# An Analysis of Full-time Academic Workload in Colleges of Applied Arts and Technology of Ontario, 1996-97

# 1.0 INTRODUCTION

This report presents the results of the survey of the 1996-97 academic staff workload in Colleges of Applied Arts and Technology in Ontario. The survey was designed to compile information recorded on the Standard Workload Form (SWF), which forms a part of the negotiated terms and conditions of academic employees covered by the 1991-94 collective agreement between the Ontario Council of Regents for the Colleges of Applied Arts and Technology and the Ontario Public Service Employees Union (for academic employees). The SWF data form remains unchanged under the new collective agreement rectified by the parties in August 1998.

This survey was conducted by the College Relations Commission (CRC) in consultation with the College Relations Commission Information Services (CRCIS) Advisory Committee. The terms of reference for the CRCIS Advisory Committee are set out in the Memorandum of Understanding appended to the 1991-94 college academic collective agreement.

This report is divided into four sections. Section 2 deals with the data submission and processing; Section 3 is a summary analysis of the data; Section 4 includes the tables referenced in Sections 2 and 3; and the Appendices include frequency distribution of class size and college-specific data collection.

## 2.0 COLLEGE DATA SUBMISSION/PROCESSING

# 2.1 College Response

Of the 25 colleges, 23 colleges provided SWF data to the CRC. Of the 23 reporting colleges, all but 3 provided all data files and 18 have jointly Asigned off@ their data by the college administration and OPSEU local president. (See Appendix A)

# 2.2 Data Verification and Error Checking

Preliminary data checking included the identification of duplicate and/or unusable records and the data was then converted to a standard record layout and read into CRC-constructed SAS datasets. This was followed by a more detailed review of the data consisting of several checkpoint analyses. The checkpoints identified are as follows:

X missing data;

- X data values falling outside limits established in the collective agreement;
   X differences in reported values and those calculated through the application of a formula in the agreement; and,
   X Aflags@ that indicate unusual data values but are not necessarily indicators
- Aflags that indicate unusual data values but are not necessarily indicators of errors.

A series of verification reports for each college was generated listing all records which had produced a checkpoint message. These reports were mailed to the parties in July 1998 (for those colleges which had submitted data prior to July 1998), along with some preliminary analyses of the data. The parties were requested to file corrections as soon as possible and latest by the end of October, 1998. 11 colleges submitted corrections and the revisions have been incorporated into the CRC datasets.

### 2.3 Data Limitations

The information in this report was derived on data submitted by individual colleges. While every effort was made by both the colleges and the CRC to ensure the accuracy and completeness of the data, the following general limitations should be noted and any conclusions drawn from the analysis should be viewed in this light.

- 1) Full-time employees on reduced or less-than-full-time workload were not identified.
- 2) For those colleges which did not report any AnonSWF@ academic staff, we do not know if these colleges reported only those academic staff with SWFs or if all of their academic staff had SWFs.
- The number of staff reported on the Council of Regents academic staff survey for 1996-97 varies from the number of staff reported in this survey. The Council of Regents survey reported 6,495 full-time academic staff. Excluding the two colleges that did not submit SWF data, the number of staff would be 5,873. The data provided to the CRC for the same period totalled 6,041full-time academic staff a difference of 168. The colleges were not asked to reconcile the difference.

For data limitations regarding specific colleges, please see Appendix A.

#### 2.4 Classification of Data

Data was provided for 6,041 employees across 23 colleges. Unless otherwise indicated, all percentages throughout this report are based on this number.

## 2.4.1 Type of Employee (Table 2)

Based on the data provided:

- X 5,831 (96.5%) of the staff were classified as professor
- X 135 (2.2%) were classified as counsellors
- X 24 (0.4%) were classified as librarians
- X 23 (0.4%) were classified as instructors,
- X 28 (0.5%) were not classified.

#### 2.4.2 Position of Responsibility: Regular/Coordinator (Tables 3.1, 3.2)

Of the 6,041 staff reported:

- X 4,924 (81.5%) in fall 1996 and 5,040 (83.4%) in winter 1997 were classified as regular staff;
- X 740 (12.2%) in fall 1996 and 657 (10.9%) in winter 1997 were classified as Coordinator I:
- X 377 (6.2%) in fall 1996 and 344 (5.7%) in winter 1997 were classified as Coordinator II.

