.** Receipt of transmission from FSCO.
  - a. Only the site administrator has access to the file and has the necessary password.  
**EXCEPTIONAL STANDARDS**
    - A. Password is changed at regular intervals – at least each month.

## 2.2 Exam Security



**4. Print & Store** the examination booklets until examination time.

- a. Site administrator/proctor prints exactly the number of test booklets needed for each version of each test form.
- b. Test forms are printed in a way that allows them to be easily distinguished from one another.
- c. Site administrator/proctor verifies the number of booklets of each type prior to storage.
- d. Printed test forms are stored in a locked facility until exam time.

**EXCEPTIONAL STANDARDS**

- A. Test booklets are individually sealed and the total package for an exam is shrink-wrapped.
- C1. Pages in the booklet are verified to ensure there is no ambiguity if an examinee hands in a booklet missing a page.
- C2. Each booklet is uniquely linked to a single examinee prior to storage – name, identification number, etc.
- D1. Both the cabinet/lockbox holding the booklets and the room itself should be kept locked when exams are there.
- D2. Access to the locked storage box should be limited to the site administrator until exam time.
- D3. Access to the locked storage room is by electronic key that records the identity of the person entering and the time.
- D4. Keys are never left in a desk drawer, unless that drawer is itself locked.

**5. Proctor** transports exam booklets to the examination room.

- a. Proctor signs for receipt of exams after re-counting the numbers and matching to the registration sheet.
- b. Proctor transports the test booklets and answer sheets to the examination room.

**EXCEPTIONAL STANDARDS**

- A. Site administrator transfers keys to locked facilities to the proctor.
- B. Test booklets and answer sheets are transported to the exam room in a locked storage box that is always attended.

## Exam

**6. Examination.** Security of test materials while in the examinees hands.

- a. Identity of examinee is verified prior to receipt of test booklet and answer sheet.
- b. Examinee signs for receipt of test booklet and answer sheet.
- c. Examinee is warned that test will be checked for missing pages and consequence if found.
- d. Exam administration procedures limit opportunities for copying questions.

**EXCEPTIONAL STANDARDS**

- B. Test booklet and answer sheet are linked to the examinee prior to the exam.

7. **Proctor.** Ensuring security of test materials during the exam session.
- a. Examinee is never left unattended with an examination booklet or answer sheet.
  - b. Proctor checks the completeness of the test booklet and its match to the right examinee before the examinee is allowed to leave the room.
  - c. Each answer sheet and test booklet is secured upon receipt.
  - d. Test booklets and answer sheets are transported to the storage facility pending shipping.
- EXCEPTIONAL STANDARDS**
- C. Test booklets and answer sheets are stored in an attended locked storage box in the exam room, until the end of the exam.
  - D. Test booklets and answer sheets are transported to the storage room in a locked storage box that is always attended.

## Post-Exam

8. **Store.** Ensuring security of test materials prior to shipping to Durham College.
- a. Test booklets, answer sheets and other administrative documents related to the exam session are stored until they can be sent to Durham College.
- EXCEPTIONAL STANDARDS**
- A1. Both the cabinet/lockbox holding the booklets and the room itself should be kept locked when exams are there.
  - A2. Access to the locked storage box should be limited to the site administrator until exam time.
  - A3. Access to the locked storage room is by electronic key that records the identity of the person entering and the time.
  - A4. Keys are never left in a desk drawer, unless that drawer is itself locked.
9. **Courier.** Security of materials sent to Durham College.
- a. Test booklets, answer sheets and other administrative documents related to the exam are packaged for courier.
  - b. Courier package is kept secure until pick-up.
  - c. Package is sent as soon as possible after the exam, so long as it can be received at Durham during open hours.
  - d. Purolator picks up the package from the examination site and delivers it to Durham College.
- EXCEPTIONAL STANDARDS**
- B. Courier package is kept in a locked facility until pick-up, or failing that, it is never left unattended.
  - D1. A specialized courier service is used that guarantees document security.
  - D2. Delivery at Durham must be directly to an Exam administrator and not to a mail room.



- 10. Central administration.** Receipt and security of materials awaiting scoring at Durham College.
- a. Courier envelopes are received at Durham College.
  - b. Exam administrator verifies the contents of the courier package.
  - c. Package is securely stored until scoring.
- EXCEPTIONAL STANDARDS**
- A. Delivery at Durham must be directly to an Exam administrator and not to a mail room.
  - C1. Package is stored inside a locked cabinet within a locked room with limited access.
  - C2. Access to the locked storage room is by electronic key that records the identity of the person entering and the time.
  - C3. Keys are never left in a desk drawer, unless that drawer is itself locked.
- 11. Scoring.** Security of materials in the scoring process.
- a. Materials are removed from storage solely at the time of scoring.
  - b. Test booklets and answer sheets are never left unattended during the scoring process.
  - c. Test booklets and answer sheets are moved immediately to storage after scoring.
- 12. Storage.** Security of stored materials after scoring.
- a. Test booklets and answer sheets are stored in a high security cabinet with limited key access.
  - b. Booklets and answer sheets are only kept for the duration of the “appeal” process – about 1-3 months.
- 13. Dispose.** Disposal of out-dated test booklets and answer sheets.
- a. At the end of the period for appeals, booklets and answer sheets are professionally shredded to limit risk of access.

## 3.0 SPECIAL ISSUES

Four special issues that affect the overall quality of outcomes are discussed here: scoring accuracy, prevention of cheating, reporting and ongoing compliance monitoring. Each of these topics is the subject of one section of this chapter. Only scoring accuracy has a process model to guide the standards it sets out.

### 3.1 Scoring Accuracy

#### Pre-exam

**1. FSCO.** FSCO's role in ensuring scoring accuracy.

Scoring accuracy begins with FSCO, which transmits answer keys to the exam administrator. To ensure that the key information transmitted from FSCO is accurate, we suggest that FSCO follow the following procedure.

- A. Answer key information is source-checked back to the questions and answers after the key is constructed.
- B. The answer key is independently prepared in different files by two different people.
- C. The two independent files are machine-compared and only sent if there is complete agreement.
- D. In the event of disagreement, flagged questions are source-checked once again and discrepancies resolved.

**2. Exam administrator.** Handling of new scoring information.

- a. Exam administrator receives scoring information files and passes information to the keying process.

**EXCEPTIONAL STANDARDS**

- A1. Administrator confirms that correct answer keys are associated with the correct forms by sending a verification message to FSCO and getting confirmation.
- A2. Administrator prepares two answer sheets for each form to use as 'benchmarks' later in the process. Each answer sheet contains half of the right answers and the others filled in with incorrect answers.

