



# Cultivating life skills at a project-based charter school

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## **Abstract**

Surveys that focused on academic and life skill development were collected from alumni who attended Avalon Charter School in St Paul, Minnesota. Avalon is a small public charter school that uses project-based learning as their primary teaching method. Forty-two alumni responded to the online survey. Students ranked life skills such as creativity, problem solving, and time management extremely high, whereas academic skills such as note taking and test taking were ranked much lower. Students graduate from this school with a strong sense of purpose and self-confidence, which helps them become productive members of society.

**Keywords:** advisories, democratic process, EdVisions, high school, non-traditional, self-directed learning

## **Introduction**

Avalon Charter School was organized as a 'liberal arts' school in St Paul, Minnesota in 2001 by a founding group of civic activists, pragmatic visionaries and some like-minded parents. A dedicated staff was hired who wanted to create a small 'people centered' secondary school of outstanding character. The school would be characterized by a shared vision of student and teacher ownership and collaborative teaching and learning with parents as full partners. The school's stakeholders co-created a highly innovative curriculum based on project-based learning and small seminars. Locally and globally, the world would be the classroom.

The school was created as part of a \$4 billion Bill and Melinda Gates Foundation initiative to ensure all students graduate from high school ready for college. This school assumes that when students have a sense of ownership of their work and the life-world of their school, students' achievement will increase. The centerpiece of the school's curriculum and instruction focuses on project-based learning that is self-directed and initiated through the students' passions and interests.

Avalon is one of the flagship learning communities of the EdVisions-Gates Project, funded in part by the Bill and Melinda Gates Foundation to create small ‘world-class’ schools (see [edvisions.coop](http://edvisions.coop) website). To judge a school’s effectiveness on the international stage or in a local community, we need more than accountability testing systems of literacy and reasoning. We also need to cultivate, support, and take into account the life-world of students, their attitudes toward living and learning, their behaviors, their character. ‘What we need if we are to judge schools effectively is a means by which schools can be assessed as cultures that create sets of relationships, norms of behaviors, and values and obligations that lead to the development of healthy and productive adults’ (Newell and Van Ryzin, 2007: 465–466).

In 1994 EdVisions Cooperative was created for the purpose of ‘creating a professional association of teacher/owners that contract with a school board to supply a learning program’. It is based upon true site-based management and dynamic and flexible decision-making (EdVisions, 2008, n.d.). In 2001 the Bill and Melinda Gates Foundation awarded a grant to EdVisions for the purpose of replicating the project-based learning model that was used at the first EdVisions school called Minnesota New Country School (MNCS). It was at this point that EdVisions Inc., a non-profit organization, was formed to oversee the replication process. Since 2001, EdVisions Inc. has created more than 45 schools across the US modeled after MNCS, including Avalon.

EdVisions schools’ ‘design essentials’ are characterized by four main themes that are embodied in the Avalon Charter School: 1) a self-directed, project-based learning program; 2) a student-centered democratic culture; 3) the use of authentic assessment; and 4) teacher ownership and accountability (p. 468). Project-based learning at Avalon requires continuous conversation, discussion, and evaluation between advisors and students. Students identify a project they would like to do, fill out a project proposal form, negotiate the details of the project with their advisors and advisory committee, do the project, and present it to their advisory committee as an exhibition. Much of the time students work alone on their own projects, primarily because of their own specific interests, however students are allowed to collaborate when they have similar interests in a project. Projects are broad ranging and might include things like designing museums, developing software programs, creating videos and movies, and creating documentaries through pictures (Newell, 2003). Depending upon their complexity, these projects may take a few days or several months to complete. When students finish a project they demonstrate their level of understanding by doing an exhibition for their advisory group, who consist of peers, advisors, community members, and parents. After the exhibition, advisors and students sit down together and discuss what curriculum state standards have been met, and how many credits they will receive for their work. In their senior year, students complete a 300–350 ‘Senior Project’ with a public presentation of their study (Thomas et al., 2005).

Students must complete all of the state standards so they are provided a copy of the standards when they enroll and are asked to be mindful of how they might complete these standards through their projects. Students move through this process at their own pace and finish their high school education when they have met all the mandatory state standards. Advisors work closely with students to make sure that all standards have been addressed through their project work. Some students graduate earlier than their traditional counterparts and others graduate later.

