

North Carolina Community College System and Blackboard: A Strategic Partner for Your Critical Mission

A Response to the Moodle Assessment Report

It is a common practice to evaluate new technology partners and solutions to ensure investments are aligned with your mission and goals. Blackboard wishes to recognize those involved in producing the Moodle Assessment Report. We understand considerable time, effort, and resources went into the development of the report. The Moodle Assessment Team provided valuable information for the North Carolina Community College System to consider in evaluating the Moodle course management product. While the two-year study concluded that Moodle may potentially be a viable alternative to Blackboard, we believe there are additional considerations that were not thoroughly explored or addressed in the written report, including the full value that Blackboard can provide and how it aligns with the mission and goals of the North Carolina Community College System (NCCCS) and *the entire State of North Carolina's public education establishment*, the many well-known risks of investing in open source products, and accounting for several hidden costs commonly incurred with open source products (see appendix A for cost analysis information).

As the NCCCS and other North Carolina higher education institutions evaluate how to best enable distance learning programs, Blackboard suggests you examine additional points when considering future distance learning investments. Blackboard and the NCCCS have been partners for over ten years and the NCCCS has invested heavily in the implementation of Blackboard to provide distance learning to the students of North Carolina. This investment goes well beyond license fees for Blackboard and includes technical and staff training, course content development, training materials, infrastructure, backup and recovery plans, and countless other substantial public investments that are not considered in the report. Furthermore, a move to an open source system like Moodle may result in cost shifting instead of cost savings. Lacking a single and qualified provider to work with on a centralized solution, the 58 individual colleges are likely to go in different directions, incurring localized costs that may lead to increased tuition or taxes. Given this sizeable existing investment and the potential risks, a closer look at Blackboard's full offering will enable the NCCCS to make the most informed decisions to ensure you are providing high-quality, accessible education opportunities to the citizens of North Carolina without incurring the significant risks associated with running open source applications.

Blackboard is Ideally Aligned to Help You Achieve Your Mission

The mission of the North Carolina Community College System is to provide high-quality, accessible educational opportunities that minimize barriers to post-secondary education, maximize student success, develop a globally and multi-culturally competent workforce, and improve the lives and well-being of individuals in North Carolina. Because of this mission, the NCCCS plays a critical role as a bridge

between K-12, higher education, and the workforce. Blackboard is uniquely aligned to help the NCCCS achieve this mission and to help the state of North Carolina because we provide:

- Technology that runs the most and the largest distance learning programs in the world.
- Active participation in the development and shaping of K-20 outcomes and initiatives.
- Tools focused on assessment, accessibility and mobile learning for maximum student success.
- Industry standard support and maintenance that allow you to focus on teaching and learning.
- Enterprise standard security to protect student data and minimize disruptions.
- Proven scalability to ensure your programs can grow.

There are many challenges to meet for the NCCCS to achieve its mission. North Carolina currently has an unemployment rate of 10.8% and this figure is predicted to increase before year's end as the economy continues to struggle. Many of the unemployed will turn to the NCCCS for high-quality training and education in order to develop new skills for the changing demands of the new economy. The NCCCS is experiencing record enrollment due to the high unemployment rate and many of the new students prefer training through distance learning programs instead of the traditional face-to-face model. This trend highlights the critical importance of your distance learning program, which will positively affect the employment rate in the state of North Carolina. Blackboard understands the importance of providing a single source for educational technology solutions, services, and support that enable the NCCCS to focus on providing high-quality educational opportunities rather than supporting multiple technologies, worrying about security breaches, and managing consultants and in-house programmers to gain desired functionality.