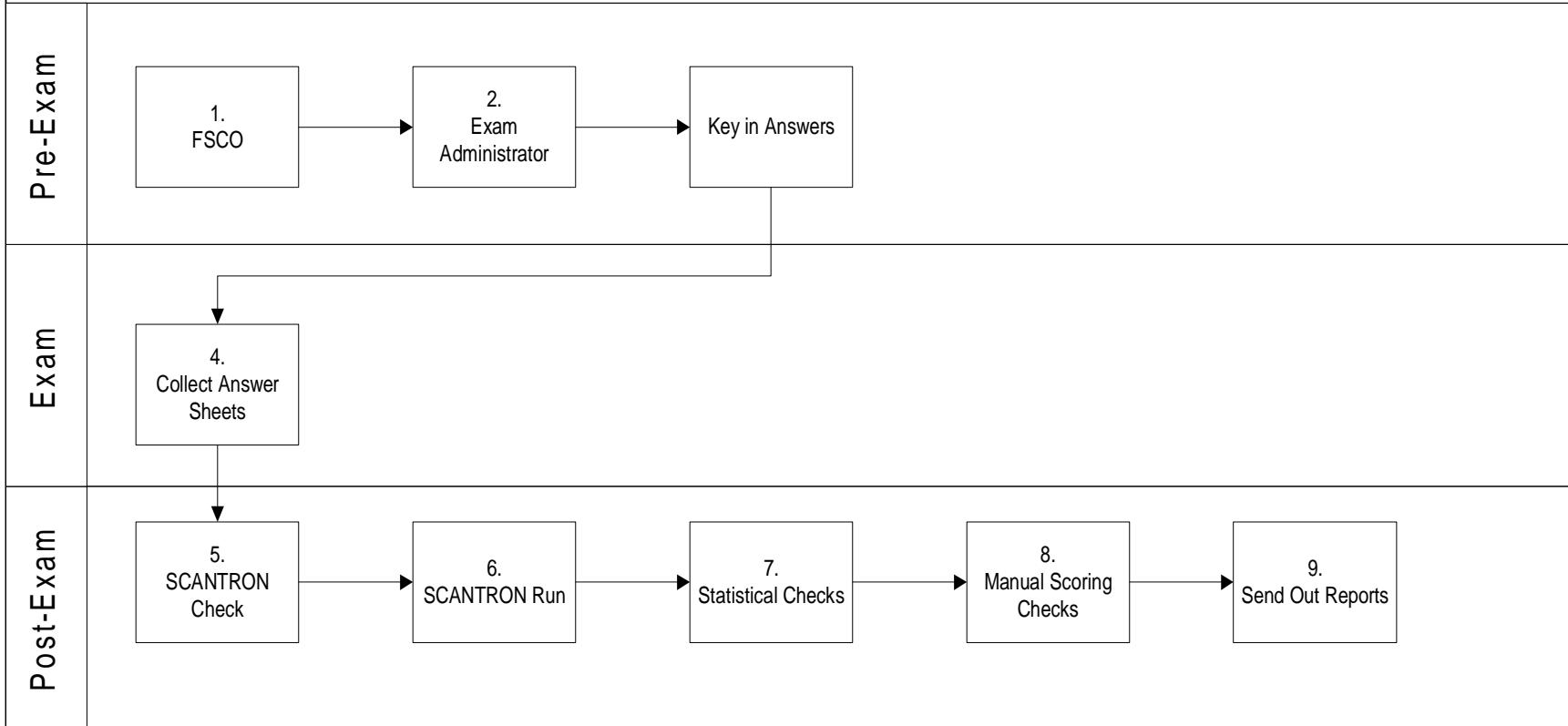
**3. Key in answers.**

- a. Exam administrator receives answer key information for each form and manually keys information into Scantron file.

**EXCEPTIONAL STANDARDS**

- A1. Using FSCO information, the scoring key is independently keyed in different files by two different people.
- A2. The two independent files are machine-compared and only accepted if there is complete agreement.
- A3. In the event of disagreement, the process starts again with step A1.

### 3.1 Scoring Accuracy



## Exam

4. **Collect answer sheets.** Verifying proper fill-in of answer sheets.
  - a. Exam administrator visually reviews answer sheets about to be scored for proper identification.  
**EXCEPTIONAL STANDARDS**
  - A1. Answer sheets are checked for extraneous marks, bent edges and other things that might interfere with scoring.

## Post-Exam

5. **Scantron check.** Preparing for a scoring run.
  - a. The Scantron machine is regularly maintained by a qualified service person according to manufacturer standards.
  - b. Normally, there is no special check of machine functioning at the start of a run other than loading the program.  
**EXCEPTIONAL STANDARDS**
  - A. Scantron software is kept up-to-date – latest version.
  - B1. Two benchmark sheets created in step 2-A2 are run to test the scoring accuracy of the machine at the start of each scoring run.
  - B2. If no errors, then proceed to the Scantron scoring run. If there are errors, diagnostic procedures need to be in place.
6. **Scantron run.** Finding and dealing with exceptions.
  - a. Answer sheets are run through the scanner. Blanks in identification and answer fields are identified.
  - b. Identification information is checked against registration information to ensure identity of the examinee.
  - c. Problems with identification and blanks are source checked back to the answer sheets.
7. **Statistical checks.** Identifying potential problems.
  - a. Once a suitable number of responses (100 or more) for an exam item are gathered, the proportion of responses for each distracter attached to the item are compared against norms. If results fall outside reasonable confidence intervals, an investigation is triggered.
  - b. The investigation includes verifying the correct answer and positioning of incorrect answers against the printed form. Item keying for the scoring key is also checked and benchmark answer sheets are re-run.  
**EXCEPTIONAL STANDARDS**
  - B1. Verify with FSCO that the correct answer has not changed as a result of changes in legislation or item wording.
  - B2. Note diagnostic information including course provider, exam centre, version, etc.
  - B3. Identify and correct problems on an ad-hoc basis.

**8. Manual scoring checks.** When are they needed?

a. There is normally no manual check on machine scoring since machine scoring does not make errors unless supplied with incorrect scoring keys. Manual checks are more prone to error.

**EXCEPTIONAL STANDARDS**

A. Manually verify scores for answer sheets that are within 5% of the passing cut-off to forestall challenges. (Note: two organizations we interviewed do this and neither has ever found a machine error)

**9. Send out reports.** Ensuring accuracy of reported results.

a. Reports on test performance directly tap the automated scoring information generated by Scantron.

### 3.2 Prevention of Cheating

This brief section draws more on a number of educational psychology studies, as well as current procedures. Among other things, it points out that course providers must be considered in the cheating process as well as examinees and administrators. Focusing on examinees, the literature points to a several principles for deterring cheating:

1. The **risk of detection** must be perceived as relatively **high**.
2. **Penalties** must be seen as **consequential** and should include some measure of embarrassment.
3. **Course providers** should **actively discourage cheating** and announce penalties.
4. **Cheating** should be defined for examinees and the **penalties** should be **explained**.
5. **Sound proctoring** is one of the most effective deterrents.
6. **Good exam administration** procedures deter cheating.

Points 4-6 were addressed in chapter 2. Risk of detection can be raised by heightening awareness in confirmation letters and the exam itself. At the extreme, one can videotape sessions and announce the practice to raise the perceived risk of detection. At the moment though, we feel that points 2& 3 should be the focus of change. **We recommend** that:

- A. A person found cheating should be barred from writing the exam again for at least one year.
- B. Course providers and employers (if financial institutions) should be notified in writing that the person is not eligible to write the LLQP exam for at least one year.
- C. Course providers should actively discourage cheating and announce the penalties in class.
- D. Course providers should be obligated to inform the regulator if any examinee attempts to provide them or the examinees' classmates with information on the questions that are on an exam.
- E. Any course provider found building an item bank consisting of current exam items (even with minor modifications) should be barred from providing courses for a period of at least six months and preferably one year.

