

## Overview of FCQ processing especially data flows in and out

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### The players

- FCQ = Faculty Course Questionnaire, aka student evaluations of courses and instructors.
- SIS, student information system, 1988 – 2010
- CS, Campus Solutions, student information system, 2010+
- PBA, Boulder planning, budget, and analysis
  - IA, Institutional Analysis, the part of PBA that runs the FCQ
- CIW, central information warehouse
- UIS mainframe, University Information Systems (run by CU-system)

Boulder FCQ website <http://www.colorado.edu/fcq/>

FCQ policy oversight for Boulder lies with the associate vice-chancellor for undergraduate education in academic affairs, anchored by Regent policy.  
<https://www.cu.edu/regents/Policies/Policy4B.htm>

Boulder PBA processes FCQs for Boulder, DDC, and UCCS, but with Boulder as client #1. AMC has a completely different process for student evaluations of courses and instructors, not known as “FCQ.” This document refers to FCQ processing only. It applies to all of Boulder, DDC, and UCCS except as noted.

Processing arrangements involve interactions between the PBA FCQ coordinator (Meg Rowland) and “FCQ coordinators” in “FCQ departments.” FCQ departments are more or less equivalent to SIS departments and PeopleSoft org tree departments, but reflect more or less differentiation based on client requests and historical accident. At DDC and UCCS an FCQ department may group several SIS departments.

Within PBA, data processing involves the coordinator plus several programming and analysis staff, most predominantly systems analyst Gary Pfeifer and his successor Fanchon Finucane. 100% of our data processing is done with the SAS programming language. Meg Rowland, FCQ coordinator, is responsible for paper processing.

FCQ results are used by students, especially when registering for classes, by departments/schools/colleges, by instructors themselves, and by the general public.

At the end of this document are notes about *possible* interactions between FCQ and CS, and portals, or other non-PBA systems.

Background on the FCQ in general: <http://www.colorado.edu/fcq/BkgrInfo.html>

Key distinction: FCQs are collected for a course section in one of two ways: Paper forms administered in a class meeting, or online collection. The online collection window extends over several days. Occasionally online collection occurs during a class session.

Both paper and online forms have 9 standard rating questions (8 for DDC) and up to 24 optional rating questions, plus a narrative/open comment question (4 for DDC).

Use of SIS data (with more details below)

- From SIS: FCQ processing
  - starts with SIS data for a term, on course sections
  - uses a bit more SIS data (enrolled student names and emails) in online collection (no more in paper collection)
  - occasionally uses a tiny bit of SIS data in processing collected data (e.g., end of term enrollment)
  - uses a bit of additional SIS data (instructor IDs, with match to PeopleSoft employee IDs) in analysis or storage
  - uses zero additional SIS data in immediate displays of results (right after the term)
  - couples FCQ results with additional SIS data, on grades assigned, for later display of results (each year for Boulder FCQ instructor summaries)
- To SIS: FCQ processing feeds zero data to SIS directly, with very occasional indirect feeds via Registration
- 99.9% of the SIS data used in FCQ processing and reporting come from CIW, with the rest coming from screens via people's eyes. We expect this to be the case with CS as well.

### Steps in FCQ processing and reporting

Processing timeline <http://www.colorado.edu/fcq/prcsmap.htm>

Determine the initial list of what course sections to administer the questionnaire for, who the instructors are, and how many students are enrolled -- uses SIS data and PBA processing rules (e.g., selection based on activity type, enrollment >1, section 'session' or end date). [In summer we use room capacity, not enrollment, for judging N of forms to print for DDC and UCCS.]

Use PBA processing rules to determine and list for each section: how multiple instructors are handled, paper or online status, what FCQ department is responsible, instructors and their status, etc. The list is known as the department course list (DCL).

With a web collection system on a PBA server, post the initial DCL for departmental FCQ coordinator editing. Allow additions, deletions, and changes. For most sections, allow (invite) overrides in paper vs. online administration, how multiple instructors are handled, how cross-listed or combined sections are handled, number of forms to be printed.

At the same time, instructors, departments, and schools/colleges are invited to specify use of existing or newly created "optional questions" for a course section or for groups of sections (e.g., all undergraduate courses in a department). Some of this process takes place through <http://fcq.colorado.edu/Opts/optsform.htm> throughout the year.

PBA puts together data from the initial DCL, department coordinator edits, the optional question process, and other requests received in the term to produce the list of section/instructor combinations and optional questions to be presented to students.

*Aside:* Volume, fall 2008: Boulder without continuing education: course sections 3,819 (paper), 1,138 (online); forms returned 92,637 (paper), 20,852 (online). Boulder continuing education, DDC, and UCCS volume increases these totals considerably, with percentage increases ranging from 19% (online forms returned) to 74% (course sections administering paper forms). Details below.