Avalon's approach to learning is quite different than the lecture format used by many educators, because with PBL, students take control of their own learning by choosing projects that are relevant and meaningful to their own lives. The theoretical underpinnings of the project method rely heavily on Dewey's (1938) 'pattern of inquiry'. The pattern of inquiry consists of six steps, however Dewey explains that his theory is similar to the scientific method and highlights four basic steps. He explains that a relevant problem (step one) causes perplexity and desire to find an answer, which is then followed by creating a plan (step two), testing the plan against reality (step three), and reflecting on its worth (step four). The planning and testing phases of this learning process are critical to project-based learning. Designing and building projects require students to solve problems and test out their ideas to determine solutions. Responding to instructor questions and reciting back information, which is a common teaching method in traditional education, allow students to talk, but learning becomes inspirational and exciting when students create plans to build projects and test them against reality.

Creating a web site, building a learning portfolio, performing an experiment, creating a piece of artwork, or building something off a blueprint, all require students to plan and test ideas in order to determine their worth. For Dewey learning meant doing something with the subject matter aside from reciting and memorizing information. Like Dewey, Avalon's philosophy is based on students' interests and allows them to choose relevant meaningful projects that they create, design, and build (Thomas et al., 2005). Students at this school are given the freedom to determine their own projects and work at their own pace, and the advisors act as guides or facilitators of the learning process.

Since this approach is highly student centered and allows students freedom to work at their own pace, it provides opportunities to practice life skills such as time management, problem solving, and responsibility. This approach to learning has the potential to teach not only academic content, but also life skills that are critical in helping young adults to become productive members of society.

## **Methods**

Alumni from Avalon Charter School were surveyed in this study. The surveys were collected through Survey Monkey and analyzed by the three researchers. Avalon School has 154 graduates from 2003 to 2009. The school had email addresses for 120 of these graduates. Kevin Ward, the Avalon Advisor in charge of Alumni Relations, believed that only 100 of these addresses were viable at the time when he sent out the letter explaining the research and the survey links. Survey Monkey was open for two weeks and 42 responses were collected.

The survey questions focused on the educational experiences students had at this charter school. Questions centered on things such as life skills, academic skills, advantages of attending this school, and success.

There was no control group used in this study primarily because the surveys were designed specifically for schools using project-based learning. This survey would be difficult to administer to a large traditional mainstream US high school. The survey was designed as an online survey using Survey Monkey, and web links were sent to the alumni to complete the survey. The researchers created letters of explanation and

**Table 1:** Skill types

Academic skills	Life skills
Writing	Creativity
Math	Problem solving
Verbal	Decision-making
Listening	Time management
Study skills	Finding information
Note-taking skills	Learn how to learn
Test-taking skills	Responsibility
	Team player

consent forms, which were sent to all participants. The alumni list consisted of students that attended the school over the past seven years. Some of these alumni attended college and others did not. The surveys were posted online for 10 weeks in order to provide ample time for participants to fill them out and submit them.

The survey asked participants to rank their competency levels on different types of skills using a 1–5 Likert scale based on the following ratings: 1 = poor, 2 = fair, 3 = satisfactory, 4 = good and 5 = excellent. Skills were categorized under two headings: Academic Skills and Life Skills (see Table 1).

The skills identified under Life Skills were originally identified by the Secretary's Commission on Achieving Necessary Skills report as important life skills needed to be productive members of a work community (2001).

The yes/no questions asked survey participants if they felt the charter school experience had given them advantages over their peers in different settings. The alumni survey also asked if the Avalon Charter School experience provided them with advantages over their college classmates and co-workers.

Finally, the survey asked several open-ended questions. One question asked participants to identify the three most important things they learned at Avalon, and another asked participants to define success. An example of the alumni survey can be found in the Appendix. There were a total of 42 alumni surveys collected, however not all 42 responded to each question.

## Results

Forty-two alumni responded to the online questionnaire (these alumni graduated from high school between 2004 and 2009). The first question on the alumni survey asked respondents about their post-secondary accomplishments. Ten responded to the question of attending technical programs: two completed a program, seven are currently enrolled and one dropped out. Of the 40 alumni who made written responses, three (8%) completed their undergraduate education; 24 (57%) are currently enrolled and seven (16.7%) began but did not finish college. On the master's level education three students began academic programs but only one earned a masters degree. The final question in this section asked whether students were currently employed. Of the 40 who responded 27 (67.5%) are currently employed and 13 (32.5%) are unemployed.