### 3.3 Reporting Standards

We divide our standards for reporting according to the recipient of the report – the examinee, the course provider and FSCO. Each party has different information needs, so their reports should reflect this. We will not deal with the frequency or timing of reports here, but rather with their content. With that in mind, we offer our recommendations for reporting.

#### 1. Reporting to examinees.

- a. Examinee receives overall test score and is advised of pass mark.  
**EXCEPTIONAL STANDARDS**
- A1. Examinee receives scores (% correct) for each major content module (e.g., investment, group insurance, etc.)
- A2. Examinee is informed of performance relative to other examinees (quartile, decile or percentile).

#### 2. Reporting to course providers.

- a. Report summary performance of students in standard intervals plus overall pass rate.
- b. Report summary performance on each measurable objective including # candidates, %right, %wrong and %blank.
- c. Report summary performance on each major content module including # candidates, %right, %wrong and %blank.  
**EXCEPTIONAL STANDARDS**
- A1. Report summary performance relative to other course providers.
- A2. Report each examinee's scores for each major content module (if examinee grants permission in advance).
- A3. Report information by test version (RLA, RLB, Full, A&S) and method of administration.
- A4. Report information by test site, if possible (minimum 50 examinees).
- B. Report summary performance on each measurable objective relative to other course providers.
- C. Report summary performance on each major content module relative to other course providers.

### 3. Reporting to FSCO.

- a. Report summary performance of students in standard intervals plus overall pass rate.
- b. Report summary performance on each measurable objective including # candidates, %right, %wrong and %blank.
- c. Report summary performance on each major content module including # candidates, %right, %wrong and %blank.
- d. Provide a data file with information for each student for each item including right, wrong, not attempted, not on exam.

#### **EXCEPTIONAL STANDARDS**

- A1. Report summary performance for each course provider.
- A2. Report summary information by test version (RLA, RLB, Full, A&S) and method of administration.
- A3. Report summary information by test site, if possible (minimum 50 examinees).
- B. Report summary performance on each measurable objective for each course provider.
- C1. Report summary performance on each major content module for each course provider.
- C2. Report summary performance on each major content module for each test version and method of administration.
- C3. Report summary performance on each major content module for each test site, if possible (min. 50 examinees).
- D. Provide a data file with information for each student for each item that also includes the letter of the distracter chosen, exam version and form, course provider, test site, test date and score reported.

### 3.4 Ongoing Compliance Monitoring

As we mentioned in chapter 1.2, ongoing compliance monitoring is a critical component of “due and reasonable care”. It cannot be overlooked when building a set of high level standards. We also cannot overlook the cost of compliance monitoring and weighing that against the benefits. We did not encounter ongoing compliance standards in our review, but we suggest that standards should be developed. As a starting point, we suggest:

- A. Durham should review procedures at each test site regularly.
- B. Reviews by Durham should be conducted at least once per year. The most active sites should be reviewed quarterly.
- C. An independent (of FSCO or Durham) reviewer should check compliance at the most active sites at least once per year.
- D. Compliance failures should be graded from minor to severe using a 1-5 scale.
- E. Compliance failures should be promptly reported to exam sites which will indicate their corrective action and timing.
- F. Corrections to severe compliance failures should be monitored by Durham within three months of their implementation.
- G. Repeated severe failures or failure to correct identified problems should lead to dropping an examination site but should follow a written policy of progressive discipline.
- H. Repeated severe compliance failures should be reported to the regulator in a timely manner.

## 4.0 DURHAM COLLEGE STANDARDS

This chapter consists of a set of tables. Within each table you will see a set of standards, our observations about Durham's compliance with the standard, Durham's views on their compliance with the standard now, and finally, their willingness to comply with a standard within the next year. The chapter is divided into four sections: (4.1) Exam administration, (4.2) Exam security, (4.3) Scoring accuracy and (4.4) Other special issues.

### 4.1 Exam Administration

In total, there are **68 generally accepted standards** for exam administration identified in this report. Durham College (DC) fully complies with 53 (78%) of these standards and partially complies with 11 (16%) of them. There are 4 standards (6%) where they don't comply with generally accepted practices.

Of the four standards where DC does not comply, there are two standards where non-compliance is due to FSCO policy and cannot be altered without FSCO approval. In another case, they are theoretically willing to comply but it is outside their terms of reference and they would need agreement and compensation from FSCO in order to comply. DC intends to fully comply with 7 of the partially met standards and will partially comply with the remainder.

We also identify **40 exceptional standards** for exam administration. DC meets 22 (55%) of these standards now and partially meets another 12 (30%) of the exceptional standards. There are 6 (15%) exceptional standards that are not met at all.

DC will partially meet 3 of the 6 unmet standards and 2 of the standards are viewed as not applicable because of contrary direction from FSCO (e.g., bathroom breaks). The one standard they won't meet is a cost consideration.

DC plans to fully meet 6 of the 12 standards that are partially met now. Almost all of the remaining partially met exceptional standards are outside DC's terms of reference. They would need agreement and compensation from FSCO in order to comply.

**Now, let us look at the Exam Administration standards one-by-one.** The first column of the spreadsheet is the identification number for the standard. The second column is an abbreviated description and you may find a more detailed description in preceding chapters. The third and fourth columns describe current compliance, as observed by The Brondesbury Group and/or Durham College itself. The final two columns deal with future changes to unmet and partially met standards and comments on reasons for their response.



| 4.1 EXAM ADMINISTRATION STANDARDS<br><br>(ABBREVIATED VERSION) |   | Durham Compliant                           |        |               | Durham Comments  |
|--|---|--|--------|---------------|--|
|  |   | (Y=yes, P=Partial, N=No,<br>blank=Unknown) |        |               |  |
|  |   | Now-TBG                                    | Now-DC | Next Year     |  |
| <b>1</b>   | <b><u>Proctor preparation.</u></b>  |  |        |               |  |
| a.   | Proctors are trained to know their responsibilities   | Y  |        |               |  |
| b.   | There are written instructions to guide a proctor's activities.   | Y  |        |               |  |
| c.   | A new proctor's readiness to supervise an exam is assessed by a supervisor.   |  | Y      |               |  |
| d.   | There is a core group of trained proctors sufficient to provide an 'alternate'  |  | Y      |               | Within reason  |
|  | <i>Exceptional Standards</i>  |  |        |               |  |
| A.   | Proctors sign a formal Confidentiality agreement.   |  | Y      |               |  |
| C.   | Supervisor signs-off on new proctor's readiness.  |  | Y      | Y             | Verbal now-change to written   |
| D.   | Two or more alternate proctors available.   |  | Y      |               |  |
|  |   |  |        |               |  |
| <b>2</b>   | <b><u>Examinee registration.</u></b>  |  |        |               |  |
| a.   | Completed standard registration form containing identification and contact information.   | Y  |        |               |  |
| b.   | Statement of desired test location, plus desired and alternate date and time.   | Y  |        |               |  |
| c.   | Proof of eligibility in the form of a signed statement on the form.   |  | N      | N-see comment | Per FSCO, we are required to accept registration before the certificate is issued. |
| d.   | Full payment for the exam.  | P  | Y      |               | As of May 3rd, 2004  |
| e.   | Receipt of registration materials at least two weeks prior to the exam.   | Y  |        |               |  |
|  | <i>Exceptional Standards</i>  |  |        |               |  |
| C.   | Photocopy of certificate from course provider must be enclosed.   |  | N      | N-see comment | Will comply, if industry directed.   |
| E.   | Registration within less than two weeks of exam date is permitted.  | Y  |        |               |  |
|  |   |  |        |               |  |
| <b>3</b>   | <b><u>Confirmation sent to candidate.</u></b>   |  |        |               |  |
| a.   | Printed confirmation sent to candidate in a timely manner   | Y  |        |               |  |
| b.   | Examinee is provided with advance information about the examination process.  |  | P      | P             | Partial information contained in confirmation--already 3 pages                     |
| c.   | Highlight need to bring government-issued picture identification, second identification and original certificate of eligibility | Y  |        |               |  |
|  |   |  |        |               |  |