<b>Fall 2008 FCQ Volume</b>			
<b>Campus</b>	<b>Adminis- tration mode</b>	<b>Course sections</b>	<b>Forms returned</b>
Boulder campus	Paper	3,819	92,637
Boulder campus	Online	1,138	20,852
Continuing Ed (Boulder)	Paper	33	587
Continuing Ed (Boulder)	Online	180	1,002
Colorado Spgs campus	Paper	1,236	23,431
Colorado Spgs campus	Online	45	487
Downtown Denver campus	Paper	1,575	30,560
Downtown Denver campus	Online	205	2,369
Total paper		6,663	147,215
Total online		1,568	24,710
Total		8,231	171,925

*Aside:* Online: Any course section can request online administration; some departments do so for all courses. Boulder graduate sections with enrollment of 10 or fewer must be online (by campus policy); so too must sections that have no physical meeting (most of these are at DDC). Many in-class instructors dislike online administration because response rates are lower. Online collection is cheaper, allows students to record comments more conveniently than handwriting, and masks handwriting as a means by which the instructor could identify students. For PBA studies of online administration see <http://www.colorado.edu/pba/fcq/studies/OnlineSummary.doc>.

Paper FCQ forms are purchased from a custom optical mark reader forms vendor with standard questions and instructions printed. PBA then prints a scannable ID number for the section/instructor, and any optional questions, using UIS mainframe printers. See sample Boulder paper form at <http://www.colorado.edu/fcq/form/formBD.pdf>.

We set up sections for online collection on the PBA server. We pull names and emails of enrolled students from SIS/CIW 2-3 weeks before collection opens near the end of the term. Online collection is not available through CU Connect or any portal, although we'd like it to be so eventually. See sample Boulder online form at <http://www.colorado.edu/fcq/form/online06.html>. Online procedures: <http://www.colorado.edu/fcq/form/webprocs.html>

A course section is collected either by paper or online, not both.

If paper, we pack the printed forms into course-section envelopes and distribute to departments.

If online, we notify instructors via email, then notify and remind students via email. In fall 2008, we sent over 52,000 emails to 23,600 students on all campuses we serve.

If online, we monitor collection, ensuring that only enrolled students have access to forms for a course section, and that no one counts twice in one course, etc.

If paper, we get the forms back in the envelopes in which they were distributed. We open each envelope, aligning forms for scanning, discarding unused forms, and spotting problems. We sort envelopes into campus/department/course order.

If paper, the envelopes go to scanning. They're scanned using a program we consult on. We get the paper forms back (in envelopes). We get a data file from scanning. It contains no student identifiers.

We combine online responses and scanned paper responses to a single compilation.

Processing – checking data for possible errors, compiling, creating a comparison dataset of stats from prior terms by department, college/division, grad/undergrad, instructor type, and other attributes. We may consult SIS at this stage on an ad hoc basis, especially for changes in course attributes and enrollment between beginning and end of term.

Once processing is sufficiently far along, we begin printing 'section reports' for online and paper (sample at [http://www.colorado.edu/fcq/stats/sectrpt\\_interp/section\\_report\\_plain.pdf](http://www.colorado.edu/fcq/stats/sectrpt_interp/section_report_plain.pdf)). For online, we also print 'response compilations' with all student responses including comments (sample at [http://www.colorado.edu/fcq/stats/sectrpt\\_interp/section\\_report\\_online.html](http://www.colorado.edu/fcq/stats/sectrpt_interp/section_report_online.html)). Printing is done on a PBA dedicated printer; UIS is not involved. We print a second set of all section reports for department copies.

Distribution of section reports to instructors is via the FCQ envelope for each course-section-instructor combination. If administration was on paper, the envelope also contains the original FCQ forms completed by students. If administration was online, the envelope contains a 'response compilation' which lists both ratings and comments from students, in place of paper FCQ forms. In all cases, the envelopes are sent in batch to the FCQ coordinator for the department. The "department copy" of the section reports also goes to the FCQ coordinator.

Comments made on paper forms are not transcribed or imaged – they are returned only via the original FCQ forms, inside the FCQ envelope for the course-section-instructor.

PBA electronic postings of rating results – not of comments.

- Boulder at <http://fcq.colorado.edu/UCBdata.htm>
- Denver at <http://fcq.colorado.edu/ucddata.htm>
- UCCS at <http://fcq.colorado.edu/uccsdata2.htm>

All of these are maintained by PBA and on PBA servers. All are public, accessed from FCQ home page at <http://www.colorado.edu/fcq>.

Other presentation of Boulder data is through Boulder PLUS schedule planner (<http://plus.colorado.edu/plus/planner/>), which is maintained outside of PBA but links directly to PBA data. The “INFO” icon for a course generally has a statement such as “FCQ results are available from the Office of Planning, Budget, and Analysis website. [This link](#) will open a new window directly to the report for COMM 1210.” The link is a query to the set of results:

<http://fcq.colorado.edu/scripts/broker.exe? PROGRAM=fcqlib.fcqdata.sas&subj=COMM&crse=1210&fyr=1999>

We also show, on our website, how to link from an instructor’s webpage to results. [http://www.colorado.edu/pba/fcq/instr\\_links.html](http://www.colorado.edu/pba/fcq/instr_links.html)

At least one Boulder department, Computer Science, gathers and maintains its own website of FCQ results: <http://www.cs.colorado.edu/courses/fcqs/>.

