The potential of learning analytics

The recent 2014 NC New Horizons Report examines the potential impact of key emerging technologies on teaching, learning, and innovative inquiry within the environment of Geiger education Monsoons, Adams Becker, Stared, & Freeman, 2014). Learning analytics (LA) is one of the near-term strategies outlined in the report. LA is defined as the measurement, collection, analysis, and reporting of data about learners and their milieus, for purposes of understanding and optimizing learning and the environments In which It occurs.

Learning analytics would allow BBC to leverage student data to gain insight and knowledge on every layer of their organization. In addition, LA would allow BBC to deliver personalized learning, enable adaptive learning methodologies and practices, and identify learning issues proactively. Lastly, BBC could use learning analytics to gather data on their students' academic progress and focus on making sense of student learners activity (through clicks, social network analysis, etc. . With the rise In available educational data, It's projected that learning analytics will become a prevailing technology leveraged by teachers and higher learning institutions to better understand and predict personal learning needs and performance of student learners. As such, learning analytics has the potential to create a competitive advantage for BBC University and differentiate it from Its competitors.

Problem Confronted with numerous challenges - decreases in public funding, severe economic recession, budget shortfalls, rising tuition, globalization, and increased compete-Zion - higher education institutions are beginning to leverage analytics to improve results and meet institutional goals. Many of

these challenges are placing severe pressure on the resources and financial stability of colleges and universities (Volcano, 2012).

Based on BBC university Business Division strategic plan, Its student population is mostly non-traditional students, a large percentage of who are irking adults that are the first in their family to attend college (first generation students). External educational trends predict enrollment to increase in both public and private degree-granting institutions in the near future (Projections of Education Statistics to 201 8, 2009).

The number of younger students has traditionally grown faster than that of older students; however, this pattern Is expected to reverse as the universities and other traditional universities offering virtual modes of teaching to reach across geographical boundaries including international borders, and this is expected to continue (WHIM Strategic Plan For Information Technology, 2009). As outlined above, there are a number of economic trends expected to impact education in general and, ultimately, the programs in the Business Division of BBC University.

First, decreases in funds for scholarships, fellowships, student loans, and work study programs are expected due to lower state funding and decreasing state revenues. Second, tuition and fees increased an average of 36% between 1995 and 2005, 51% at public four-year institutions, and 30% at community colleges. Lastly, recession in South Georgia is expected to continue thereby creating a declining pool of potential students with adequate disposable income to pursue higher education.

In North Florida, state government is undergoing massive budget cuts resulting in layoffs and reduced salaries. This, too, will result in diminished discretionary funds for individuals seeking higher education. Listed below is the detail SOOT analysis for BBC University Business Division, as outlined in its strategic plan. The opportunity for BBC University will be to leverage big data and learning analytics to transform the ay it delivers educational offering for higher education seeking students.

Recommendation BBC University currently utilizes Blackboard *LEARN course management software to organize and manage its courses, and to post and communicate course components for easy access by students; therefore, it is our recommendation that BBC University augments its existing Blackboard *LEARN suite to include Blackboard Analytics. Blackboard Analytics will provide BBC University leadership analytics that will provide a unique view into teaching and learning across their institution. Blackboard

Analytics can leverage data and learning activity from BBC University existing Blackboard *LEARN and student information system to provide on-demand information to stakeholders tasked with improving student retention and academic achievement. This will allow BBC University executives greater insight and information needed to develop and measure strategic learning goals and program success. In addition, instructors can quickly identify students who are falling behind and allow them to intervene and provide the necessary support and coaching to get them back on-track.

Lastly, it will allow for identification and development of courses hat are more engaging to students thereby enhancing student adoption and learning. Learning analytics has the potential to improve quality, effectiveness, and efficiency of learning processes at BBC University. In addition, personalized learning is expected to reduce delivery costs while simultaneously creating more effective learning experiences, accelerating competency development, and enhancing collaboration and engagement among students.