In the fall snapshot, the percentage of regular staff varied from a low of 63.9% (Sir Sandford Fleming) to a high of 100% (Cambrian, Grands Lacs, Lambton). The percentage of staff classified as Coordinator I varied from a low of 0% (Boréal, Cambrian, Grands Lacs, Lambton, Loyalist) to a high of 30.8% (Confederation). The percentage of staff classified as Coordinator II varied from a low of 0% (Cambrian, Conestoga, George Brown, Grands Lacs, Lambton, St. Lawrence) to a high of 23.4% (St. Clair).

In the winter snapshot, the percentage of regular staff varied from a low of 65.9% (Sir Sandford Fleming) to a high of 100% (Cambrian, Confederation, Grands Lacs). The percentage of staff classified as Coordinator I varied from a low of 0% (Boréal, Cambrian, Confederation, Grands Lacs) to a high of 32.2% (Sir Sandford Fleming). The percentage of staff classified as Coordinator II ranged from a low of 0% (Cambrian, Canadore, Conestoga, Confederation, George Brown, Grands Lacs, St. Lawrence) to a high of 23.4% (St. Clair).

#### 2.4.3 Service Status: Non-Probationary/Probationary (Table 4)

5,369 employees (88.9%) were classified as non-probationary, and 310 (5.1%) were classified as probationary employees. Colleges did not provide service status data for 362 employees (6%). The non-probationary employees ranged from a low of 8.3% (Cambrian) to a high of 100% (Loyalist, Northern, St. Lawrence). The probationary employees varied from a low of 0% (Grand Lacs, Loyalist, Northern, Sault, St. Lawrence) to a high of 38.9% (Sheridan).

#### 2.4.4 SWF Availability: Reasons for No SWF (Tables 6.1, 6.2)

Colleges reported that a total of 713 employees did not have SWFs at any time in the 1996-97 academic year. The various reasons are as follows (percentages based on 713 employees):

- X 53 (7.4%) took professional development leave,
- X 53 (7.4%) took personal leave,
- X 7 (1%) took maternity/parental leave,
- X 9 (1.3%) took prepaid leave,
- X 92 (12.9%) were on LTD,
- X 7 (1%) were on union business,
- X = 1 (0.1%) were on vacation,
- X 66 (9.3%) were on project assignment,
- X 17 (2.4%) were on sabbatical leave,
- X 263 (36.9%) did not have a SWF for reasons other than those listed above or reason not provided.

# 3.0 ANALYSIS OF THE SWF DATA

Analysis of the 1996-97 SWF data is based on the data provided in each of the two snapshot periods (October 28 - November 1, 1996 and February 24 - 28, 1997), and year-end totals from the final SWF of the 1996-97 academic year. If a snapshot week was Abetween intakes@, the college used the week immediately following the snapshot week noted above.

The sections below provide selected highlights from each of the tables included in the report. Sections 3.1 to 3.6 are based on the two snapshot periods and Section 3.7 summarizes year-end data.

## 3.1 Workload by Function (Tables 7.1, 7.2)

Article 11 of the collective agreement sets out a comprehensive formula for the determination of workload. Four factors to be considered in establishing workload are: teaching contact hours, attributed hours for preparation, attributed hours for evaluation and feedback, and attributed hours for complementary functions.

## 3.1.1 Assigned Teaching Contact Hours

Article 11.01 I states that assigned teaching contact hours in post-secondary programs shall not exceed 18 in any week, and in non post-secondary programs shall not exceed 20 in any week. Based on the data provided, the average weekly teaching contact hours across the system were 14.2 hours in the fall snapshot, and 14.1 hours in the winter snapshot.

The individual college averages ranged from 11.6 hours (Grand Lacs) to 16.7 hours (Cambrian) in the fall snapshot. In the winter snapshot, the averages ranged from 9.2 hours (Grands Lacs) to 15.9 hours (Cambrian).

