LEGO Education

**A.B. Combs Elementary Leadership Magnet School**

*The A.B. Combs Magnet School in Raleigh, North Carolina, serves students from pre-kindergarten to 5th grade. Pedagogical practice is focused at nurturing cooperative relationships, responsibility, kindness and good judgment. One of the basic principles of all teaching is that every child is capable and every child is a leader with special talents. Children use personal data notebooks in which they formulate their individual academic and personal goals, and monitor their progress over time. To stimulate discussions and collaborative exploration, construction and problem solving during regular lessons and “Imagineering” pull-out sessions, teachers make wide use of LEGO construction materials and computer programmes. The school strongly emphasizes a culture of student empowerment and developing leadership in young children, based on a whole-school transformation model called “The Leader in Me”, which uses universal principles from trainings initially targeted at adult business leaders, such as ‘Be proactive’, ‘Begin with the end in mind’, and ‘Think win-win’. Other innovative features of the practice at this school are student-lead programming like daily news broadcasts, community service projects, Leader of the Week Programmes, and Celebrate Success Assemblies. Educators from all over the world are regularly invited to learn about the school’s practice in a day-long seminar in which students have an active role.*

**General Information**

**Name of the ILE:** A.B. Combs Elementary Leadership Magnet School

**Location/Address:** 2001 Lorimer Road  Raleigh, NC 27606, USA.

**Website (if available):** [http://combses.wcpss.net/](http://combses.wcpss.net/)

**Rationale**

_Why do you suggest that it should be included in the project? How does it respond to 21st century learning challenges?_

A.B. Combs Elementary Leadership Magnet School implemented The Leadership Model Program and has received national recognition for its emphasis on developing leadership in young children. The Leader in Me is an innovative, school wide model that emphasizes a culture of student empowerment and helps unleash each child’s full potential. Applying The 7 Habits of Highly Effective People®, teachers and students internalize timeless leadership principles that nurture the skills students need for success in the 21st century.

It is grounded in the belief that building cooperative relationships and nurturing responsibility, kindness and good judgment is the basis for creating a successful community of learners. By developing the WHOLE child - socially, emotionally, academically and ethically - the program fosters a climate of principle-centered and personal leadership.
The principles of Dr. Stephen R. Covey, internationally renowned consultant and author of the 7 HABITS OF HIGHLY EFFECTIVE PEOPLE and FIRST THINGS FIRST, are embedded in the school’s culture and guide the student, faculty and staff in building the leadership model. In addition, as part of collaboration with the PTA, community members and families are given the opportunity through seminars to learn about and apply these principles.

After implementing The Leader in Me program, A.B. Combs also looked for ways to help boost 21st century skills in the classroom. They turned to LEGO Education to bring in an engaging, hands-on, minds-on learning solution. The staff at A.B. Combs is constantly innovating, and looking to help students not only perform to key learning targets, but to become true 21st century learners equipped for whatever lies ahead.

### Learning Aims / Intended Learning Outcomes of the ILE

What are the core learning aims and which knowledge, skills or attitudes are to be acquired? (These may include outcomes related to learners’ social, interpersonal, or meta-cognitive development)

As part of the Wake County Public School System in Raleigh, North Carolina, A.B. Combs is of course held accountable for students’ performance on standardized tests. The staff works hard to ensure strong annual progress on key learning targets. However, the staff also ensures that students are learning key life skills and 21st century skills. The unique model created at A.B. Combs ensures a holistic, well-rounded education centered on the whole child.

A.B. Combs in Raleigh, North Carolina, USA serves students from pre-kindergarten to 5th grade. The school serves a diverse student population representing various socio-economic backgrounds, ethnicities, and learning styles. The school’s stated mission: To develop global leaders, one child at a time. One visit to A.B. Combs makes it clear that the school is working to develop 21st century learners who will have success in school and society. A.B. Combs has inspired countless other schools to create a child-first learning environment centered on the whole child, and working to develop creative problem-solvers who are equipped to become global leaders.

