

Discovery Unit  
Education and Technology  
October 30, 2013

Education in America is in the middle of a reactive, transitional re-evaluation. There is grassroots dissatisfaction with “No Child Left Behind,” and the perceived “teaching to the test”. Strained budgets result in low teacher salaries and recruitment and declining infrastructure. National costs of the retiring baby boomers, rising birth rates, and increasing college tuition mean education dollars will continue to be scarce. Lack of parental involvement, drugs, gangs, and unemployment have deeply undercut our schools and disenfranchised our kids. American families seem to believe that the system is broken.

On the bright side, these negative factors have helped spark a proliferation of educational experiments in the last few decades, including charter and magnet schools, homeschooling, semester schools, Montessori-style models, and other non-traditional forms. There is an ongoing re-evaluation of core skills and models of learning across the board.

Eagle’s Nest has always valued the education of whole child – emotionally, socially, intellectually, spiritually, physically. We believe creative expression and introspection are vital partners of critical thinking and synthesis. We believe that our mission is independent of technology and that in fact, it is more effectively fulfilled by building a personal mentoring relationship with our students. Our curricula and programming are deeply reflective of this.

The most culture-changing innovations are in technological tools for education. Our team believes this is the most important area for discussion for the future of the Eagle’s Nest education model. For example, in its present form, The Outdoor Academy is not where most American schools are heading during this transition. “The betterment of human character” may reflect the same ideology, but the tools and techniques are quite different.

The recent Mobile Learning Survey by the National Association of Independent Schools (as one of many) documents unquestioned and categorical support for the use of electronic devices in the classroom. Ninety percent of respondents agree that laptops, iPads/tablets, and smartphones transform learning and report increased student achievement, engagement, motivation, and research skills. Compared to most private and public American schools, The Outdoor Academy model would now be defined as non-traditional and possibly outdated. A quote in the report states “Computers are not technical tools, rather, they are cognitive tools that are holistically integrated ...they are inseparable.”

However, NAIS also admits that this is an emerging area of research in education. Additionally, the door has been opened for a broader inclusion of life skills, creativity, innovation, experiential models, exploration, and information access as well as the “traditional” core curricula. This is where OA can define itself.

We have divided our findings into three areas: Curriculum, Logistics, and Technology.

## **Curriculum**

### **Common Core**

For years, educators have rallied for a national curriculum that would raise standards of American education. “ The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn.... The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers....to compete successfully in the global economy.”

<http://www.corestandards.org>

Common Core provides standards for grades K-12 in mathematics, language arts, and literacy in relation to history, social studies, science, and other technical subjects. The standards have been adopted by 45 states as of 2013, including GA, FL, NC, SC, and TN. Additionally, many private schools are incorporating these standards. Besides the possibility of raising standards in literacy and mathematics, Common Core allows students to transition more seamlessly between school programs. The Excel document on our resources page summarizes public high school graduation requirements for math, history, and science for rising ninth graders in GA, FL, NC, and TN.

### **The Four C's**

The National Education Association (NEA) identifies four vital aspects of education: critical thinking, communication, collaboration, and creativity as part of the Partnership for 21<sup>st</sup> Century Skills program. The Partnership seeks curricular changes on local and national levels. They envision a four-fold curriculum: Life/Career Skills, the Four C's, Technology/Media Skills, and Core Subjects.

<http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf>

<http://www.p21.org/home>

### **Expeditionary Learning**

This program was launched in 1993 by Outward Bound USA and the Harvard Graduate School of Education to partner with schools to build project-based learning. At least 150 schools and 45,000 students are involved at this time. <http://elschools.org/>. Their ten core values are:

- The Primacy of Self-Discovery
- The Having of Wonderful Ideas
- The Responsibility for Learning
- Empathy and Caring
- Success and Failure
- Collaboration and Competition
- Diversity and Inclusion
- The Natural World
- Solitude and Reflection
- Service and Compassion

### **Community Service**

Service-based experiential learning is embedded in most independent school and many public school curricula. Eagle's Nest has a long tradition of community service in all three of our programs. The Outdoor Academy reports service hours on our students' final transcripts.