## 3.1.2 Attributed/Additional Preparation Hours

Article 11.01 D 1 sets out the method to be used for determining the amount of preparation time attributed and assigned. Preparation time is calculated through a combination of attributed hours (a ratio of hours per assigned teaching contact hour dependent on the type of course section), and additional preparation hours assigned. (See section 3.4.1 below for an analysis of preparation factors). Based on the data provided, the weekly preparation hours across all colleges averaged 8.8 hours in the fall snapshot and 8.7 hours in the winter snapshot.

Individual college averages ranged from 7.8 hours (Sir Sandford Fleming) to 10.5 hours (St. Clair) in the fall snapshot, and from 7.1 hours (Grands Lacs) to 10.7 hours (St. Clair) in the winter snapshot.

#### 3.1.3 Attributed Evaluation and Feedback Hours

Article 11.01 E 1 sets out the method to be used for determining evaluation/feedback time. Attributed hours are calculated on a per student basis depending on the type of evaluation/feedback required for the course. Courses requiring more than one type of evaluation/feedback are assigned a Amultiple@ ratio. (See section 3.4.2 below for an analysis of evaluation/feedback factors). Based on the data provided, the weekly evaluation and feedback hours across all colleges averaged 9.5 hours in the fall snapshot, and 8.9 hours in the winter snapshot.

Individual college averages ranged from 4.8 hours (Grands Lacs) to 11 hours (Sir Sandford Fleming) in the fall snapshot, and from 4.2 hours (Grands Lacs) to 10.6 hours (Sir Sandford Fleming) in the winter snapshot.

## 3.1.4 Hours for Complementary Functions

Article 11.01 F provides for a weekly minimum allowance of 5 hours for routine complementary functions. Additional complementary functions may be assigned. Based on the data provided, total weekly hours for complementary functions across all colleges averaged 9.5 hours in the fall snapshot, and 10.1 hours in the winter snapshot.

Individual college averages ranged from 5.2 hours (St. Clair) to 17 hours (Grands Lacs) in the fall snapshot, and from 5.3 hours (St. Clair) to 22.6 hours (Grands Lacs) in the winter snapshot.

#### 3.1.5 Total Workload Hours

Article 11.01 B 1 of the agreement states that the total workload shall not exceed 44 hours for any week for which there are teaching contact hours. Article 11.01 J 1 states that maximum overtime is three total workload hours in any one week on a voluntary basis. Based on the data provided, total workload hours for all colleges averaged 41.8 hours in the fall snapshot, and 41.6 hours in the winter snapshot.

Individual college averages ranged from 38.7 (Boréal) to 43.4 (Georgian) in the fall snapshot, and from 37.2 (Sault) to 43 (Grands Lacs) in the winter snapshot.

# **3.2** Teaching Contact Hours - Coordinators Excluded (Table 8)

Article 14.03 A 3 defines coordinators as those academic staff members who have responsibility for providing academic leadership in the coordination of courses and/or programs. They receive, in addition to their regular salary, an allowance equal to one or two steps on the appropriate salary scale. In some cases, coordinators may also have a reduced number of teaching contact hours.

The CRC calculated teaching contact hours for all staff, excluding coordinators within each college and then across all colleges. The purpose was to see what effect, if any, the inclusion of coordinators had on the average number of teaching contact hours. For each term, the CRC excluded from the calculation any employee coded as either Coordinator I or Coordinator II. Then CRC excluded any individual course data in which the teaching contact hours were reported as blank or zero.

In the fall snapshot, data for 3,972 regular staff members was used in the calculation. In the winter snapshot, data for 3,850 regular staff members was used. The average number of teaching contact hours among regular staff was:

- X 14.7 hours in the fall snapshot, ranging from a low of 10.1 (Grands Lacs) to a high of 16.7 (Cambrian),
- X 14.6 hours in the winter snapshot, ranging from a low of 8.2 (Grands Lacs) to a high of 16.3 (Conestoga).