The core of the A.B. Combs school model is The Leader in Me program. The Leader in Me is a whole-school transformation model that acts like the operating system of a computer — it improves performance of all other programs. Based on The 7 Habits of Highly Effective People®, The Leader in Me produces transformational results such as higher academic achievement, fewer discipline problems, and increased engagement among teachers and parents. Better yet, The Leader in Me equips students with the self-confidence and skills they need to thrive in the 21st century economy.

The program aims to fill a school with students who are responsible, who show initiative, who are creative, who know how to set goals and meet them, who get along with people of various backgrounds and cultures, and can resolve conflicts and solve problems. This is reality at Leader in Me schools across the country. It started in 1999 when struggling school A.B. Combs Elementary was asked to reinvent itself or be shut down. When principal, Muriel Summers, asked parents and business leaders what they wanted in their schools, she heard the following:

- Leadership
- Accountability
- Adaptability
- Initiative and Self-direction
- Cross-cultural Skills
- Responsibility
- Problem Solving
• Communication
• Creativity
• Teamwork

This feedback represents what most people believe — that our schools should not merely be focused on improving test scores, but should provide opportunities for students to develop their full potential. As Muriel searched for answers she attended a 7 Habits seminar and noticed how comprehensive the habits were in covering the same needs expressed by her community. She and staff developed a leadership theme and a school mission statement: To Develop Leaders, One Child at a Time. They taught the 7 Habits not as a curriculum, but in a ubiquitous fashion, integrating them into the curriculum, traditions, systems, and culture of AB Combs.

As Muriel Summers, principal of A.B. Combs Elementary, sat among business leaders, she could not help but wonder why the 7 Habits were not taught to young people. Read the following synopsis of the habits in kids’ language and see if you come to the same conclusion.

In 2006 A.B. Combs became the #1 magnet school in the country. The leadership model began to be replicated by other schools with similar results. In 2008, Dr. Stephen R. Covey, published the book—The Leader in Me—which documents the leadership model these schools pioneered and its outcomes for staff, students, parents and community.

A.B. Combs leverages LEGO Education products to engage their students in a hands-on, minds-on learning experience. Principal Muriel Summers chose to bring LEGO Education into her school to bring creativity back into the classroom. At A.B. Combs, students do more than memorize answers for a test; they are encouraged to think creatively and analytically about the world around them. All students in grades 1-5 rotate through the “Imagineering” lab that is geared towards STEM related curriculum. The school utilizes the majority of the elementary line of products from LEGO Education including:

LEGO Education Simple Machines
LEGO Education WeDo Robotics
LEGO Education BuildToExpress
LEGO Education Early Simple Machines

In the Imagineering Lab, students are working in teams to solve problems integrated across curriculum areas. They experience robotics, software programming, and science concepts in lessons that draw from the real world.

Additionally, the school uses LEGO Education BuildToExpress, across all grade levels and in every classroom to help students engage in a deeper dialogue about any subject. The BuildToExpress process combines specific teaching principles, professional development, and a specially formulated set of LEGO bricks to create a hands-on learning environment where teachers can facilitate a deeper classroom dialogue and all students can form a deeper connection with what’s being taught. In one lesson, the teacher invited a World War II Veteran to speak to the class. She then had the students create LEGO builds that expressed what they had learned about the role of veterans and their service in war time.

According to Muriel Summers regarding BuildToExpress, “There’s no price tag that you can put on what I have seen happen as a result of providing this for our children. I’ve been in education thirty-four years, this is a gift. It is a gift of expression, a gift of confidence, a gift of collaboration, a gift of higher-order thinking and problem solving, it’s a gift of understanding and there is absolutely nothing else like it out there to bring about conversation and understanding and appreciation for one another’s ideas. The bottom line is the academics are soaring as a result of us finding ways to infuse it into every curriculum area in the school.”
But don’t just take Muriel’s word for it. After first using BuildToExpress in the classroom, a student said “thank you for letting me use my imagination.”