## **Logistics**

### **School calendar**

- Some momentum is building to expand learning time in schools beyond 180 6.5-hour days.
- Federal education funding is beginning to be tied to expansion of classroom time, particularly for low performing schools.
- On the other hand, some states have responded to the recession by reducing classroom days.
- School calendars vary and most states allow district level decisions for school calendars.
- In NC, the start date is no earlier than the Monday closest to August 26 and end date is no later than the Friday closest to June 11 unless there is an approved waiver for year-round school or charter school.

### **Finances**

- It is difficult to gauge trends on tuition remittance from independent sending schools. There is only anecdotal evidence.
- Financial aid policies for independent sending schools are internal.
- Nationally, higher income families comprise the largest growth in requests for financial aid amid an overall increase in requests for financial aid.
- Rise in tuitions is easily outpacing inflation: 5-8% annual increases.
- Private schools nationwide are facing declining enrollments over the last decade.
- Opportunity scholarships (vouchers) were approved by NC General Assembly in July 2013. They offer up to \$4,200 per qualifying student beginning 2014-15 school year.

### **Charter schools**

- 42 states have charter schools. 6000 schools are serving 2.3 million students.
- This constitutes approximately 4% of total public schools.
- 400-500 new charter schools open annually. There are 610,000 students on waiting lists.
- 26 new charter schools were approved in NC for 2014. 155 presently (up from 100 in 2011-12).
- 170 letters of intent filed for 2015 in NC.
- Many charter schools are marketed as a “private school education for free.”
- 6 in 10 charter schools operate with a calendar longer than the national average.
- Race to the Top funding favors states with no restrictions on establishment of charter schools.

**Home-schooling** is enjoying similar rates of growth, particularly as online education is legitimized and improved. There are more than 2 million home school students nationwide.

### **International Baccalaureate (IB) programs**

The International Baccalaureate foundation, in addition to curriculum for younger ages, offers a **Diploma Programme** for high school students; it is a two-year curriculum leading to final examinations and a qualification that is welcomed by leading universities around the world. This curriculum is generally seen as very rigorous and demanding, perhaps more so than the Collegeboard Advanced Placement courses. The International Baccalaureate program continues to grow. Students complete prerequisite advanced placement courses during their underclassmen years (such as 3 credits of a world language). Depending on our changing student demographics, the prerequisites for the IB program may affect which students can attend our program and/or which courses OA should offer or require to be completed during the summer. There are 40 programs in Florida, 28 in Georgia, and 30 in North Carolina. Recently, the IB organization released two relationship studies defining the linkages between the IB and the Common Core State Standards (CCSS), possibly demonstrating the growing predominance of both CCSS and the IB program. (<http://www.ibo.org/announcements/2013/ccrs.cfm>).

## **Technology**

**Electronic Resources** - Three broad areas of electronic learning aids at this time include:

### **Online Learning**

Online independent courses can address additional curricular needs of students and sending schools. These are areas of study that OA does not offer such as Chemistry and Chinese. These requests are becoming more frequent for us. Nearly any course, including lab sciences, are available online. In the past, GAVPS has been superior to NCVPS and FLVPS for public schools and will allow students in public schools in other states to take their courses with approval. NCAIS offers the Virtual Independent School Network (VISNET <http://www.vis-network.org/>), in which the school is a member and offers courses directly. An assigned proctor is needed to administer these courses to students. OA has had mixed success with online math, language, history, science courses. The faculty agrees that they are not optimal curricular and scheduling choices.

**Blended learning.** This is the use of electronic devices and online resources, for both interactive teaching and research. It is an integrated electronic “presence” in the classroom.

**Bring Your Own Device (BYOD).** These are personal electronic aids for research, note-taking, and writing such as laptops, tablets, calculators, audio players (iPods), translators, readers, and smartphones.