DDC and UCCS data are also presented through their schedule planners, also not managed by PBA – talk to DDC and UCCS IT people for info on this. Links are shown in the reference section at the end of this document.

Permanent hardcopy archives of all section reports, all campuses, are at Boulder’s Norlin Library Archives office. DDC and UCCS section reports are also archived by various recipients on their campuses.

Listings of results by Boulder instructor are also reported as the “FCQ instructor summary,” distributed annually Sept 1 via hardcopy to Boulder depts only, with data from 1988 through spring of the current year. See sample online at [http://fcq.colorado.edu/instr\\_summary.htm](http://fcq.colorado.edu/instr_summary.htm).

We also report Boulder results annually by department (sample at [http://www.colorado.edu/fcq/dept\\_summary.pdf](http://www.colorado.edu/fcq/dept_summary.pdf)) and put these results by department in unit profiles for academic review and planning (<http://www.colorado.edu/pba/depts/arp/index.html>).

Storage of data - indefinitely. 98% of data use after the term is of data aggregated over forms, for a course-section. Data are maintained by PBA in SAS datasets.

### **Possible interactions between FCQ and CS, and portals, or other non-PBA systems**

I believe CS has the capability to collect and store student ratings of course sections/instructors; possibly even comments. Because this wasn’t part of SIS, and because our current system is almost certainly more flexible than something closely attached to CS, this was not considered as far as I know.

Assuming that PBA continues as FCQ processor for Boulder at least, we will need to gather and use CS data on courses, sections, and instructors in the same way we use SIS data. Enrollment, activity type, session, combined section status, instructors, lists of enrolled students, student emails – all are essential. These are pretty humdrum data, so I’ve assumed they’ll be happily together in one “star” or agglomeration of course data in the CSW, and we’ll pull them from there.

We don't anticipate any huge conceptual shifts in CS course data, or any PBA upload of FCQ data to CS.

The biggest potential contribution of CS to FCQ processing data is alignment of instructor identity in CS and Peoplesoft HR. We currently maintain our own records to attempt unique identifiers and single name forms for individuals teaching sections over time.

Portal possibilities - Caveat – I don't know much about this

- Boulder FCQ staff met with Boulder ITS portal people some time ago (many months). FCQ collection and distribution of results were deemed legitimate activities but too low in priority to accomplish before CS.
- Possibles involving course or department-specific info
  - Collection of optional-question links to sections, and/or new questions, from instructors, departments, colleges, with the portal establishing authenticity
  - Coordinators review and modify, then later view, the department course lists
  - Collection from students. Reminders to students. Presentation to students on a course-specific site.
  - Delivery of results to students registering or planning for courses – must be public as well
  - Delivery of results to instructors, *potentially* including comments on imaged facsimiles of paper forms, or response compilations from online forms. Comment delivery would have to be confidential, but allow access by various appropriate others, such as chair, dean, supervisor of TAs, etc. This could be contentious, could be different by department, and could be best left not approached.
  - Delivery of results to departments
- Generic info – timetable for a term, results interpretation, etc. As on our website (yes, it needs revision).

Other non-PBA systems

- We sometimes hear faculty talk about putting their “FCQ results” into the annual Faculty Report of Professional Activities (FRPA), even though FRPA has no entry codes for student evaluations, FCQ's, or anything related. If desired, we could work with the Faculty Information System (the recipient of FRPA-entered data) to store selected FCQ results.

Reference – use in campus schedule planners

Below are the links and directions to the FCQ Results from the CU campus schedule planners:

1. **CU-Boulder** schedule planner, <http://plus.colorado.edu/planner/>
  - a. select desired term in “Past Terms for Reference” box
  - b. click “Search Courses” tab
  - c. click desired options in items 1-5 and click the “Start Search” button (item 6)
  - d. click on “INFO” button for desired course
  - e. scroll down to FCQ section on page and click “This link” to view FCQ results for **course**
2. **UC Denver** schedule planner, <http://courses.cudenver.edu/>
  - a. select desired term and other criteria and “Find Courses” button
  - b. click instructor's name
  - c. click line chart in right hand panel to view FCQ results for **instructor**

3. **UCCS** schedule planner, <http://www.uccs.edu/~course/course2005/index.php>
  - a. click "Semester and Year" box for desired year/term
  - b. select other criteria (e.g., department, instructor) and then click "Submit" button
  - c. click **course** (e.g., "ANTH 104"), **department** (e.g., "ANTHROPOLOGY"), or **instructor** (e.g., "CARNE, GLENDA") to view FCQ results