Other student feedback on using LEGO bricks in the classroom:

“We use it to basically express and show what we are learning. It’s another way to show how you think.”
- Chase, Student, A.B. Combs Elementary School (Raleigh, NC)

“I love to use it and I think it’s really fun because through LEGOs you can express your feelings and we have this rule, if you call it an elephant it’s an elephant so you can just put down a simple brick and say well that’s an elephant. So it’s a way that we use our imagination in so many different kinds of ways and I think that’s really important and I know that tons of the children in our class think that’s really cool.”
- Elizabeth, Student, A.B. Combs Elementary School (Raleigh, NC)

Learners
Which group(s) of learners is it aiming at? Who is eligible to take part? How many learners are there? What are their ages?

The school hosts grade kindergarten through fifth grade, ranging in ages 5-12. Students attend school together on campus in Raleigh, North Carolina.

Facilitators
Who are the teachers/facilitators? Who are the leaders? What are their professional backgrounds? What are their roles?

There are a number of teachers who teach at the school. See the link for a list of teachers that have been recognized on the A.B. Combs website. http://combses.wcpss.net/news/spotlight-on-teachers

Principal Muriel Summers started her career in the field of education 33 years ago. During that time she has served as a classroom teacher, demonstration teacher, instructional resource teacher, assistant principal, and principal. She has received numerous awards in the field of education from Teacher of the Year to Principal of the Year. In 2009, she was named as one of the North Carolina Women to Watch. Muriel presents at national, state, and local conferences and consults with school districts nationally and internationally. Most recently her influence has been felt in Canada, Australia, Indonesia, Malaysia, Japan, China, Thailand, Denmark, Puerto Rico, and India.

Twice a year (typically in the fall and spring) educators from all over the world are invited to learn about our school in a day-long seminar where you will be greeted by students, see a presentation of flags from countries that are represented at A.B. Combs, and learn more about what makes our model so unique. You will hear and see students as they give speeches, showcase their talents, present data notebooks, and share their experiences about what it means to be a leader. Leadership Day also includes classroom visits. To see Leadership Day in action, check out our student-created video in Animoto: http://animoto.com/play/H3QKLklCKFbEmFo2DPNTkg?autostart=true.

Organization of the ILE
How is learning organised? How do learners and facilitators interact? What kind of pedagogy do they follow? What curriculum is used?

There are four reasons why The Leader in Me leadership model works so well when so many other reform initiatives don’t:

- It embodies a different paradigm
- It works from the inside out
• It uses a common language—The 7 Habits  
• The implementation is ubiquitous  
• A Different Paradigm  

Instead of seeing children through the lens of a normal distribution curve—some kids are smart and some less smart—The Leader in Me paradigm sees that every child is capable, every child is a leader. This paradigm changes everything.  

From the Inside Out  
Leader in Me schools must first get their own teachers on the same page and improve the climate among their staff before they can make it come alive with the students. They can't expect changes in their students until they have changed themselves. As the great educator Roland S. Barth puts it, "The nature of the relationships among the adults who inhabit a school has more to do with its quality and character, and with the accomplishments of its pupils, than any other factor." This model is just as much about the adults as it is the children. It's inside out—first teachers, then students, and then parents.  

A Common Language—The 7 Habits  
When everyone—teachers, students, and parents—begin using the same language, you get a compound interest effect that is truly amazing. The 7 Habits create that common language. For example, what a difference it makes when everyone knows what it means to "put first things first" or to "seek first to understand" or to "be proactive." Leader in Me schools often find their students using the language among themselves and with their parents: "I need to put first things first and do my homework before I play"; "I should have thought win-win"; or "Dad, you're being reactive."  

Implementation is Ubiquitous  
The Leader in Me is not an event and it's not a curriculum, its ubiquitous leadership development—meaning everywhere and all the time. Instead of "teaching leadership every Tuesday at 1 p.m.," educators use an integrated approach and make leadership training part of everything they do. So the model impacts everything—the traditions, events, organization, culture, instructional methodologies, and curriculum of the school. But as teachers will tell you, "It's not doing one more thing; it's doing what you're already doing in a better way."  

The Leader in Me is a three-year transformation process — the timeline varies in each school.  

