College Mathematics Project

Guiding Questions to assist Possible Analyses for College-Based Users of the CMP Database

There are many analyses possible using the CMP Database and the following are not intended to limit its creative use. Rather, the following questions are designed to stimulate a variety of possible lines of investigation that users might wish to follow.

1. *Analyses of achievement by program cluster, sub-cluster and program (Data-view B2)*
   - 1.1 Starting from the college achievement data by program clusters, select one cluster and click on it to reveal the sub-clusters. Investigate variations in achievement (% good grades, % at risk) for each sub-cluster. Repeat this investigation with the other program clusters.
   - 1.2 Drill into each of the sub-clusters and review achievement at the program level. See if there is much variation across programs. Can you or members of the faculty explain these?
   - 1.3 At the cluster, sub-cluster or program level, are there areas in which VROGs (direct-entry from secondary school) achieve significantly higher or lower than ROGs? Can you account for this? Could discussions with local school board colleagues suggest reasons for these changes?
   - 1.4 Are there programs where your college is significantly better or worse than the aggregate data from across the province? Can you think of any possible reasons for these variations?
   - 1.5 Are there any special program-specific initiatives being planned for which CMP 2009 data can be used as base-line data for evaluating the impact of the new initiatives?

2. *Pathways analyses (ROGs and/or VROGs)*
   - 2.1 Starting with Data-view C1 (Pathways), once again, drill down into sub-clusters and programs of particular interest to you. Which sequences of mathematics courses in secondary school lead to the highest levels of achievement in those sub-clusters and programs? Which lead to the lowest? Can you think why this might be?
   - 2.2 How do these groups of pathways compare with the college program admission requirements and expectations for those sub-clusters and programs? Repeat this investigation with other program clusters.

2.3 Have the patterns of pathway participation (numbers of Ss) or achievement (% Good Grades) of VROGs changed significantly from those of ROGs in specific program clusters, sub-clusters or programs? Can you account for this?

We would like to add to these guiding questions from your experience of using the CMP database. If you have discovered some interesting results by following another line of investigation, or if you have other questions or concerns about the use of the database, please let us know. Write to us at cmp@senecac.on.ca.