The average number of teaching contact hours for all staff, including coordinators, in the fall snapshot was 14.2, a difference of .5 hour per week. In the winter snapshot, the average number of teaching contact hours for all staff was 14.1, the difference is also .5 hour per week.

# 3.3 Student Contact Hours per Week (Table 9)

The CRC calculated student contact hours per week, within each college and across all colleges. The calculation excluded any individual course data in which either the teaching contact hours or the class size was reported as blank or zero. Within each snapshot, the CRC calculated the student contact hours per course in each college by multiplying the teaching contact hours per course by the number of students in that course. The results of this calculation were summed by academic staff member to arrive at the weekly total teaching contact hours per academic staff member. These were totalled and then divided by the number of academic staff members counted to arrive the average student contact hours per week in each college.

In the fall snapshot, 4,932 academic staff members were included in the calculation. In the winter snapshot, 4,714 academic staff were included. Based on the data provided, the average number of student contact hours per week was:

- X 405.2 hours in the fall snapshot, ranging from a low of 172.3 (Boréal) to a high of 479.8 (George Brown),
- X 380.4 hours in the winter snapshot, ranging from a low of 140.1 (Boréal) to a high of 470.1 (George Brown).

# **3.4** Classification of Courses by Type (Tables 10.1, 10.2, 11.1, 11.2)

Preparation and evaluation/feedback time is attributed based on course type and/or class size. The analysis of preparation factors is based on 22,819 courses in the fall snapshot and 21,382 in the winter snapshot. The analysis of evaluation/feedback factors is based on 22,804 courses in the fall snapshot and on 21,365 courses in the winter snapshot. In analysing preparation factors, the CRC excluded data which reported the preparation factor as blank. The same applies to evaluation/feedback factors.

#### 3.4.1 Preparation Factors

Article 11.01 D 1 identifies seven classifications of courses, with preparation factors ranging from 0.35 to 1.10 hours per assigned teaching contact hour. Based on the data provided, the most common type of preparation factor during the two snapshot weeks was AEstablished B@. In the fall snapshot, 50.1% of courses were designated as Established B, ranging from a low of 41.5% (Seneca) to a high of 70.4% (Northern). In the winter snapshot, the average was 54.7%, with individual college ranging from 40.8% (Georgian) to 65% (Grands Lacs).

In the fall snapshot, 26.9% of the courses were classified as Repeat B, 16.3% were classified as New, 4.2% were Repeat A, and 2.1% were classified as Established A. A small percentage of 0.4% were reported as having multiple preparation factors. In the winter snapshot, 25.6% of the courses were Repeat B, 14.2% were new, and 3.5% were Established A. Again, a small percentage of 0.5% had multiple preparation factors.

#### 3.4.2 Evaluation/Feedback Factors

Article 11.01 E 1 identifies three classifications of courses depending upon the type of evaluation/feedback required for students. The most common type of evaluation/feedback is ACombined@ (i.e. more than one type of factor used in evaluating and providing feedback to students), at 42.2% in the fall snapshot and 42.7% in the winter snapshot. In the fall snapshot, averages ranged from 0% (Boréal) to 94.7% (Confederation). In the winter snapshot, averages varied from 0% (Boréal, Grands Lacs) to 95.7% (Confederation).

The next common type of evaluation/feedback factor is AEssay/Project@. In the fall snapshot, 37.6% of the courses were designated as Essay/Project. Among the colleges, the average ranged from a low of 1.4% (Confederation) to a high of 88.1% (Boréal). In the winter snapshot, 37.1% of courses were designated as Essay/Project, with individual college averages ranging from 1.7% (Confederation) to 89.1% (La Cité collégiale).

In the fall snapshot, 13.1% of courses across all colleges were ARoutine/Assisted@ and 7.1% were considered as AIn-Process@. In the winter snapshot, these percentages were 13.2% and 6.9% respectively across the colleges.

#### 3.5 Class Size (Table 12)

Article 11.01 E 3 addresses class size. No prescribed limits are set out in the agreement, however the size of a class is used in the formula for determining evaluation/feedback time. Thus, it has an impact on the overall workload.