Then-Lieutenant Governor Perdue spoke with Blackboard in October of 2008 about her goals for seamless integration between all education units, starting before kindergarten and moving beyond the boundaries of a two- or four-year degree. Blackboard is uniquely positioned to offer leadership and technology to accomplish these goals because Blackboard is the only company that has successfully taken a K-20 education program from concept to reality. The state of New Mexico K-20 programs identified Blackboard as the ideal partner to enable collaboration, improved education, and workforce development across all education grades and organizations. Although New Mexico has a smaller population than North Carolina's, it faced many of the same challenges including rural technology access, language barriers where English is not the first language, tying workforce needs back to education, and the need to bring new business into the state. A few of the early outcomes from the New Mexico project were:

- The ability to expand educational opportunities by closing achievement gaps, supporting college and career goals, and increasing educational attainment.
- A reduction in overall costs of technology by increasing access to K-12 schools, colleges and universities and state agencies.
- An increase in technology skills for youth and adult learners.
- A decrease in travel and personnel costs for state agency trainings and instructor professional development via on-line courses.
- The facilitation of collaboration between K-12 districts, higher education and state agencies.

Blackboard is in a unique position to help each state formulate a solution that works for their dynamic demographics and to share effective practices and avoidable risks. As K-20 discussions continue in the state of North Carolina, Blackboard continues to share New Mexico K-20 outcomes through ongoing discussions with Governor Perdue, Superintendent June Atkinson, Chairman Howard Lee, and other education leaders.

Top Five Risks to Consider when Evaluating Open Source

All open source technology is not equal. Most open source products offer targeted, narrow functionality that allows for quick deployment and no license cost. Some of the many risks associated with the dependency on these small-scale products are lack of support, lack of standard training, a small developer community, uncertain security policies, and no defined product roadmap to inform your decisions. A few open source products, such as the Linux operating system, offer mature, enterprise-level solutions, because industry leaders like Red Hat and IBM invest millions of dollars to maintain, support, and develop them. Because of this commercial support, Linux poses few risks; but for the same reason, costs to purchase and implement Linux are consistently in line with proprietary software. Moodle may offer some benefits of other open source software products, but it comes with considerable risks and hidden costs because it is not a true enterprise solution backed by reputable software vendors that have the resources to ensure enterprise-level security, support, and development.

The future economy of North Carolina is directly tied to the success of distance learning within the NCCCS. Recognizing this critical dependence, Blackboard recommends minimizing risk by continuing to invest in an enterprise solution that has industry-standard security, support, and innovation. The following list documents the top five risks the NCCCS should consider when evaluating any open source product:

1. Security Risks

Security breaches and identity theft are common challenges that today's education IT staff struggle with every day. Sensitive information, regulated data, and proprietary research are transferred over the Internet more than ever before. Protecting this information is critical to minimizing liability and ensuring students and teachers can focus on learning instead of on technology. Moodle relies on the community at large to test for security vulnerabilities and to issue security patches after a problem is identified. This model is risky because hackers can have access to the same information as the programmers and they can quickly exploit any security issue announced on the Moodle public forums before a school offers a patch to fix the issue.

Blackboard is accountable for repairing any security concerns and these concerns are never announced publicly while a fix is in progress. Blackboard has a dedicated team of security professionals who follow a software industry standard security methodology, providing clients with enterprise-level security monitoring, testing, response planning, and maintenance. Blackboard spends millions of dollars to ensure that its products and your data are secure and these security benefits are built directly into the Blackboard license fee.

2. Support Risks

Technical issues and other related problems are inevitable when operating any distance learning program. Managing and fixing these technical issues can be costly and distracting to teachers and students. Ensuring a consistent level of support as a distance learning program grows is also a major challenge. Moodle support, when it exists, is provided by several small consulting companies. These consulting companies do have Moodle experts but usually are not focused solely on supporting Moodle and education clients. Instead, they support several open source products for various types of users. These companies may not have the deep expertise required to fix your problems, they may go out of business without warning, or they may have priorities that are not aligned with your mission of supporting quality distance education.

One solution some Moodle users undertake is to hire additional programmers and systems individuals at each site with the obvious headcount and cost implications. Blackboard is accountable for all support issues a large distance learning program may have. Blackboard works with hundreds of distance learning programs around the world and is uniquely qualified to offer quality support and expertise specifically to distance learning programs. Blackboard focuses solely on supporting Blackboard solutions and provides each client with a dedicated technical support manager and client manager. Blackboard's client care programs and technical support are built into the Blackboard license fee, but costs for similar support services for Moodle can be unpredictable and sizeable for large distance learning programs.

