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Austin Peay State Univ. (Tenn.)
Advising by Algorithm

At Austin Peay State University in Tennessee, a program called “Degree Compass” provides students with a customized list of course recommendations based on degree requirements as well as predicted grades. Here is how the lists are generated.

Your records
The system has access to your previous college grades, your high school grade-point average and all of your standardized test data, including ACT and SAT scores.

Grade database
Software searches transcripts of students who have taken classes or tests in common with you. The database includes more than 500,000 grades.

Grade correlations
Every grade in the database is connected to grades in other courses. The system finds correlations. Grades in calculus, for example, have a strong correlation with grades in statistics.

Predicted grades
To predict your success in a given course, the software combines your grades in correlated classes with other grades and scores you have received. The more correlations, the more weight in the prediction.

Requirements
The system knows the requirements for your major and the core curriculum, and knows which of these you have already fulfilled.

Recommendations
Courses are given a star rating based on your predicted grade as well as their importance to requirements.
The Predictive Analytics Reporting (PAR) Framework is a multi-institutional data mining project that brings together 2 year, 4 year, public, proprietary, traditional, and progressive institutions to collaborate on identifying points of student loss and to find effective practices that improve student retention in U.S. higher education. Current efforts focus on removing barriers to student success in online and blended programs. With sixteen WCET member institutions, over 1,700,000 anonymized student records and 8,100,000 institutionally de-identified course level records, the PAR Framework offers educational stakeholders a unique multi-institutional lens for examining dimensions of student success from both unified and contextual perspectives. More benefits of PAR Framework participation.
Welcome Russell K. Uyeno (Effective Spring 2005)
You are currently enrolled in:
Manoa Graduate Grad Div PHD/EDEP (Primary) Fall 1998

Aloha Russell!
Congratulations on your Graduation and welcome back to Manoa STAR. To view your unofficial transcript or see how your courses would fit into a different campus or program please click the "Transcripts/Grades" tab or the "What If Journey" tab.

KCC New Media Arts
Interface Programming I
offsite hrs -
M - Th: 3pm to 5:30pm
F: 2pm to 3pm
Rshen@hunix.uh.edu
ROR: 555-1997

HEROCK.FABIAN

STAR program incomplete!

Manoa University of Hawaii Arts & Sci BA/BIOL (Primary) Fall 2005

Example only
Issues

- Philosophical
- Ethical
- Institutional
"I'm not saying that education is a commercial transaction, but the math that underlies how to get someone to a point of sale can be repurposed to understand what type of content and educational experience to provide to a student to optimize learning outcomes.\textsuperscript{1} (Quoted in Dian Schaffhauser, “The Power of Predictive Analytics,” Campus Technology, 9/25/2013)
Analytics in Higher Education: Establishing a Common Language

Angela van Barneveld, Kimberly E. Arnold, and John P. Campbell

ELI Paper 1: 2012
January 2012
What is Predictive Analytics?

By: Chad Brooks, BusinessNewsDaily Contributor
Originally published at businessnewsdaily

Aug 21, 2013
No comments yet
Industry News, Left-hand
IBM Predictive Analytics, SAP

Every business has a treasure trove of data, from customer and transaction information to manufacturing and shipping statistics. The key is figuring out how to use past data to better the business’ future.
Policy Dimensions of Analytics in Higher Education

By Rodney J. Petersen

The current higher education landscape is replete with demands for improving accountability, increasing efficiency, and controlling costs. At the same time, information technologies make it easier to collect and analyze information to measure outcomes or to assist in decision making. Consequently, there is a higher demand for better information and also a never-before-available supply of data. This corresponding increase in both supply and demand creates the perfect storm for higher education to move into a new era of analytics. However, in a recent discussion session about the analytics tool, one of the participants raised a question...
Predictive Analytics in Higher Education

Data-Driven Decision-Making for the Student Life Cycle

January 2013
Analytics in Higher Education
Benefits, Barriers, Progress, and Recommendations
Ethics of Data Mining and Predictive Analytics in Higher Education

Presented at the
Rocky Mountain Association for Institutional Research Conference
October 5, 2012 • Laramie, Wyoming

Data mining and predictive analytics are increasingly used in higher education to classify students and predict student behavior. But while the potential benefits of such techniques are significant, realizing them presents a range of ethical and social challenges. The immediate challenge considers the extent to which data mining's outcomes are themselves ethical with respect to both individuals and institutions. A deep challenge, not readily apparent to institutional researchers or administrators, considers the implications of uncritical understanding of the scientific basis of data mining. These challenges can be met by understanding data mining as part of a value-laden nexus of problems, models, and interventions, by protecting the contextual integrity of information flows; and by ensuring both the scientific and normative validity of data mining applications.

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Thank You!