|          |   |   |   |      |  |
|----------|---|---|---|------|--|
| <b>4</b> | <b><u>Prepare exam facility.</u></b>  |   |   |      |  |
| a.       | Select an exam room that is subject to a minimum of distraction and disruption.           | P | Y |      | As per policy  |
| b.       | Arrange to accommodate people with disabilities.  |   | Y |      | Selected sites   |
| c.       | Arrange seating to prevent examinees from looking at other exams                          | Y |   |      |  |
| d.       | Identify a space away from examinees to store items not needed during the exam            | Y |   |      |  |
| e.       | Bring #2 pencils and non-programmable calculators for those w/o them.                     | P | Y |      | As per policy  |
| f.       | Check washroom facilities for possible evidence of intended cheating.                     | N |   | N    | N/A Bathroom Breaks not allowed                          |
| g.       | Ensure there is at least one proctor per 30 examinees present in the room.                | Y |   |      |  |
|          | <i>Exceptional Standards</i>  |   |   |      |  |
| A1.      | Avoid rooms with classes in adjoining rooms.  | P |   | N    | Can't control booking of rooms                           |
| A2.      | Select rooms with minimal visual distraction  | P |   | Y    | Will ask students for feedback, then act on it.          |
| C1.      | Pre-assign seating to ensure adjacent examinees complete different forms.                 | Y |   |      |  |
| C2.      | Ensure at least 1 metre of space between examinees.                                       | Y |   |      |  |
| F.       | Reserve a single stall lockable bathroom for examinee use during the exam.                | N |   | N.A. | N/A Bathroom Breaks not allowed                          |
| G.       | Provide one proctor per 10-15 examinees.  | Y |   |      |  |
|          |   |   |   |      |  |
| <b>5</b> | <b><u>Candidate intake.</u></b>   |   |   |      |  |
| a.       | Limit access to testing room to those verified as proper examinees.                       | Y |   |      |  |
| b.       | Check identity of examinee.   | Y |   |      |  |
| c.       | Check eligibility to write the exam – presentation of exam registration confirmation.     | Y |   |      |  |
| d.       | Ensure examinee has #2 pencil and non-programmable calculator.                            | Y |   |      |  |
| e.       | Examinee is directed to leave all possessions at storage area except pencil & calculator. | Y |   |      |  |
| f.       | Examinee is directed to an assigned seat.   | P | Y | Y    | Will be included in exam centre guidelines.              |
| g.       | Late arrivals are accepted for a limited time after the exam has started                  | Y |   |      |  |
|          | <i>Exceptional Standards</i>  |   |   |      |  |
| B.       | Require two pieces of identification including government-issued picture identification.  | Y |   |      |  |
| C1.      | Require original eligibility certificate from course provider (not expired)               | Y |   |      |  |
| C2.      | Examinee signs “attendance sheet” after eligibility and identity are verified.            | Y |   |      |  |
| G.       | Late arrivals are accepted for up to 30 minutes after the start of the exam.              |   | P | P    | General 10 minute rule. Will review if deemed necessary. |

|          |   |   |   |   |   |
|----------|---|---|---|---|---|
| <b>6</b> | <b>Instructions at start of exam.</b>   |   |   |   |   |
| a.       | Exam booklets are passed out after all timely arrivals are seated.                          | Y |   |   |   |
| b.       | Exam instructions are standardized.   | Y |   |   |   |
| c.       | Instructions are both read by the examinee and announced by the proctor.                    | Y |   |   |   |
| d.       | Instructions include the following topics:  |   |   |   |   |
|          | ◆ start-stop time – post in a visible position up front,                                    | Y |   |   |   |
|          | ◆ break times for full exam – recommend 15 minutes between 2-hour sessions,                 | Y |   |   |   |
|          | ◆ bathroom break policy   | Y |   |   |   |
|          | ◆ food & drink policy – none allowed except for those with medical conditions,              | P |   | P | No food, test centre's discretion for drinks      |
|          | ◆ handling of questions for proctors  |   | P | Y | Raise hand policy                                 |
|          | ◆ use of test booklet as scrap paper  | Y |   |   |   |
|          | ◆ state policy on cheating  | Y |   |   |   |
|          | ◆ how to fill-in a multiple choice item – show correct fill and examples of incorrect fill; | P |   | Y |   |
|          | ◆ instruct examinees to fill-in the answer sheet as they go                                 | P |   |   |   |
|          | ◆ penalty for guessing  | N |   | Y | Script will be updated                            |
|          | ◆ policy on departure after early completion  | N | Y | Y | Allowed - Will include in exam centre guidelines. |
| e.       | Ensure that exam booklet and answer sheet are identifiably linked to a single examinee.     | Y |   |   |   |
|          | <i>Exceptional Standards</i>  |   |   |   |   |
| C1.      | Unchanging instructions are printed on the front of the test booklet at minimum.            | P | Y |   | On exam cover                                     |
| C2.      | Changing instructions visible at the front of the room                                      | P | P | Y | In exam centre guidelines                         |
| C3.      | Examinee signs test booklet--instructions have been read and understood.                    |   | Y |   | First page of book, signed and handed in          |
| D1.      | A large clock is visible to examinees   | P |   | P | Posted times are substitute                       |
| D2.      | After instructions, examinee fills-in a dummy multiple choice item                          | N | N | P | Will consider how to implement                    |
| E.       | Examinee puts i.d. on both the test booklet and the answer form.                            | Y | Y |   | Test centres may pre-fill information             |