3. Product Roadmap

A distance learning program must be confident that the future direction of their course management tools will be aligned with their mission and vision. The Moodle product roadmap offers only a short-term view into the direction of future product upgrades and is controlled by a single person, Martin Dougiamas. A large-scale distance learning program needs to plan three or more years in advance, but by then Moodle may have changed its priorities based on the types of users who have adopted the system. The Moodle developer community controls what functionality is available for Martin Dougiamas to choose from for future upgrades. Without other large distance learning programs investing in new Moodle development and customizations, it is unlikely the unique, changing needs of the NCCCS will be available for selection. Depending on a loose development community to build individualized NCCCS innovations and having little influence over which innovations are selected for future product upgrades is risky. The risk is that the Moodle development community decides to build tools in a direction that does not support future NCCCS needs or Martin Dougiamas does not select tools that support the NCCCS needs. The NCCCS would then have to hire even more developers and testers to build and manage customized functionality that is separate from the Moodle community product package, and additional headcount which can be costly and distracting from the NCCCS mission.

Blackboard is a public company and must present a long-term product roadmap and clear vision for future innovations. Project Next Generation (NG) is a three- to five-year, forward-looking vision to bring together the best of WebCT, ANGEL Learning, and Blackboard. Innovations in

student assessment, student retention, mobile learning, and openness are cornerstones to the future of Blackboard offerings. The Blackboard Idea Exchange and many other client input programs enable clients to influence each new Blackboard product release in a systematic, democratic process. *Global innovation is by nature not static and moves at a rapid pace. Open source may meet some minimum standard of LMS competency, but only Blackboard can grow, adapt, and evolve with the customized and ever changing needs of your students and faculty.*

4. Training Risks

Student, faculty, and staff training are critically important to meeting the NCCCS's mission of student success. All software tools, no matter how easy to use, require significant investment in training to ensure all users are actively engaged with the technology. Distance learning programs depend heavily on these software tools to deliver online teaching, creating an even greater need for universal training. There is not a consistent user interface across Moodle modules, making it difficult for students and faculty to adjust as new modules become available. This inconsistency leads to the need for more frequent training in order to maintain levels of adoption and satisfaction with the software.

The NCCCS has already invested in training for the Blackboard platform and Blackboard offers a consistent user interface to reduce training requirements. The Moodle Assessment Report identified faculty development and training is needed regardless of what technology is being used. To address this immediate need, Blackboard has quickly responded by offering free training workshops and seminars available to all the NCCCS affiliated schools from September until the end of the year. This training would be extremely costly with a Moodle consulting company and you would lose your significant existing investments in Blackboard training.

5. Risk of Shifting Focus Away from the NCCCS Mission

The mission of the NCCCS is to provide high-quality, accessible educational opportunities to the state of North Carolina. To achieve this mission, you must recruit students and teachers, develop effective curriculum, train faculty to properly use technology, and retain students in good standing until they graduate ready for the job market or further education. Managing the security, support, training, and maintenance of an open source course management tool is not aligned with your core mission and risks creating a costly resource distraction when problems occur. The NCCCS could use the investment required to migrate to and retrain on an open source product instead to focus on increasing faculty development and student retention programs, which are core to the NCCCS mission. This investment would show an immediate and measurable return on student success and further the achievement of your mission. This is the biggest risk, as you can easily begin to find day-to-day tasks are less about supporting students and more focused on supporting technology.

Blackboard's mission is to develop technologies and services to support online education and we invest millions of dollars in product enhancements, security, support, and our training curriculum every year. Our missions are complementary and the growth of the NCCCS programs over the last ten years is a testament to the success of our partnership. Knowing that you can

trust Blackboard to provide the technology and support you need for online education frees your resources to focus on your core mission of educating the citizens of North Carolina.