Year One:  
In the first year, schools engage their entire staff in a shared vision of the greatness and leadership that are inherent in every child and adult. They study the timeless, universal principles that allow people to realize their potential and they make specific plans for implementing these principles in their school and classroom cultures.  
• Vision  
• 7 Habits Signature Training and Certification  
• Implementation Training  
• Lighthouse Team Training  

Year Two:  
In the second year, schools build on the foundation established in year one and learn to apply the 7 Habits and leadership concepts at a higher order. They implement specific tools that empower staff and students and they focus on effective school wide goals that produce results now and build a lasting capacity to produce results in the future.  
• Empowerment Day
• Achieving School-Wide Goals

**Year Three+:**
By the third year, schools are defining their unique signature. At this level, the training and consulting are customized to help schools achieve their vision and make a distinctive contribution. Continuous improvement is needed to maintain greatness and The Leader in Me supports schools in an ongoing way as they adapt and enhance over time and as their influence expands. 

Customized Consulting and Resources.

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**Learning Context**

*In which context does learning take place? What does the physical learning environment look like? Are community resources used to facilitate learning and how?*

**Resources used for learning:**
- LEGO Education resources are used to bring a hands-on, open-ended learning component into the classroom. LEGO Education solutions are integrated into language arts, social studies, math, science, and character development. Software components and some electronics are integrated to assist with STEM and technology learning.

**Technology and digital resources:**
- Technology and digital resources are used across the school and across subject areas. Particularly in the “Imagineering” Lab, this is a pull-out program, students experience using LEGO Education WeDo Robotics to support using and learning about technology in a tangible, meaningful way. Students can build a motorized LEGO model, and then use colorful, age-appropriate software to provide movement to their LEGO model. This work is conducted on a computer, giving these elementary students the opportunity to learn how to use a computer in the classroom.

**Families/communities as a resource:**
- Families and communities can enrich the learning experience in the classroom. With LEGO Education BuildToExpress, teachers can share what students are building in class giving families a deeper insight into what students are doing in the classroom.

**Physical learning environment and uses of learning space:**
- The Imagineering Lab is a bright, colorful space designed to spark engagement! Students are seated in teams where they are facing each other rather than just facing the front of the class. There is room at each team’s table for students to store and access their LEGO bricks.

**Learning context:**
There are a number of activities the children are involved in. Below are a few examples but for more details, please see http://combses.wcpss.net/about-us/school-traditions.

- Each quarter of the school year, students identify and set their own personal academic goals. Using Baldrige criteria, data collection and data analysis practices, children track their progress and growth over the course of the school year. Students also learn social etiquette and develop communication and presentation skills through student-lead programming including a daily news broadcast, school-wide assemblies, community service projects, and an innovative Leader of the Week Program featuring local, state and national leaders.

- Celebrate Success Assemblies are special assemblies held at the end of every quarter after report cards go home and are designed to spotlight the achievements of our students. Children at all grade levels are recognized for academic achievement, meeting their personal and academic goals, and outstanding performance in special classes (Art, Music, PE, etc.). Character Education awards are also given to
deserving students. Parents and guardians are invited to attend this very special event which begins with a short grade level assembly and ends with classroom time.

**History of ILE**
*Who initiated it? For what reasons was it started and with what purpose? Have these changed since?*

Faced with the daunting task of losing her school's magnet status 10 years ago when she first took over as principal, Muriel Summers, principal at A.B. Combs was told that she needed to create a specialized magnet school "like no other in the U.S, and you will have no additional resources to do it with" to maintain their magnet status. After much deliberation, she had once heard 7 Habits author Stephen Covey speak and came up with the brilliant idea to focus the school's stagnant culture and curriculum to be all about Leadership. The rest is history.

Summers and her staff created the first leadership elementary school in the nation using FranklinCovey's 7 Habits program as a foundation. A.B. Combs is a diverse elementary school, boasting children from 64 countries. By recognizing that each student possesses unique gifts and talents, and building on students' strengths rather than their weaknesses, Muriel and the other faculty guide students at A.B. Combs to continually achieve high levels of academic performance year after year.