The second section asked the alumni if they chose to attend Avalon school (88%) or if their parents chose the school (12%). They were then asked to rank (1 = poor, 5 = excellent)

**Table 2:** Percentages of combined good and excellent responses

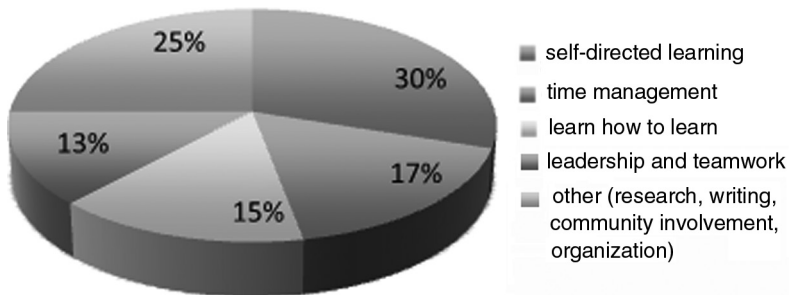
	Alumni
Academic skills	
Writing	93
Math	48
Verbal	88
Listening	88
Study skills	82
Note-taking skills	54
Test-taking skills	47
Life skills	
Creativity	93
Problem solving	88
Decision-making	86
Time management	84
Finding information	95
Learned how to learn	91
Responsibility	91
Being a team player	73

their overall academic performance before attending Avalon. The average rating before attending Avalon was 3.45, and their performance at Avalon was 4.41. Their overall academic performance after graduating from high school if applicable was 4.35.

The next section asked respondents to rank a list of academic and life skills using the same Likert scale (1= poor, 2 = fair, 3=satisfactory, 4 = good, 5 = excellent). In Table 2 good and excellent rankings were combined for all the skills.

The last section was composed of six open-ended questions providing for a written response. The first question asked students to identify the three most important things they learned at Avalon School. The answers varied and were coded according to themes mentioned most often by respondents (see Figure 1).

The next question asked alumni to reflect on whether there were broader life skills and/or knowledge they needed to reach their future goals that they did not receive at Avalon High School. All 42 alumni answered the question. Sixty-seven percent (33) responded



**Figure 1:** The three most important things learned by alumni at Avalon School

no; 33 percent (nine) responded yes. Fifteen respondents made written comments, which fell into several categories: four respondents suggested the need for a stronger curriculum in math, science or test taking (one commented, 'Test skills but I believe Avalon turns out a well rounded adult'); five alumni wrote of skills learned ('engaging community', 'life lessons') and 'the independence and confidence I needed'. Another person noted that he/she 'was not prepared for most stuff in college'; two were incomplete responses and one noted, 'No school can teach everything. It is not failing!'

When asked if Avalon gave them advantages over their college classmates, 41 of the 42 answered the question: 88% (36) said yes, 12% (5) said no. Written responses from this question fell into four categories: time management (11), academic skills (11), life-skills (nine) and other (five). Alumni comments included the following:

I was way better at time management; writing papers longer than five pages scared lots of freshmen; had self-editing skills; I was more comfortable with freedom; then the intangibles – so many kids had come from different environments to a liberal arts high school – crucial point, I came from Avalon.

A strong advantage for me – managing study time between classes. Most students were used to sitting in classes all day and having to make time to study; it was easier for me to incorporate study into my everyday schedule.

Time management, and personal maturity (I had three years of independence at Avalon, my college classmates had none), independent studies, networking skills.

I knew what a syllabus was, how class structure and meeting only several times a week – no problems writing papers and doing research.

I was better prepared in reading, writing, being organized and responsible to get my assignments in on time.

Project based learning helped my focus in college as well as my ability to communicate with others. Avalon gave me excellent writing, listening, reading comprehension and time management skills.

[Avalon had] a semi-structured system rather than just assignments to be done; it gave me an edge in creative thinking. Avalon overall very similar to college which is not what I hear from other students.

Avalon increased my ability to pursue things I want to learn (unlike many students) plus advantages in making strong, well thought out presentations.

Nine of the 33 written responses focused on life-skills. 'I'm a killer at studying and actually have a life-plan.' One wrote that an advantage he had over other students is 'working on my own – not to rely on the instructor (e.g. if I have a question, I can figure it out on my own . . . I know how to learn without being handed specific guidelines' and another alumnus indicated that 'I was able to critique my own work and self-manage my performance much better than others.'