Blackboard's Full Offerings and Value Added Services

The Blackboard Learn platform is much more than course management software and it offers far more than the few features in common with Moodle. The Blackboard Learn platform includes the following integrated solutions: Blackboard Learn for Course Delivery, Blackboard Learn for Community Engagement, Blackboard Learn for Content Management, Blackboard Learn for Outcomes Assessment, and Blackboard Mobile. These solutions give you the ability to grow and meet almost any distance education need. To illustrate the advantages of using just the Blackboard Learn Course Delivery solution when compared to Moodle, the following tools and value added services are not available in the latest Moodle 1.9 release:

- **Retention and Assessment Tools:** Students have diverse learning styles and needs. The adaptive release tool within Blackboard empowers teachers to develop customized learning paths for individuals or groups of students. The early warning tool alerts teachers when a student meets or fails to meet their specific learning outcomes. Both of these tools help to increase student retention rates and student performance.
- **Mobile Learning Tools:** Today's students want access to information anytime, anywhere, from a variety of mobile devices. The Blackboard iPhone application is the only application developed specifically for a learning management system. Blackboard also has a full mobile product strategy to help you meet the needs of an ever-connected student population.
- **Plagiarism Detection Tools:** You need to ensure that your students are doing original work. Many institutions have turned to purchasing additional plagiarism detection software to combat this challenge, but Blackboard has built-in tools that enable teachers to easily and quickly check for potential dishonesty. Plagiarism detection software costs \$0.75 per student on average, but is integrated and included as part of Blackboard Learn.
- **Web 2.0 Experience:** Today's students and teachers expect a modern user interface and interactive dashboards to quickly view important, changing information within their courses. Blackboard Learn Release 9 meets modern expectations by providing a user interface with drag-and-drop content management, contextual menus, and fully customizable cascading style sheets. New dashboards alert students and teachers to information that is customized for each user across all courses.
- **Unique Partnerships Offer Access to Content and Tools:** Teachers need easy access to large repositories of educational content in order to advance student knowledge and skills. Blackboard's recent partnership with NBC gives teachers integrated access to the large, proprietary NBC multimedia archives. Blackboard also recently announced partnerships with Wimba and Echo360 to provide teachers with web conferencing tools and lecture capture tools at no additional cost.

The breadth and depth of the Blackboard platform addresses the many and diverse needs of our clients around the world. Blackboard also understands the importance of client care and has invested sizeable resources to develop new client care programs and enhanced client support. Blackboard offers software, training, support, and regular upgrades with a license fee from a single source. Additionally, we are ready to provide advanced training, business process consulting, technical expertise, and managed hosting, as you need it.

Blackboard is a Strategic State-Wide Partner

- By leveraging the success already in place with Blackboard and building on the strong partnership that currently exists, North Carolina can accomplish its K-20 vision. There is already a strong foundation in place with many critical, highly visible programs in North Carolina that are using Blackboard today including:
 - The University of North Carolina at Greensboro's iSchool, which provides college preparation courses using Blackboard.
 - The Learn and Earn program, which enables dual enrollment in K-12 and community colleges across the state using Blackboard.
 - Regional Consortia like Rowan Cabarrus, Catawba Valley and Caldwell.
 - The North Carolina Virtual School, which uses Blackboard to reach across boundaries and serve the entire state's population.
- Governor Perdue's stated vision of achieving K-20 objectives would not only impact learners, but through learner advancement, would increase local and state economic development. Additionally, as you build an overarching education platform across education sectors, it becomes much easier to track individual student's progress, and make changes whenever or wherever possible to guide more students toward success.
- The state of North Carolina is taking its first steps towards student tracking by investing in a Pre K-20 Data system, as referenced in section 7.19 of S.L. 2009-451. While this initiative is largely driven by the Department of Public Instruction, the state wisely understands the important role the NCCCS and the University of North Carolina system will play in tracking overall student success. Gathering data is the foundation, but how you access, manipulate, and use that information to make data-driven decisions will have the most impact on overall student success. Blackboard is the only partner that can provide a solution to leverage information and activities taking place in the online teaching and learning space to evaluate, assess, and measure student, program and college performance. Blackboard can help improve student outcomes, cultivate 21st century life-long learners, and help further the state's economic development agenda.