The CRC excluded from the analysis any class sizes which were reported as zero or as a blank. In the fall snapshot, data collection included 22,775 classes and class size across the colleges averaged 30.78. Individual college averages ranged from a low of 14.72 (Boréal) to a high of 43.29 (Sir Sandford Fleming). In the winter snapshot, data recorded 21,355 classes for analysis class size among the colleges averaged 29.11. Among the individual colleges, the average ranged from 14 (Grands Lacs) to 38.79 (Sir Sandford Fleming).

Eleven colleges reported the smallest class size as one in both the fall snapshot and the winter snapshot. The largest class was reported as 483 (St. Clair) in the fall snapshot and 300 (George Brown) in the winter snapshot. The most frequent provincial college class size is 26-30 for both fall and winter terms. (See Appendix B)

# 3.6 Course Preparations (Table 13)

Article 11.01 D 2 states that no more than four different course preparations shall be assigned in a given week except by voluntary agreement. Based on the data provided, the system average number of course preparations in the fall snapshot was 2.89. Among individual colleges, the average ranged from 2.36 (Seneca) to 3.80 (Grands Lacs). In the winter snapshot, the average was 2.94 course preparations. Among individual colleges, the average ranged form 2.47 (Seneca) to 3.48 (St. Clair).

# 3.7 Course Sections (Table 14)

Article 11.01 D 2 states that no more than six different course sections shall be assigned in a given week except by voluntary agreement. Based on the data provided, the average number of course sections was 4.37 in the fall snapshot and 4.28 in the winter snapshot. Among individual colleges, the average ranged form 3.62 (Boréal) to 5.23 (Sheridan) in the fall snapshot, and from 2.67 (Grands Lacs) to 5.00 (St. Clair) in the winter snapshot.

# 3.8 Yearly Totals (Table 15)

The CRC excluded from the calculations any data for academic staff who did not have a SWF in one snapshot. Among the 23 colleges providing the SWF data, two colleges (Grands Lacs, Sault) did not provide their year end records and one college (Lambton) did not provide data on snapshot 1. The following analysis were based on data provided by 20 colleges.

## 3.8.1 Total Teaching Contact Hours

Article 11.01 K 3 of the agreement states that the total teaching contact hours shall not exceed 648 in post-secondary and 760 in non post-secondary programs. The average total teaching contact hours were 462.09. Among individual colleges, the average ranged from a low of 385.09 (La Cité collégiale) to a high of 552.54 (Cambrian).

## 3.8.2 Total Teaching Contact Days

Article 11.01 K 1 states that total teaching contact days should not exceed 180 for post-secondary and 190 for non post-secondary. Based on the data provided, the average total teaching contact days were 164.05. Among individual colleges, the average ranged form 145.75 (Conestoga) to 172.65 (George Brown).

# 3.8.3 Total Teaching Contact Weeks

Article 11.01 B 1 states that the maximum teaching contact weeks are 36 in post-secondary programs and 38 in non post-secondary programs. Based on the data provided, the average number of teaching contact weeks was 33.45. Among individual colleges, the average ranged from 30.59 (Sheridan) to 35.62 (Centennial).

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# **COLLEGE SPECIFIC 1996-97 SWF DATA COLLECTION**

COLLEGE	SWF DATA LIMITATIONS
Boréal	No sign-off
Canadore	Submitted Employee Names and CRC assigned Employee ID Numbers to replace employee names on all records.
Durham	Did not submit SWF data.
Grand Lacs	Did not submit Academic Year Total File.
Lambton	Provided Employee Names and CRC assigned Employee ID Numbers to replace employee names on all records.  Did not submit Course File.  Snapshot Week 1 (Fall >96) data was not provided.  Without the fall data, Year End Total could not be produced.  No sign-off
Mohawk	Did not submit SWF data.
St. Clair	No sign-off
Sault	Did not submit the Academic Year Total File.
	No sign-off
Seneca	No sign-off

# 1996-97 CAAT ACADEMIC WORKLOAD SURVEY

Analysis of Full-Time Academic Staff Standard Workload Form (SWF) Records: Ontario Colleges of Applied Arts and Technology

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