|          |  |   |   |   |   |
|----------|--|---|---|---|---|
| <b>7</b> | <b><u>Proctoring the exam.</u></b>   |   |   |   |   |
| a.       | Written procedure for emergencies\ test interruptions                                      |   | P | Y | Will provide a supplement for the exam centre guidelines                  |
| b.       | Proctors should vary their standing position (front/back of room).                         | Y |   |   |   |
| c.       | Proctors should circulate among the examinees at least once every 15 minutes.              | Y |   |   |   |
| d.       | Proctors should not engage in activities that distract from watching the examinees         | Y |   |   |   |
| e.       | Proctors should only answer questions that deal with administrative issues like breaks.    | Y |   |   |   |
| f.       | Late arrivals should be signed in quietly  | Y |   |   |   |
| g.       | Post remaining time at set intervals.  | P | Y |   | 10 minute warning   |
| h.       | Ensure that any person taking a washroom break is accompanied                              | Y |   |   |   |
| i.       | The exam room must never be left unattended.   | Y |   |   |   |
| j.       | Document any noise or disruptions, as well as complaints about heat, light & noise levels. | N | P | Y | Back of class list currently used, will investigate using a separate form |
| k.       | Provide written procedures for how to respond when someone is suspected of cheating.       |   | P | Y | Will discuss with regulators and industry                                 |
| l.       | Document any suspected cheating activity in detail.  |   | P | Y | A central document will be created  |
|          | <i><u>Exceptional Standards</u></i>  |   |   |   |   |
| C1.      | Proctors should check answer sheets for correct fill of bubbles - remedy problems.         |   | P | P | Minor checking only, validations are performed at Durham                  |
| C2.      | Proctors should check answer sheets and test booklets for correct identification.          | Y |   |   |   |
| C3.      | Calculators should be checked - not programmable & no notes.                               | P | Y |   | per policy  |
| J1.      | Administration should provide a standardized form for environmental complaints.            |   | P | Y | To Be Developed   |
| J2.      | Incidents that constitute severe administrative irregularities should be reported.         |   | P | Y | Verbal now- form will be developed  |
| J3.      | Earplugs available for noise complaints.   |   | P | P | Discretion of exam centre   |
| L1.      | Administration should provide a standardized form for documenting suspected cheating.      |   | P | Y | Will create the document.   |
| L2.      | Incidents of suspected cheating should be reported to the credentialing authority.         |   | Y |   | Regulator is notified   |
| L3.      | Videotape all examination sessions.  | N | N | N | Cost prohibitive  |

|           |   |   |   |      |  |
|-----------|---|---|---|------|--|
| <b>8</b>  | <b><u>Collect exams/Break instructions.</u></b>   |   |   |      |  |
| a.        | Examinees can hand in exams after the late arrival period.  |   | Y |      |  |
| b.        | Proctor ensures identification fields completed and match registration  | Y |   |      |  |
| c.        | Proctor counts the pages in the exam booklet  | Y |   |      |  |
| d.        | Exams and signature forms are placed in an attended locked box  | P | Y |      | Per policy                                 |
|           | <i><u>Exceptional Standards</u></i>   |   |   |      |  |
| A.        | No contact - early completers & washroom break.   |   |   | N.A. | N/A no breaks                              |
| B.        | Proctor checks correct fill of bubbles -- remedy problems.  |   | P | P    | Minor checking - Validation at Durham      |
| C.        | Examinee signs that exam is now complete and received by the proctor.   | Y |   |      |  |
|           |   |   |   |      |  |
| <b>9</b>  | <b><u>End exams.</u></b>  |   |   |      |  |
| a.        | Announce "time-up" instructions.  | Y |   |      |  |
| b.        | Follow procedures outlined in step #8.  | P |   |      |  |
|           |   |   |   |      |  |
| <b>10</b> | <b><u>Score exams. (See "Scoring accuracy" path for standards.)</u></b>   |   |   |      |  |
| a.        | Score the exams using the Scantron.   | Y |   |      |  |
| b.        | Exams should be scored within 5 business days   | Y |   |      |  |
| c.        | Statistical analysis of response pattern similarities.  | N |   | P    | Outside original RFP, will be investigated |
|           | <i><u>Exceptional Standards</u></i>   |   |   |      |  |
| B.        | Exams are scored within one business day of completion.   | Y |   |      |  |
| C.        | Suspected cheating detected by statistical analysis reported to FSCO.   | N |   | P    | Outside original RFP, will be investigated |
|           |   |   |   |      |  |
| <b>11</b> | <b><u>Report. (See "Reporting standards" for more detail.)</u></b>  |   |   |      |  |
| a.        | Send individual performance info to examinee in a timely manner   | Y |   |      |  |
| b.        | Send periodic performance reports to course provider.   | Y |   |      |  |
| c.        | Send periodic performance reports to FSCO.  | Y |   |      |  |
|           | <i><u>Exceptional Standards</u></i>   |   |   |      |  |
| A1.       | Notice includes procedure for challenging score and rewrites.   |   | Y | Y    | Will be added to mark report               |
| A2.       | Performance information is sent within 5 business days or less.   | Y |   |      |  |
| C1.       | Incidents that constitute severe admin/process irregularities (e.g., construction, fire drills) should be reported to FSCO. |   | P | Y    | Will report-supported by student feedback. |
| C2.       | Incidents of suspected cheating should be reported to FSCO.   |   | Y |      |  |

|           |   |   |  |   |   |
|-----------|---|---|--|---|---|
| <b>12</b> | <b><u>Store. (See section 2.2 on “Exam security” for detail.)</u></b>   |   |  |   |   |
| a.        | Retain booklets and answer sheets during “challenge” period             | Y |  |   |   |
| b.        | Challenge period should be well-defined and limited to 1-3 months.      | N |  | Y | Yes - regulator OK needed                 |
|           |   |   |  |   |   |
| <b>13</b> | <b><u>Dispose. (See section 2.2 on “Exam security” for detail.)</u></b> |   |  |   |   |
| a.        | Dispose of test booklets and answer sheets after “challenge” period.    | Y |  |   |   |
|           | <i>Exceptional Standards</i>  |   |  |   |   |
| A.        | Store image of answer sheet on CD.                                      | N |  | P | Outside original RFP, can be investigated |

## 4.2 Exam Security

In total, there are **30 generally accepted standards** for exam security identified in this report. Durham College (DC) fully complies with 28 (93%) of these standards, partially complies with one and doesn't meet one of the general standards. DC will fully meet the partially met standard. The standard that isn't met is outside their terms of reference and they would need agreement and compensation from FSCO in order to comply.

We also identify **26 exceptional standards** for exam security. DC fully meets 10 (38%) of these standards now and partially meets another 11 (42%) of the exceptional standards. There are 5 (20%) exceptional standards that are not met at all.

The unmet standards are typically outside DC's terms of reference and they would need agreement and compensation from FSCO in order to comply. Largely, the same applies to the partially met standards, where 10 standards will continue to be partially met and one will be fully met.