Because of Combs pioneering success in teaching leadership, hundreds of administrators and teachers from around the world come to the school's "Leadership Days" twice a year to learn of their amazing leadership program, in hopes to implement a similar version in their schools. Combs program has been so successful that the school and Muriel Summers are prominently featured in Stephen Covey's book, The Leader in Me.

Muriel Summers and her staff were also among the first schools to implement LEGO Education BuildToExpress, a way of using LEGO bricks to foster a deeper dialogue with students. Working closely with LEGO Education, A.B. Combs helped pioneer the use of this facilitative classroom method that strengthens students’ abstract thinking and problem-solving skills. Based in part on the feedback from A.B. Combs, LEGO Education BuildToExpress is now a teaching process designed for use across curriculum areas. It is used by elementary schools across the U.S.

Muriel's school has been featured on several national television programs including PBS, Good Morning America, and The Oprah Winfrey Show. A.B. Combs is also featured in Dr. Stephen Covey’s books The 8th Habit and The Leader in Me. During her tenure at A.B. Combs, Muriel has earned numerous awards for her school, including the National Blue Ribbon School of Excellence, the Number One National Magnet School in America, the National Title 1 Distinguished School, the National Elementary School of the Year, the North Carolina Honor School of Excellence, the North Carolina Governor's Entrepreneurial Award, and the National School of Character Award.

Muriel started her career in the field of education 33 years ago. During that time she has served as a classroom teacher, demonstration teacher, instructional resource teacher, assistant principal, and principal. She has received numerous awards in the field of education from Teacher of the Year to Principal of the Year. In 2009, she was named as one of the North Carolina Women to Watch. Muriel presents at national, state, and local conferences and consults with school districts nationally and internationally. Most recently her influence has been felt in Canada, Australia, Indonesia, Malaysia, Japan, China, Thailand, Denmark, Puerto Rico, and India.

Summers and A.B. Combs Elementary have won nearly every prestigious national and state school award for having one of the nation's top elementary schools.

**Funding of the ILE**
*How is it funded?*
A.B. Combs is part of the Wake County Public School System in Raleigh, NC, and is funded by that district. In addition, the school holds Title 1 status. The staff also pursues grant opportunities as appropriate.

**Learning Outcomes**

*What are the learning outcomes achieved by the ILE, including academic, social, interpersonal and metacognitive outcomes? How is learning assessed?*

In a study conducted by Cindy Little, Ph.D. at Baylor University titled: A Study of Motivation and Problem Solving Using LEGO® Education BuildToExpress in Elementary Social Studies Lessons, she assessed the BuildToExpress method as to whether or not this process impacted motivation and problem-solving skills in fourth-grade students during social studies lessons at an elementary school in central Texas. The research design encompassed the following three primary objectives:

1. To find out if students experience flow while using BuildToExpress
2. To find out if using BuildToExpress increases intrinsic motivation
3. To explore teacher and student perceptions of using BuildToExpress while solving problems

The results were promising:
1. All students experienced mid to high levels of flow across every study session.
2. Test results supported the idea that BuildToExpress increased intrinsic motivation (see below).
3. Student and teacher interviews revealed that BuildToExpress positively impacted problem solving.

Overall, The Leader in Me process is now being implemented in over 600 schools worldwide. Schools are consistently reporting:

- Increases in students’ self-confidence, teamwork, initiative, creativity, leadership, problem-solving, communication, diversity awareness and academic performance
- Improved school culture
- Dramatic decreases in disciplinary issues
- Increased teacher pride and engagement
- Greater parent satisfaction and involvement

For more information, please see: [http://www.theleaderinme.org/what-are-the-results/](http://www.theleaderinme.org/what-are-the-results/)

**Documentation describing or evaluating the ILE**

*Is there documentation on this learning environment? Is there a website? Films? Research reports or evaluations? Other forms of documentation? (please supply references or links)*

http://combses.wcpss.net/gallery
http://combses.wcpss.net/news
http://combses.wcpss.net/information