Additionally, Blackboard has solutions that can help North Carolina deploy an effective mass communication and emergency notification system with robust reporting capabilities that can help fulfill accountability requirements. Currently, there are thousands of students, parents and residents of North Carolina receiving messages through the Blackboard Connect solutions. The combination of Blackboard Learn and Blackboard Connect can help North Carolina fulfill its custodial responsibilities during times of

emergencies, leverage capabilities of the system to cultivate stronger ties with key constituents, and provide learning continuity – all from one vendor. No other technology partner can do this today.

- Blackboard recognizes and understands the following challenges facing educational institutions across the country:
 - **Engaging Students:** Districts and community colleges need to engage all learners, reduce drop-out rates, and graduate students who are better prepared for challenges in postsecondary education or the workplace.
 - **Preparing for College:** University and college leaders struggle to meet retention and graduation expectations from their boards, funding agencies, and the public without better-prepared students from K-12.
 - **Succeeding in the Workforce:** State leaders need to focus on education requirements to build a more capable and skilled workforce and entice more employers to come and stay in their states.
- Blackboard has made significant investments researching and responding to these challenges and every feature and function we build into our solutions help educators address these issues head on. Outside of simply building technology, we have taken a leadership role, investing many resources to convene educators from around the country to determine the direction and future development of K-20 effective practices and programs.
- We recently announced the formation of the K-20 Council from the Blackboard Institute. The K-20 Council comprises 50 select experts and leaders in education sectors from kindergarten through college who collaborate to develop a framework for characterizing the education pipeline and sharing effective practices and research for meeting common challenges. Dr. Bill Randall, AVP of E-Learning at the NCCCS, is part of our panel and participated in the first session held in Washington DC this year. It was an extremely productive first session and there has been tremendous positive feedback from all participants.
- By continuing to partner with Blackboard, the NCCCS can have additional avenues to collaborate with peers and education policy makers to shape the future of education across the United States.

Conclusion and Summary

A continued partnership with the NCCCS and the state of North Carolina is tremendously important to Blackboard. Over the past 10 years Blackboard has met the evolving needs of the NCCCS mission and has invested significant time and resources into the success of the NCCCS and all North Carolina educational clients. While the NCCCS has had much success with Blackboard, future challenges such as unemployment, increasing enrollments, and K-20 initiatives require you to make smart investments and informed decisions now. While the choice of where to invest is yours, Blackboard urges the NCCCS and other North Carolina educational institutions not to divert funding, resources, and time in a costly and disruptive migration to a risky software product, but instead focus on faculty development for programs that can have a more immediate and visible impact on student success. Even the Moodle Assessment Report acknowledged that training and adoption is the key to success with a platform. Through

increasing proficiency and comfort with your current software platform, you can recognize an immediate and positive impact on student outcomes and teacher effectiveness, and ultimately, on the struggling North Carolina workforce.

By funding a centralized solution with Blackboard, individual campuses are less likely to go their own way and incur repetitive and unforeseen costs that can affect the performance of the system and the cost of higher education in North Carolina. Incurring such decentralized and repetitive costs could roll back much of the progress that the NCCCS has made in the past ten years. Blackboard is uniquely and strategically aligned to support the NCCCS and the state of North Carolina in achieving their education goals and can offer much more than a course management tool. Trusting the technology to a market leader enables the NCCCS to focus on educating tomorrow's leaders and ensuring success in the state of North Carolina. We would like the opportunity to present how Blackboard can support your mission to the NCCCS State Board and Presidents Association before the end of the year, and look forward to scheduling this session soon. If there are other NCCCS stakeholders or any North Carolina institutions that would like to discuss Blackboard's offerings or the Moodle Assessment Report specifically, we would happily spend as much time as needed to answer any questions or concerns.

Appendix A: Cost Analysis Information

There are many costs associated with running a successful distance learning program. Common cost categories include infrastructure, faculty development, support personnel, curriculum development, teaching, and technology. Technology costs include several specific categories such as bandwidth, helpdesk, faculty and student training, networking, hardware, and online course delivery. All of these cost categories present opportunities for savings. Blackboard works with hundreds of distance learning programs from around the world and can offer consulting services to analyze the entire NCCCS cost structure and help identify areas for cost savings. Blackboard can share best practices from a large, diverse group of distance learning programs as a trusted partner in creating a more efficient overall distance learning service for the state of North Carolina.