**Now, let us look at the Exam Security standards one-by-one.** The first column of the spreadsheet is the identification number for the standard. The second column is an abbreviated description and you may find a more detailed description in preceding chapters. The third and fourth columns describe current compliance, as observed by The Brondesbury Group and/or Durham College itself. The final two columns deal with future changes to unmet and partially met standards and comments on reasons for their response.

| 4.2 EXAM SECURITY STANDARDS<br><br>(ABBREVIATED VERSION) |  | Durham Compliant                               |        |           | Durham Comments                               |
|--|--|--|--------|-----------|---|
|  |  | <i>(Y=yes, P=Partial, N=No, blank=Unknown)</i> |        |           |   |
|  |  | Now-TBG  | Now-DC | Next Year |   |
| <b>1</b>   | <b>FSCO.</b> Security of exam questions and answer keys at FSCO.                           |  |        |           |   |
|  | Due & reasonable care  | N.A.   | N.A.   | N.A.      |   |
| <b>2</b>   | <b>E-mail.</b> Secure transmission of forms to exam sites.                                 |  |        |           |   |
| a.   | Exam forms are transmitted to the examination site in a password-protected file.           | Y  |        |           |   |
|  | <b>EXCEPTIONAL STANDARDS</b>   |  |        |           |   |
| A1.  | File is encrypted (128-bit) as well as password-protected.                                 | N  |        | P         | Limited transmissions therefore limited risk. |
| A2.  | File is transmitted over a PKI-protected system  | N  |        | P         | see 2.a                                       |
| <b>3</b>   | <b>Site administrator.</b> Receipt of transmission from FSCO.                              |  |        |           |   |
| a.   | Only the site administrator has access to the file and has the necessary password.         | Y  |        |           |   |
|  | <b>EXCEPTIONAL STANDARDS</b>   |  |        |           |   |
| A.   | Password is changed at regular intervals – at least each month.                            |  | P      | Y         | Could be changed with each transmission       |
| <b>4</b>   | <b>Print &amp; Store</b> the examination booklets until examination time.                  |  |        |           |   |
| a.   | Site administrator/proctor prints exactly the number of test booklets needed               | Y  |        |           |   |
| b.   | Test forms are printed in a way that allows them to be easily distinguished                | Y  |        |           |   |
| c.   | Site administrator/proctor verifies the number of booklets of each type prior to storage.  | Y  |        |           |   |
| d.   | Printed test forms are stored in a locked facility until exam time.                        | Y  |        |           |   |
|  | <b>EXCEPTIONAL STANDARDS</b>   |  |        |           |   |
| A.   | Test booklets are individually sealed and the total package for an exam is shrink-wrapped. | N  | N      | P         | Outside original RFP, will be investigated    |
| C1.  | Pages in the booklet are verified  | P  |        | P         | see 4.A                                       |
| C2.  | Each booklet is uniquely linked to a single examinee prior to storage                      | P  |        | P         | see 4.A                                       |
| D1.  | Cabinet/lockbox holding the booklets and the room should be kept locked                    | P  | Y      |           | per policy                                    |
| D2.  | Access to the locked storage box limited to the site administrator until exam time.        | P  |        | P         | see 4.A                                       |
| D3.  | Access to the locked storage room is by electronic key                                     | N  |        | P         | see 4.A                                       |
| D4.  | Keys are never left in a desk drawer, unless that drawer is itself locked.                 |  | P      | P         | see 4.A                                       |

|          |   |   |   |   |                     |
|----------|---|---|---|---|---------------------|
| <b>5</b> | <b>Proctor</b> transports exam booklets to the examination room.                          |   |   |   |                     |
| a.       | Proctor signs for receipt of exams  | N |   | P | see 4.A             |
| b.       | Proctor transports the test booklets and answer sheets to the examination room.           | Y |   |   |                     |
|          | <b><u>EXCEPTIONAL STANDARDS</u></b>   |   |   |   |                     |
| A.       | Site administrator transfers keys to locked facilities to the proctor.                    |   | Y |   |                     |
| B.       | Test materials transported in an attended locked storage box                              | P | Y |   | per policy          |
|          |   |   |   |   |                     |
| <b>6</b> | <b>Examination.</b> Security of test materials while in the examinees hands.              |   |   |   |                     |
| a.       | Identity of examinee is verified prior to receipt of test booklet and answer sheet.       | Y |   |   |                     |
| b.       | Examinee signs for receipt of test booklet and answer sheet.                              | Y |   |   |                     |
| c.       | Examinee is warned that test will be checked for missing pages and consequence if found.  | Y |   |   |                     |
| d.       | Exam administration procedures limit opportunities for copying questions.                 | Y |   |   |                     |
|          | <b><u>EXCEPTIONAL STANDARDS</u></b>   |   |   |   |                     |
| B.       | Test booklet and answer sheet are linked to the examinee prior to the exam.               | Y |   |   |                     |
|          |   |   |   |   |                     |
| <b>7</b> | <b>Proctor.</b> Ensuring security of test materials during the exam session.              |   |   |   |                     |
| a.       | Examinee is never left unattended with an examination booklet or answer sheet.            | Y |   |   |                     |
| b.       | Proctor checks the completeness of booklet and its match to the right examinee            | Y |   |   |                     |
| c.       | Each answer sheet and test booklet is secured upon receipt.                               | Y |   |   |                     |
| d.       | Test booklets and answer sheets are transported to the storage facility pending shipping. | Y |   |   |                     |
|          | <b><u>EXCEPTIONAL STANDARDS</u></b>   |   |   |   |                     |
| C.       | Test booklets and answer sheets are stored in an attended locked storage box              | P | Y |   | Per policy          |
| D.       | Test materials are transported in an attended locked storage box                          | P | Y |   | Per policy          |
|          |   |   |   |   |                     |
| <b>8</b> | <b>Store.</b> Ensuring security of test materials prior to shipping to Durham College.    |   |   |   |                     |
| a.       | Test materials stored securely prior to shipping  | P | Y |   | Per policy          |
|          | <b><u>EXCEPTIONAL STANDARDS</u></b>   |   |   |   |                     |
| A1.      | Cabinet/lockbox holding the booklets and the room itself kept locked                      | P | Y |   | Per policy          |
| A2.      | Access to the locked storage box limited to the site administrator until exam time.       | P | Y |   | Per policy          |
| A3.      | Access to the locked storage room is by electronic key                                    | N | P |   | Where available now |
| A4.      | Keys are never left in a desk drawer, unless that drawer is itself locked.                |   | P | P | see 4.A             |
|          |   |   |   |   |                     |
|          |   |   |   |   |                     |