Research indicates technological aids enhance learning, but no one seriously suggests online learning can or should stand alone in primary and secondary education. Both teachers and students value the role of the mentor. The backlash against the fully online classroom means many schools are developing more project-based technological learning. More sophisticated software is helping. Use of electronic aids is being questioned and re-evaluated and re-structured in many schools.

### **Current EN policy on electronic devices:**

OA currently offers laptop and desktop computer stations for writing and individual independent study requirements. Online student research (and tablet or reader use) is only offered under special circumstances and is monitored and limited. OA students bring their own math calculators. Teachers may use online resources for instruction such as news sites and documentary videos at their discretion. Classrooms have access to DVD players and digital projectors. Several times each semester OA students are allowed limited time to use social media sites and email to connect with family and friends. No student/camper cellphones or smartphones are allowed in any Eagle’s Nest programs.

The use of technology, especially electronic devices, is not an all -or-nothing decision at Eagle’s Nest. Certainly, innovations are going to need to be evaluated for our use as they develop and given the rate of technological change, this will require ongoing assessment and possibly is not an area of discussion for long-range planning.

## Resources

- Partnership for 21st Century Skills <http://www.p21.org/home>
- Museums and the Future of Education <http://www.aam-us.org>
- Buhl Lecture Survey 2013 University School of Nashville Survey  
<http://www.sitemason.com/files/cwHBLi/Buhl%20Lecture%202013%20survey.pdf>
- Education Technology Outlook Article National Association of Independent Schools  
<http://www.sitemason.com/files/dCnvry/Education%20Technology%20Outlook%20article.pdf>
- Teaching and Learning Outlook Article National Association of Independent Schools  
<http://www.sitemason.com/files/eI3p7O/Teaching%20and%20Learning%20Outlook%20article.pdf>
- Expeditionary Learning <http://elschools.org/>
- National Science Teachers <http://www.nsta.org/publications/news/story.aspx?id=59800>
- Learning Time in America <http://www.sitemason.com/files/gti0gM/LearningTimeinAmerica.pdf>
- Is Year Round Schooling on Track?  
<http://www.sitemason.com/files/hyXTX2/Is%20YearRound%20Schooling%20on%20Track%20%20District%20Administration%20Magazine.pdf>
- Year Round Education Program Guide  
<http://www.sitemason.com/files/iEDNDi/YearRound%20Education%20Program%20Guide%20Mutitrack%20YearRound%20Education%20CA%20Dept%20of%20Education.pdf>
- International Baccalaureate <http://www.ibo.org/announcements/2013/ccrs.cfm>
- Common Core Standards <http://www.corestandards.org>
- National Education Association <http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf>
- State Curriculums – Excel document of Graduation Requirements
- State Departments of Education for selected states (for calendars & proposed changes)

### **Closing thoughts:**

Our Education and Technology team would like to pass on a suggestion to help focus the efforts of the Retreat. Although broad and vital topics like the Common Core, International Baccalaureate, Advanced Placement, tuition remittance, and school calendars are important to our sending schools, they continue to be handled routinely by the administrative staff of Eagle's Nest as ongoing discussions and adjustments. Likewise with most of the technological tools and advances. These have little predictability, so we may not want to spent too much time and effort on formulating specific plans at the Retreat. They are, as always, simply the ever-changing face of education.

More important, we feel, are the educational principles and themes that define the Eagle's Nest educational mission. Our staff will always need a solid structure with which to assess new developments, opportunities, and challenges to our programs. Here's a sample of some of the questions we came across: Do we all share a common interpretation of our mission? Do we feel our mission can be fulfilled with limited technology? Should we/can we budget for future technological developments? What are the curricular goals of The Outdoor Academy? How do we assess technological opportunities? Are we becoming a dinosaur or the cutting edge of education? Should we define the educational goals for Camp and Hante more specifically? To what degree will we compromise or alter our mission to stay in business?

So, a mixed message from this team. Lots of generalities, a very fluid technological environment, an active national debate, probably few concrete decisions we can make, and much at stake.

Our thanks to the next team to tackle these conversations,

David Gilbert, Steve Robins, Michael Brown, Katie Harris, Ted Wesemann