When analyzing costs of open source against proprietary software, the NCCCS should carefully consider the true total cost of ownership of running and supporting an open source product. A common myth is that open source software is free, but in reality several hidden costs are incurred when depending on open source to run a mission critical service such as the NCCCS distance learning program. These hidden costs can include:

- Faculty, student, and staff training
- Security testing and security response planning
- Industry standard support processes
- Product maintenance and upgrade maintenance
- Integrated plagiarism detection software
- Customized development and design
- Ongoing performance and scalability testing

The above costs can be unpredictable from year to year. Blackboard offers many of these critical, sometimes overlooked, services within its yearly license fee. This inclusion ensures the NCCCS does not have to manage multiple small support vendors, consultants, or in-house personnel to provide similar Blackboard services. Blackboard also offers a unique opportunity to join a collaborative distance learning community where clients share best practices and knowledge. The Blackboard cost structure is predictable and offers many value-added services. Blackboard is a trusted partner to hundreds of distance learning programs because we have the resources to handle any problem or emergency quickly and effectively without incurring unforeseen costs.

The Moodle Assessment Report concluded NCCCS would recognize cost savings within four years, but it failed to factor in many hidden costs associated with open source products. To illustrate these costs please view the below table:

<p align="center">Costs the Moodle Assessment Report Addresses:</p>	<p align="center">Costs the Moodle Assessment Report Does Not Address:</p>
<ul style="list-style-type: none"> ▪ License fees ▪ Hosting fees ▪ Administration fees ▪ Course conversion costs ▪ Cost of running both platforms at the same time *** <p>*** The cost of supporting two platforms can be significant. There is also a hidden cost associated with the disruption and distraction of students and faculty that should be considered. This disruption could cause student retention challenges and distract faculty’s focus on teaching and learning.</p>	<ul style="list-style-type: none"> ▪ Faculty training ▪ Student training ▪ IT staff training ▪ Plagiarism detection software ▪ NCCCS system integrations ▪ Support and Helpdesk fees ▪ Security testing and maintenance ▪ Performance testing for scalability ▪ Quality assurance testing of any new development ▪ User interface customizations ▪ Feature and function development ▪ Mobile integration ▪ Assessment tool development

A final note on cost concerns the growth in cost to NCCCS associated with running Blackboard. That growth has correlated directly with the growth and demand for distance learning at NCCCS. Any system’s cost will increase with growth and adoption, and Blackboard solutions are already proven to ensure that NCCCS achieves its mission of providing high-quality, accessible educational opportunities to the state of North Carolina.

Appendix B: Meeting Learning Technology Systems Business Requirements

The NCCCS outlined a systematic approach to measure the validity of future technology investments, included as Attachment A of the Moodle Assessment Report. Aligning the goals and objectives for technology business requirements, planning, and stewardship for future technology choices is important to ensure the continued success of the NCCCS distance learning programs. As the NCCCS evaluates the Moodle open source technology product through this cost model, we at Blackboard would like to demonstrate our alignments to NCCCS's business requirements criteria.

Additionally, to achieve the most effective use and stability of today's technology, there are two criteria that we think the NCCCS should also apply when making decisions about new technology: security and overall support of the NCCCS mission. All technology partners should adhere to industry-standard security expectations and offer documented, proven response planning processes to demonstrate a commitment to security and integrity of state-protected data. Finally, vendors must show how they directly support the mission of the entire NCCCS and state of North Carolina. If taxpayer dollars are being used to pay for new technology products, then vendors must be held accountable to advance the mission and vision of the state as a whole as the last, and arguably most important, criterion to review.