|           |   |   |   |   |  |
|-----------|---|---|---|---|--|
| <b>9</b>  | <b>Courier.</b> Security of materials sent to Durham College.                           |   |   |   |  |
| a.        | Test material packaged for courier.   | Y |   |   |  |
| b.        | Courier package is kept secure until pick-up.   | P | Y |   | Per policy                                 |
| c.        | Package sent as soon as possible, but ensure receipt during open hours.                 | Y |   |   |  |
| d.        | Purolator picks up the package from the examination site and delivers it to DC          | Y |   |   |  |
|           | <b><u>EXCEPTIONAL STANDARDS</u></b>   |   |   |   |  |
| B.        | Courier package is kept in locked and/or attended.                                      | P | Y |   | Per policy                                 |
| D1.       | A specialized courier service is used that guarantees document security.                | N |   | P | Outside original RFP, will be investigated |
| D2.       | Delivery at Durham must be directly to an Exam administrator and not to a mail room.    | P |   |   |  |
|           |   |   |   |   |  |
| <b>10</b> | <b>Central administration.</b> Receipt and security of materials awaiting scoring at DC |   |   |   |  |
| a.        | Courier envelopes are received at Durham College.                                       | Y |   |   |  |
| b.        | Exam administrator verifies the contents of the courier package.                        | Y |   |   |  |
| c.        | Package is securely stored until scoring.   | Y |   |   |  |
|           | <b><u>EXCEPTIONAL STANDARDS</u></b>   |   |   |   |  |
| A.        | Delivery at Durham must be directly to an Exam administrator and not to a mail room.    | P |   |   |  |
| C1.       | Package is stored inside a locked cabinet within a locked room with limited access.     | Y |   |   |  |
| C2.       | Access to the locked storage room is by electronic key                                  | N | P |   | Where available now                        |
| C3.       | Keys are never left in a desk drawer, unless that drawer is itself locked.              |   | P | P | see 4.A                                    |
|           |   |   |   |   |  |
| <b>11</b> | <b>Scoring.</b> Security of materials in the scoring process.                           |   |   |   |  |
| a.        | Materials are removed from storage solely at the time of scoring.                       | Y |   |   |  |
| b.        | Test booklets and answer sheets are never left unattended during the scoring process.   | Y |   |   |  |
| c.        | Test booklets and answer sheets are moved immediately to storage after scoring.         | Y |   |   |  |
|           |   |   |   |   |  |
| <b>12</b> | <b>Storage.</b> Security of stored materials after scoring.                             |   |   |   |  |
| a.        | Test materials are stored in a high security cabinet with limited key access.           | Y |   |   |  |
| b.        | Booklets and answer sheets are only kept for the duration of the “appeal” process       | P |   | Y | Yes-regulator approval required.           |
|           |   |   |   |   |  |
| <b>13</b> | <b>Dispose.</b> Disposal of out-dated test booklets and answer sheets.                  |   |   |   |  |
| a.        | Booklets and answer sheets are professionally shredded after appeal period              | Y |   |   |  |

### 4.3 Scoring Accuracy Standards

In total, there are **12 generally accepted scoring accuracy standards** identified in this report. Durham College (DC) fully complies with 10 (83%) of these standards and partially complies with 2 (17%) of them. DC will continue to partially comply with one of the partially met standards and will fully meet the other standard.

We also identify **17 exceptional standards** for ensuring scoring accuracy. Four of these standards are FSCO's responsibility and outside the scope of our analysis here. Of the remaining 13, DC fully meets 3 (23%) of these exceptional standards now and partially meets the remaining 10 (77%) of the exceptional standards. There is only one of the partially met standards where further changes are deemed undesirable. For the remainder, DC intends to comply on an "as required" basis to ensure scoring integrity.

**Now, let us look at the Scoring Accuracy standards one-by-one.** The first column of the spreadsheet is the identification number for the standard. The second column is an abbreviated description and you may find a more detailed description in preceding chapters. The third and fourth columns describe current compliance, as observed by The Brondesbury Group and/or Durham College itself. The final two columns deal with future changes to unmet and partially met standards and comments on reasons for their response.

| 4.3 SCORING ACCURACY STANDARDS<br>(ABBREVIATED VERSION) |  | Durham Compliant                               |        |           | Durham Comments  |
|---|--|--|--------|-----------|--|
|   |  | <i>(Y=yes, P=Partial, N=No, blank=Unknown)</i> |        |           |  |
|   |  | Now-TBG  | Now-DC | Next Year |  |
| <b>1</b>  | <b>FSCO.</b> FSCO's role in ensuring scoring accuracy.                         |  |        |           |  |
| A.  | Answer key information is source-checked                                       | N.A.   | N.A.   | N.A.      |  |
| B.  | Answer key independently prepared by two different people.                     | N.A.   | N.A.   | N.A.      |  |
| C.  | Two independent files are machine-compared for agreement.                      | N.A.   | N.A.   | N.A.      |  |
| D.  | Flagged questions are source-checked once again and discrepancies resolved.    | N.A.   | N.A.   | N.A.      |  |
| <b>2</b>  | <b>Exam administrator.</b> Handling of new scoring information.                |  |        |           |  |
| a.  | Exam administrator receives & passes scoring information files                 | Y  |        |           |  |
|   | <b><u>EXCEPTIONAL STANDARDS</u></b>  |  |        |           |  |
| A1.   | Administrator confirms correct answer keys matched to correct forms            | P  | Y      | Y         | New policies as of Apr 5th 2004 re triple person checking            |
| A2.   | Administrator prepares 'benchmark' answer sheets                               | N  | Y      | Y         |  |
| <b>3</b>  | <b>Key in answers.</b>   |  |        |           |  |
| a.  | Exam administrator manually keys scoring information into Scantron file.       | Y  |        |           |  |
|   | <b><u>EXCEPTIONAL STANDARDS</u></b>  |  |        |           |  |
| A1.   | Scoring key is independently keyed in different files by two different people. | N  | P      | Y         | Question DB will auto-generate and store key. No manual intervention |
| A2.   | The two independent files are machine-compared for agreement.                  | N  | P      | Y         | see 3.A1   |
| A3.   | In the event of disagreement, the process starts again with step A1.           | N  | P      | Y         | see 3.A1   |
| <b>4</b>  | <b>Collect answer sheets.</b> Verifying proper fill-in of answer sheets.       |  |        |           |  |
| a.  | Exam administrator visually reviews answer sheets for proper identification.   | Y  |        |           |  |
|   | <b><u>EXCEPTIONAL STANDARDS</u></b>  |  |        |           |  |
| A1.   | Answer sheets are checked for things that might interfere with scoring.        | Y  |        |           |  |
| <b>5</b>  | <b>Scantron check.</b> Preparing for a scoring run.                            |  |        |           |  |
| a.  | The Scantron machine is regularly maintained                                   | Y  |        |           |  |
| b.  | No special check of machine functioning at the start of a run                  | Y  |        |           |  |
|   | <b><u>EXCEPTIONAL STANDARDS</u></b>  |  |        |           |  |
| A.  | Scantron software is kept up-to-date – latest version.                         |  | P      | N         | Existing program stable-no need.                                     |
| B1.   | Benchmark sheets are run to test scoring accuracy                              | N  | P      | P         | Periodic checks are performed  |
| B2.   | If errors, diagnostic procedures need to be in place.                          | P  | Y      |           |  |

|          |   |   |   |   |                                     |
|----------|---|---|---|---|-------------------------------------|
| <b>6</b> | <b>Scantron run.</b> Finding and dealing with exceptions.                             |   |   |   |                                     |
| a.       | Answer sheets scanned. Blanks in identification and answer fields are identified.     | Y |   |   |                                     |
| b.       | ID info checked against registration info to ensure identity of the examinee.         | Y |   |   |                                     |
| c.       | Problems with identification and blanks are source checked back to the answer sheets. | Y |   |   |                                     |
|          |   |   |   |   |                                     |
| <b>7</b> | <b>Statistical checks.</b> Identifying potential problems.                            |   |   |   |                                     |
| a.       | Check statistical properties of items against benchmark norms                         | N | P | Y | New internal reports observe trends |
| b.       | Follow investigation procedure for norm violations                                    | N | P | P |                                     |
|          | <b>EXCEPTIONAL STANDARDS</b>  |   |   |   |                                     |
| B1.      | Verify with FSCO that the correct answer has not changed                              | N | P | Y | When required                       |
| B2.      | Note diagnostic information including course provider, exam centre, version, etc.     | N | P | Y | When required                       |
| B3.      | Identify and correct problems on an ad-hoc basis.                                     | N | P | Y | When required                       |
|          |   |   |   |   |                                     |
| <b>8</b> | <b>Manual scoring checks.</b> When are they needed?                                   |   |   |   |                                     |
| a.       | There is normally no manual check on machine scoring                                  | Y |   |   |                                     |
|          | <b>EXCEPTIONAL STANDARDS</b>  |   |   |   |                                     |
| A.       | Manually verify scores for answer sheets that are within 5% of the passing cut-off    | N | P | Y | At candidate's request              |
|          |   |   |   |   |                                     |
| <b>9</b> | <b>Send out reports.</b> Ensuring accuracy of reported results.                       |   |   |   |                                     |
| a.       | Reports on test performance directly tap the automated scoring information            | Y |   |   |                                     |