In response to the question did Avalon School 'prepare you to reach your goals after graduation', 41 answered the question and one skipped. Some 90.5 percent responded yes while 9.5 percent responded no. Of 27 written comments the following categories

are noted for college (seven), goal setting (five), independence, professional networking, life-skills (12), not prepared, not sure (four). Alumni comments included the following:

Because of all the hurdles I overcame and goals I did reach, I now know I can do things that terrify me and maybe even excel at them.

Avalon helped prepare me to reach my goals after graduation by giving me constant support throughout my time in high school which instilled confidence in me that my goals were attainable.

[Avalon] taught me to reach my goals, hard work, creativity, risk-taking and never being afraid to ask for help.

Avalon taught me to work on my own create what I want to do in life.

When asked if the Avalon School experience gave them ‘any advantages over your peers in your career after graduation’, 34 students responded to the question while eight skipped it. Of those responding, 79 percent (27) wrote yes while 21 percent (seven) wrote no. There were 27 written responses in the following categories: time management (six), community involvement (two) and interpersonal conflict resolution (two) were reported as was life-skills (10). Five responded they were still in college and two were not applicable. Comments included:

When I attended (college) I was baffled at how much help other students needed to plan their schedule. At Avalon it was assumed you would design your own four year plan, not rely on your educators.

Avalon got me interested in being a community member – reason I was so involved in so many activities in college not only made my resume look better, it’s given me a lot of valuable experiences that I would not get otherwise.

I explain Avalon and ace almost any job interview.

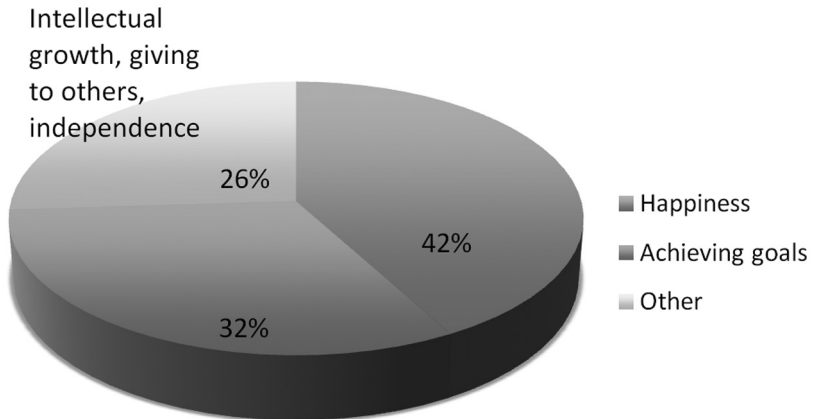
Avalon taught me how to network, how to handle job interviews, and how to function in professional communities.

Better time management, experiences working with people of different ages/backgrounds and taking responsibility for self.

I can deal with workplace conflict better than anyone I know and I know how to work creatively in many situations.

When asked if alumni felt that the Avalon School experience gave them any ‘advantages over your peers in life’, 41 responded and one skipped. Some 88 percent (35) of alumni responded yes while 12 percent (six) responded no to the question. There 27 written responses which fell into the following categories: more confident, accomplished, passionate (six), more flexible, adaptable (two), other life-skills (seven), value community (four), school, graduate planning (four); and four were not applicable.

Because of projects I did, especially my senior project, I feel I’ve already accomplished a huge task in my life. I know a lot of high school grads from other schools [who] do not have this kind of experience already behind them. And I believe it will serve as a source of inspiration for me – it will make me want to do even bigger and better things in my future.



**Figure 2:** Defining success

A similar response remarked:

I feel Avalon gave me the ability to view the world in a lens that is not entirely black and white; I am continually very grateful for Avalon for giving me skills to live in community, to see the world holistically, to be friends with people not exactly like me, and to understand that grades and test scores are not the most important things in life.

Avalon gave me advantages in life by igniting my passion for learning so even when I'm not in school; I am continually searching for ways to better my life and keep myself an active member of community.

Avalon helped teach me the value of community; Avalon taught me to find my foals and dreams and run after them.

I see learning and school as an enjoyable challenge and am more motivated to continue school than some peers.

Self-reliance and independence allow me to direct my life where I want to go with less outside support.

I understand and respect community; I know how to deal with people from all sorts of backgrounds.

When asked to define success, responses fell into five categories (see Figure 2).