The NCCCS recommended criteria that all adopted learning technologies now and in the future must meet are:

1. Compatible
2. Standards based
3. Scalable
4. Open source or licensed through true consortium contracts, resulting in substantial cost reductions
5. Hosted centrally or regionally on the NC backbone (via MCNC, ITS, or higher education hosting centers)
6. Based on identified common needs & solutions & networks
7. Established by workgroups, "People networks precede technical networks"
8. Established with collaboration incentives
9. Established with shared resources
10. Security
11. Alignment to system mission

How Blackboard meets these criteria:

1. The NCCCS has used Blackboard for over 10 years. During this time, Blackboard has proven its compatibility with many other technologies in the NCCCS such as Datatel, Elluminate, and the Learning Edge. Blackboard has formed hundreds of partnerships with other technology vendors to ensure that Blackboard solutions and services are compatible with today's most adopted education technologies.
2. Blackboard has a strong commitment to the standards community. Currently, we support IMS Content and Packaging with extensions for course archives and also support SCORM 2004 as part of our product capabilities. Blackboard has also provided the reference implementation for

an emerging standard around learning tool interoperability called LTI. In June of this year, Ray Henderson, a board member of the IMS GLC standards body and president of Blackboard Learn, released a letter reaffirming our commitment to standards and announcing a roadmap to support IMS Common Cartridge along with other important standards in our industry.

3. Blackboard can quantify and predict your bandwidth needs and resource requirements using our capacity planning guide and the Blackboard global services team. This expertise gives our clients a significant advantage to plan and manage operational costs more efficiently. Open source solutions are notorious for highly variable performance and operational costs. The net result is that with Blackboard you can manage and control your risks, while with Moodle your risks are variable and uncontrollable.
4. Blackboard continues to be flexible in cost models that allow for significant cost savings in consortia models. The current structure of the system contract has shown savings on average of 40% below standard licensing. Additionally, included in the license costs are a dedicated strategic client manager, test licenses for each campus, and development licenses for each campus. Blackboard will certainly work with the NCCCS to demonstrate continued cost savings opportunities. Right now the current proposal for moving to Moodle actually results in cost increases for the system and a great deal of uncertainty around long-term operational growth costs. We believe that Blackboard offers the best option for managing costs over the long term while continuing to provide innovation.
5. Blackboard software is portable by design and can be hosted locally or by Blackboard at our managed hosting facilities in northern Virginia. We welcome the opportunity to explore a connection directly on the North Carolina state network backbone.
6. The success of a distance learning program ties directly to the delivery of online education over the Internet. Blackboard designs solutions and services specifically to enable our clients to serve many common distance learning needs such as collaborative curriculum development, course asset storage, streaming media repositories, integrated learning content, online grade books, web discussions, and much more.
7. Workgroups of teachers who wanted a simple and easy way to conduct learning on the Web established the need for learning management tools and services. Blackboard is built to support the needs of teacher and student workgroups throughout North Carolina and the world.
8. Collaboration incentives are inherent throughout all Blackboard solutions and services. A great example of this is the creation of the Blackboard Building Blocks program and EduGarage.com where thousands of academic and commercial developers collaborate on the programming of additional education tools that can be integrated within Blackboard. Many Building Blocks, such as the Who's Online block, are available at no additional cost.
9. Blackboard is currently running at 54 of the NCCCS schools. These 54 schools have shared money, training, and effective practices when integrating the Blackboard solutions into their

daily operations. The opportunity cost of losing such a significant investment by migrating to another course management system would be substantial.

10. Security is a cornerstone of Blackboard's software integrity and performance requirements. We can show clients a mature, industry-standard security methodology that a dedicated team of security professionals designed. This team ensures there is learning continuity at your school when inevitable security issues occur and that all issues are quickly and privately handled. Blackboard has invested millions of dollars to develop emergency disaster preparation and security response plans that meet client expectations. Moodle does not have a mature security methodology and security issues are often handled in a public forum, which can alert other hackers to vulnerabilities or the local media to negative press stories.
11. Finally, Blackboard has proven that we have directly supported the NCCCS mission for the past 10 years through the rapid growth and success of the NCCCS distance learning programs. We hope to continue to this invaluable partnership as a trusted advisor in addition to a technology solution and services provider. Our mission is to enable online education and innovation everywhere. As we demonstrate our ability to achieve our mission, the NCCCS can use valuable investment dollars and time to focus on faculty development and curriculum development to achieve your mission more effectively.