#### 4.4 Other Special Issues

There are five exceptional standards for prevention of cheating introduced here that apply to FSCO and to the course providers. They are not Durham College's responsibility at all, but they merit mention. There are eight exceptional standards for ongoing compliance monitoring introduced as well. DC fully complies with 3 of these standards now and partially meets the other 5 standards.

There are **8 generally accepted reporting standards**. DC fully complies with 3 and partially complies with 4 of these standards. One standard is unmet. DC is willing to fully meet these standards but they are outside their terms of reference and they would need agreement and compensation from FSCO in order to comply.

There are **16 exceptional reporting standards**. DC fully meets 5 of these exceptional standards and partially fills another 5. Some 6 of the exceptional standards are not met at all. For the most part, DC is willing to fully meet these standards but they are outside their terms of reference and they would need agreement and compensation from FSCO in order to comply.

| 4.4 OTHER SPECIAL ISSUES<br><br>(ABBREVIATED VERSION) |   | Durham Compliant                               |        |           | Durham Comments   |
|---|---|--|--------|-----------|---|
|   |   | <i>(Y=yes, P=Partial, N=No, blank=Unknown)</i> |        |           |   |
|   |   | Now-TBG  | Now-DC | Next Year |   |
| <b>**** Prevention of Cheating</b>                    |   |  |        |           |   |
| A.  | A person found cheating should be barred from writing the exam again for at least one year.   | N.A.   | N.A.   | N.A.      | We agree  |
| B.  | Course providers and employers (if financial institutions) should be notified in writing that the person is not eligible to write the LLQP exam for at least one year.                | N.A.   | N.A.   | N.A.      | We agree  |
| C.  | Course providers should actively discourage cheating and announce the penalties in class.   | N.A.   | N.A.   | N.A.      | We agree  |
| D.  | Course providers should be obligated to inform the regulator if any examinee attempts to provide them or the examinees' classmates with information on exam questions.                | N.A.   | N.A.   | N.A.      | We agree  |
| E.  | Any course provider found building an item bank consisting of current exam items should be barred from providing courses for a period of at least six months and preferably one year. | N.A.   | N.A.   | N.A.      | We agree  |
| <b>**** Ongoing Compliance Monitoring</b>             |   |  |        |           |   |
| A.  | Durham should review procedures at each test site regularly.  |  | Y      | P         | Random reviews are done   |
| B.  | Annual reviews - Quarterly for most active sites.   |  | Y      |           | Process will be formalized  |
| C.  | An independent reviewer checks compliance at the most active sites >= once per year.  |  | P      | P         | Outside original RFP - will be investigated - depends on meaning of "independent".      |
| D.  | Compliance failures should be graded from minor to severe using a 1-5 scale.  |  | P      | Y         | General comment. No grade system in place. Will look to include with formalized process |
| E.  | Compliance failures should be promptly reported to exam sites for correction  |  | Y      |           |   |
| F.  | Corrections should be monitored by DC within three months   |  | P      | P         | Depending on type of failure  |
| G.  | Repeated severe failures lead to dropping an examination site   |  | P      | Y         | Suspension first-drop on repeat   |
| H.  | Repeated severe compliance failures reported to the regulator in a timely manner.   |  | P      | Y         | Will report.  |

|   |   |   |   |   |  |
|---|---|---|---|---|--|
| <b>**** Reporting Standards</b>         |   |   |   |   |  |
| <b>1 Reporting to examinees.</b>        |   |   |   |   |  |
| a.                                      | Examinee receives overall test score and is advised of pass mark.       | Y |   |   |  |
| <b><u>EXCEPTIONAL STANDARDS</u></b>     |   |   |   |   |  |
| A1.                                     | Examinee receives scores (% correct) for each major content module      | N | P | Y | On request. Automatic report to be added to notification ~May 31, 2004 |
| A2.                                     | Examinee is informed of performance relative to other examinees         | N |   |   |  |
| <b>2 Reporting to course providers.</b> |   |   |   |   |  |
| a.                                      | Report students in standard intervals plus overall pass rate.           | Y |   |   |  |
| b.                                      | Report by objective # candidates, %right, %wrong and %blank.            | P |   | P | Outside original RFP-will discuss                                      |
| c.                                      | Report by module # candidates, %right, %wrong and %blank.               | P |   | P | see 2.b  |
| <b><u>EXCEPTIONAL STANDARDS</u></b>     |   |   |   |   |  |
| A1.                                     | Report summary performance relative to other course providers.          | Y |   |   |  |
| A2.                                     | Report each examinee's scores for each major content module             | N |   | P | see 2.b  |
| A3.                                     | Report by test version and method of administration.                    | Y |   |   |  |
| A4.                                     | Report information by test site, if possible (minimum 50 examinees).    | N |   | P | see 2.b  |
| B.                                      | Report by objective relative to other course providers.                 | P |   |   |  |
| C.                                      | Report by module relative to other course providers.                    | P |   |   |  |
| <b>3 Reporting to FSCO.</b>             |   |   |   |   |  |
| a.                                      | Report in standard intervals plus overall pass rate.                    | Y |   |   |  |
| b.                                      | Report by objective # candidates, %right, %wrong and %blank.            | P |   | P | Outside original RFP-will discuss                                      |
| c.                                      | Report by module # candidates, %right, %wrong and %blank.               | P |   | P | see 3.b  |
| d.                                      | Data file by student by item - right, wrong, not attempted, not tested. | N |   | P | see 3.b  |
| <b><u>EXCEPTIONAL STANDARDS</u></b>     |   |   |   |   |  |
| A1.                                     | Report summary performance for each course provider.                    | Y |   |   |  |
| A2.                                     | Report summary information by test version and method of admin          | Y |   |   |  |
| A3.                                     | Report summary information by test site, if possible                    | N |   | P | see 3.b  |
| B.                                      | Report by measurable objective for each course provider.                | P |   | P | see 3.b  |
| C1.                                     | Report by content module for each course provider.                      | P |   | P | see 3.b  |
| C2.                                     | Report by module, version and method of administration.                 | Y |   | P | see 3.b  |
| C3.                                     | Report by content module for each test site                             | N |   | P | see 3.b  |
| D.                                      | Data file for each student for each item w/ distracter information      | N |   | P | see 3.b  |