## Discussion

In traditional school settings students learn how to take instructions from teachers, do their homework, memorize information for tests, and follow orders, but learning life skills appear to be lacking. Life skills such as creativity, time management, problem solving, and learning how to learn are usually not an intentional part of a high school curriculum, and therefore, students do not necessarily learn these skills until after they graduate. Students at Avalon Charter School however are doing exceptionally well in

learning important life skills. Small advisories at this school, consisting of a teacher and 10–16 students, lends itself to a more personal education environment, but research indicates that project-based learning is a key factor in helping students learn important life skills.

In a study conducted at Minnesota New Country School, also an EdVisions project-based learning school, Wurdinger and Rudolph (2009) found that students ranked life skills extremely high. For instance, when combining the good and excellent rankings, creativity, finding information, problem solving, and learning how to learn were near or above 90 percent. The combined good and excellent rankings on the Avalon Alumni Survey were very similar. When combining good and excellent rankings all but one life skill (being a team player) were ranked in the mid-80s to mid-90s. The Avalon alumni believe strongly that they learned valuable life skills while attending this school.

Academic skills however, were less impressive. When combining good and excellent rankings there were three skills that were in the 40th and 50th percentile: note-taking skills was 54 percent, test-taking skills was 47 percent and math skills was 48 percent. Students do not take tests at this school because they focus on projects, which is the reason why test-taking and note-taking skills were ranked low. Math is a difficult subject to teach using project-based learning which may be why this ranking was low.

So why are life skills ranked higher by alumni from these project-based learning schools? One reason might be because these schools are student centered. Students are given the freedom to design and create their own projects. Projects created by teachers do not generate the same level of interest and passion as those created by the students. When students create them they have relevancy and meaning. For example, when asked the question, ‘Do you feel this charter school gives you advantages over your peers in more traditional public schools?’ several students stated that they learn more because they get to do projects on whatever they are interested in. Often times these projects have practical ends such as making a lure to be used for fishing, or constructing a web site to start a small business. When students are responsible for designing and completing projects that have useful ends, they will use their creativity, and problem solving skills to carry out the necessary steps, possibly solving multiple problems along the way, in order to complete their projects. They invest time and effort in their work and take ownership of their projects.

Motivation may be another factor. In these environments students are not forced to learn by taking tests and having to memorize information. They are free to choose something from their own interest and are evaluated based on the quality of the project and their presentation of the project. Several students mentioned on the survey that they enjoy the freedom that Avalon provides because it has helped them become more self-directed and responsible for their actions.

In some cases students that have a sloppy project or poor presentation are required to do more research, fix their projects, and do their presentations again. The process continues until they reach a level of quality agreed upon by their advisory committee. For instance, an advisory committee may agree that a student has to streamline navigation procedures to make a web site design more user-friendly before granting credit for the project. Motivation is intrinsic because students desire to improve upon their projects, especially if they will be using them in real world settings.

Students learn that mistakes are valued and are part of the process. They learn that their advisory committee is a resource that can help them improve their projects, rather than authority figures that have the power to mark down their grade. Several students commented that they are treated more like equals at this school and teachers treat them with more respect. Learning to use their committee as a resource fosters self-confidence and leadership skills. Through this process students begin to realize that they are equals, and mistakes are seen as an important part of the learning process.

Time management is an ever-present part of the students' school day as well. Advisors check in on students and help guide the learning process but the student is responsible for staying focused and on track. The PBL process is structured requiring learning proposals, learning logs, daily check ins, and eventually presentations. After doing a couple of projects, students realize that if they don't stay focused they will fall behind and may not graduate on time. Learning to manage time takes longer for some than others, but eventually most students realize how important this skill is if they want to do well and graduate on time.

Ultimately, this approach to learning is helping Avalon students learn how to be self-directed. Many students stated on the survey that this school has allowed them the freedom to learn on their own and become more responsible for the completion of their own projects. Learning to be more independent was mentioned frequently and this can only be learned by providing students with freedom to do their own work and struggle through their own mistakes.

## **Conclusions**

The data collected from this research study clearly indicate that students are learning important life skills, and that a project-based learning curriculum provides them with opportunities to learn and practice these skills. Obtaining and using these skills resonates throughout many of their answers on the survey and most alumni believe that this school provided them with advantages over classmates, peers, and co-workers. Equipping individuals with these skills carried over into post-secondary experiences and allowed them to become more confident self-directed learners in higher education settings. Traditional public schools may want to take a closer look at this curriculum and implement some project-based learning in their own settings to help students acquire these important life skills.