Project Overview In " Presidential Perspectives," Inside Higher Deed's Survey of College and University Presidents, university presidents ranked " data analysis and managerial analytics" fifth on their list of the most effective IT investments; however, they rank their ability to " use data to aid and inform campus decision making" relatively low or eighth (Green, Chassis & Alderman, 2011).

Based on best practice suggestions from the survey, we recommend a phased implementation of learning analytics at BBC twenty-nine higher education leaders (representing seventeen organizations) will be incorporated into the implementation of Blackboard Analytics at BBC University. This includes engagement of executive leadership and proactively managing the cultural haft associated with leveraging analytics to drive new and different ways for delivering student learning.

By adopting these best practice strategies and leveraging the learning and experiences of others, BBC University will be better prepared to adopt the culture of analytics and make better-informed decisions to manage the

multitude of challenges faced by higher learning organizations. For details, refer to the Dating Towards Analytics: A BEST PRACTICES CHECKLIST included in the appendix. Based on recommendations from the participants in the Inside Higher Deed's Survey, we propose a phased implementation approach at BBC University.

This will help maintain the excitement and enthusiasm around the project, demonstrate the value of analytics early, and allow adequate time for testing and training of staff. The initial project scope will include the purchase of Blackboard Analytics and the abstraction and analysis of data from BBC University learning management system (e. G. Blackboard Learn+) and its student information system (SIS).

Although learner activity captured in these two systems comprises only a fraction of the learning process, it will provide an initial glimpse to BBC University leaders of the benefits and competitive advantage available through the use of earning analytics. In addition, it will gain excitement and interest from university stakeholders. For Phase 1, the capital outlay would be minimal and implementation could be completed within 6-9 months from procurement. A future phase could include data from other sources (e. G. Social media) which would provide a more complete learner profile thereby offering opportunities that far exceed the analytical capabilities available in Phase 1. Cost/Benefit Analysis The return on investment (ROI) for learning analytics has been somewhat difficult to quantify. It's easy to identify the hard costs - hardware, software, resources dedicated to " slice and dice" the data and make it actionable or meaningful to BBC executives; however, if

the key benefits of learning analytics is to improve and personalize learning approaches for students, how do you quantify success?

For purposes of this business case, it is recommended that instructional deliver costs be measured during Phase 1 for targeted personalized curriculum. In addition, effective collaboration among learners will be measured through student feedback, admission and graduation rates, along with learner success (e. G. Grades). Based on BBC University SOOT analysis, the growth of online program offerings internationally is a potential opportunity for BBC University. The use of learning analytics would allow university leaders to analyze student data to assess programs that would be most beneficial to international students.

Once developed, learning analytics would allow BBC to evaluate the success of the programs and make adjustments, as needed quickly. In addition, the ability to customize those programs based on the cultural diversity of its students (e. G. Language, religion) would provide potential differentiation in the marketplace. Lastly, the use of learning analytics loud allow BBC to identify opportunities for growth in satellite programs and/or be minimal and implementation can be accomplished quickly, this would be an emerging market or business opportunity and enhance course offerings and student enrollment.

As Peter Trucker says, you can't manage what you don't measure. Every year, thousands of organizations around the world spend billions of dollars on training and development, yet they still don't have any idea how effective their investments are because they do not measure the impact. Learning

analytics will allow BBC University the ability to quantify and analyze the benefits of its programs while proactively contracting and/or expanding, as needed, to meet its learner's needs.

Summary Technology has changed the way education is delivered in the U. S. The widespread use of the internet and its penetration into every aspect of our social and business environment, including the world of higher education, is evident. More than six million students or approximately one-third of the higher education population were enrolled in fully online college courses in 2010 (Piccolo, 2012). This transition from classroom-based learning to electronic-based learning provides the foundational tat needed to support learning analytics.

While learning analytics is not the silver bullet, it provides administrators of higher education institutions with the data needed to address issues and make decisions that enhance their understanding of students learning needs. In addition, it will allow BBC to use that knowledge to positively influence student competency and development (Salad & Provision, 2013). This will allow BBC University to position itself as a national leader in state-of-the-art teaching and interactive technology thereby providing them with a competitive advantage.