Success for these students seems to go well beyond college completion and includes important values like happiness, reaching personal goals, and the betterment of others. Students have a mature view of reality and understand that success is not necessarily measured by degrees completed, but by being involved in experiences that promote personal growth and happiness. Students leave this school prepared for the challenges of life and are motivated to better themselves and the world around them.

Further research could look at the personalized learning that occurs at these small charter schools and how the teacher/student relationship might foster a more meaningful learning environment. In addition a deeper look at the project-based learning process is needed and how this process might be useful in more traditional public high schools.

## Appendix 1: Alumni survey

Education:

Please choose the option that best describes your educational attainment after high school AND your area of study.

Trade or Technical Certification

- Completed
- Currently enrolled
- Began, but did not finish
- Area of Study ~ Please Specify:

Undergraduate Education

- Completed
- Currently enrolled
- Began, but did not finish
- Area of study ~ please specify:

Master's Level Education

- Completed
- Currently enrolled
- Began, but did not finish
- Area of study ~ please specify:

Post Master's Degree Education

- Completed
- Currently enrolled
- Began, but did not finish
- Area of study ~ please specify:

Current Employment

- Unemployed
- Current Occupation:

What years did you attend this charter school?

Did you choose to attend this charter school?

- Yes, I chose to attend
- No, my parents chose for me
- Other, please specify

Please rank the following:

1	2	3	4	5
Poor	Fair	Satisfactory	Good	Excellent

My overall academic performance prior to attending this charter school

1	2	3	4	5
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My overall academic performance at this charter school

1	2	3	4	5
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My overall academic performance after graduating from high school (if applicable)

1                      2                      3                      4                      5

Rank the following skills using the 1–5 scale: 1 = Poor 2 = Fair 3 = Satisfactory  
4 = Good 5 = Excellent

In what ways did your charter school experience prepare you for life after graduation?

Academic Skills

Writing Skills

1                      2                      3                      4                      5

Math Skills

1                      2                      3                      4                      5

Verbal Skills

1                      2                      3                      4                      5

Listening Skills

1                      2                      3                      4                      5

Study Skills

1                      2                      3                      4                      5

Note Taking Skills

1                      2                      3                      4                      5

Test Taking Skills

1                      2                      3                      4                      5

Life Skills

1                      2                      3                      4                      5  
Poor                  Fair                  Satisfactory                  Good                  Excellent

Creativity

1                      2                      3                      4                      5

Problem Solving

1                      2                      3                      4                      5

Decision Making

1                      2                      3                      4                      5

Time Management

1                      2                      3                      4                      5

Finding Information

1                      2                      3                      4                      5

Learned How to Learn

1                      2                      3                      4                      5

Responsibility

1                      2                      3                      4                      5

Being a Team Player

1                      2                      3                      4                      5

What were the three most important things you learned while attending this charter school?

1

2

3

Were there broader life skills and/or knowledge you needed to reach your future goals, but did not receive while attending this charter school?

Yes No

Explain:

Do you feel that the charter school experience gave you any advantages over your college classmates?

Yes No

Explain:

Do you feel that the charter school experience gave you any advantages over your peers in your career after graduation?

Yes No

Explain:

Do you feel that the charter school experience gave you any advantages over your peers in life?

Yes No

Explain:

Do you feel that this charter school prepared you to reach your goals after graduation?

Yes No

Explain:

How do you define success?

Is there any additional information you feel is important to share?

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## References

- Dewey J (1938) *Experience and Education*. Indianapolis, IN: Kappa Delta Pi.
- In *How it all started*. Retrieved 1st October, 2010, from <http://www.edvisions.com>
- Newell R (2003) *Passion for learning: how project-based learning meets the needs of the 21st century students*. Lanham, MD: The Scarecrow Press, Inc.
- Newell R and Van Ryzin M (2007) Growing hope as a determinant of school effectiveness. *Phi Delta Kappan* 88(6): 465–471.
- Thomas D, Enloe W and Newell R (2005) *The Coolest School in America*. Lanham, MD: Rowman & Littlefield.
- Wurdinger S and Rudolph J (2009) A different type of success: Teaching important life skills through project based learning. *Improving Schools* 12(2): 117–131.