

Western Washington University Western CEDAR

WWU Honors Program Senior Projects

WWU Graduate and Undergraduate Scholarship

Fall 1996

Making "Connections" and Shifting the Educational Paradigm: One school's struggle to empower students through transforming the educational process

Brad (Bradley) Lewis Western Washington University

Follow this and additional works at: https://cedar.wwu.edu/wwu_honors



Part of the Secondary Education Commons

Recommended Citation

Lewis, Brad (Bradley), "Making "Connections" and Shifting the Educational Paradigm: One school's struggle to empower students through transforming the educational process" (1996). WWU Honors Program Senior Projects. 232.

https://cedar.wwu.edu/wwu_honors/232

This Project is brought to you for free and open access by the WWU Graduate and Undergraduate Scholarship at Western CEDAR. It has been accepted for inclusion in WWU Honors Program Senior Projects by an authorized administrator of Western CEDAR. For more information, please contact westerncedar@wwu.edu.

Honors Program

Bellingham, Washington 98225-9089 (360) 650-3034

HONORS THESIS

In presenting this Honors Paper in partial requirements for a bachelor's degree at Western Washington University, I agree that the Library shall make its copies freely available for inspection. I further agree that extensive copying of this thesis is allowable only for scholarly purposes. It is understood that any publication of this thesis for commercial purposes or for financial gain shall not be allowed without my written permission.

Signature _

Date December 10, 1996

Making "Connections" and Shifting the Educational Paradigm:

One school's struggle to empower students through transforming the educational process

by Brad Lewis

According to Elliot W. Eisner of Stanford University, education reform efforts for American schools have not exactly been "a novel enterprise." In the late 1950s, the Space Race pressured Congress to turn to American education to help regain and maintain our technological superiority. The result was the curriculum reform movement of the 1960s. In the 1970s "accountability" became the central focus of reformers. Then, in April of 1983, A Nation at Risk was published only to give way, by the close of that century, to America 2000, the reform agenda of the Bush Administration, which aimed to do what all the previous movements were unable to accomplish. Yet even today, with Clinton's Goals 2000 promoting improved national standards, little more than the face of reform has changed. As Eisner surmises, "We seem to latch on to approaches to reform that are replays of past efforts that themselves failed to come to grips with what it is that makes school practices so robust and resistant to change." (Eisner, pp. 758-759)

In a small, rural Whatcom County high school a localized attempt to break the national mold of ineffective education reform has taken place. The offspring of teacher concern and collaboration and not of a national or state-mandated agenda, the impetus for change was familiar, disturbing trends in student performance and student disconnection from school. The changes, however were unique and, in the view of many, too radical. What follows is a documentation, though not completely thorough, of one high school's attempt to revolutionize "school practices" in order to engage and empower students toward meaningful learning and academic success. Their efforts have brought them face to face with powerful forces which make "school practices so robust and resistant to change." The lessons afforded by their experience can be appreciated by those involved in public education, for sure, but also by anyone who may at some time have the courage to be an instrument of change, however unpopular.

Connections

In 1990, Mt. Baker School District administered a student survey, Survey 66, to its 5th, 7th, 9th and 11th grade students. The survey revealed that the transition between grades 8 and 9 was the most difficult for students socially, emotionally, and academically. Such results were confirmation of the increasing apathy and declining academic performance perceived in the classroom by ninth grade teachers. This was the spark uniting Mt. Baker teachers, administrators and parents and igniting a search for solutions and change. On the anvil of their research, collaboration, and creative effort the Ninth Grade Connections Project was forged.

The new program (I shall refer to it as Connections) did not jettison the traditional curriculum. Students continue to take courses in English, math, science, social studies, vocational studies and an elective. The significant changes came in how the content would be delivered. If Connections were to be described in two words they would be "integration" and "application." Designed to minimize the barriers which separate traditional academic departments, the new delivery system calls for comprehensive integration of curriculum. Behind this bold move is the desire to enable students to see the "connections" between the subject areas. Alongside this ultimate objective is the goal of having students become actively involved in authentic, student-centered learning. In the context of group research and application activities, students are given opportunity to apply the skills they are learning in classes to projects of their own choosing. The element of choice is crucial, allowing them to pursue their interests and relate their schooling experience with the reality of life outside the classroom.

These unconventional educational strategies (to be further described and discussed later) were developed to achieve the goals formulated by the "Freshman Connections

Team." In order to obtain the necessary resources, particularly time and money, to make the changes happen, the *Connections* goals were combined with those of Washington

State's Commission on Student Learning. Hence the program officially is aimed at fostering "student's abilities to become responsible citizens, capable of providing for their families and contributing to their communities." In this regard, these general goals were established: Students would be able to:

- 1. read with comprehension, write with skill, and communicate effectively and responsibly in a variety of ways and settings.
- 2. know and apply the core concepts and principles of mathematics, social and life sciences, civics and history, health and fitness.
- 3. think analytically, logically, and creatively and integrate experience and knowledge to form reasoned judgments to solve problems.
- 4. understand the importance of work and how performance, effort and decisions directly affect future career and educational opportunities.

These goals match those approved by the Washington State Legislature in the Education Reform Bill of 1993. Allying these goals with theirs of improving the connections between ninth grade students and their schooling experience, the Connections team developed and implemented their program, which can be broken down into five main components: Freshman Camp, Common Readings, Joint Homework, Research and Applications, and Monthly Parent/Student Meetings.

"It is our intention to let students know from the first day of school that their ninth grade year is going to be different than all their previous years of school." (Connections Handbook, p. 5-1) Freshman Camp is the first impression effort to introduce the new freshman class to each other, the ninth grade staff and to the changes in educational experience which the year promises. It is a three-day emersion orientation with activities designed by willing parents and staff with four particular goals in mind: 1) Greet students with new expectations and experiences, calling for new attitudes and responsibilities from them. Particularly, they are readied to be engaged and active learners, rather than mere passive recipients of knowledge. 2) Establish connections relationally between students and

all the ninth grade staff, as well as with each other. 3) Offer to students a "sneak preview" of the skills they will be learning and using during the year. 4) Communicate to students that preparing them for a successful long-term future is what *Connections* and its staff are aiming for. The three-day experience takes them from a picnic at Silver Lake Park to the school's career center, with a host of activities in between. Students get a strong and immediate taste of the teamwork and cooperation which they will have to exercise throughout the year in order to accomplish their goals. They see this modeled by teachers who are "committed to working together to give them a unique and meaningful education." (Handbook, 5-2)

In the words of English teacher LaLani Doud: "This year we have about 170 freshmen...you can either do everything you can to bring them together or pull them apart. (Connections) is a really beneficial way to start their high school career. It's important to try to keep that as they move through high school so that they get a strong feeling of themselves as a class, and learn to value their differences and diversity. And we try to have them look at their own strengths and weaknesses and those of other people they may end up working with in their groups, and see that as a valuable thing."

One of the tenets of the program to which the Freshman Camp offers introduction is that of content integration. "Common Reading" represents a large part of the effort to approach a "truly interdisciplinary approach to learning." (Handbook, 3-1) Touted as providing one of best connections between teachers, students and curriculum, the common reading program focuses all students, teachers and presumably some parents on the same passage of the same book, and has all students doing the same assignment, on one night per week. The following day the reading is discussed in each class, and in the context of that class' content area. Apparently, these discussions have been powerful and one of the most exciting aspects of the common reading program as the information is shared and discussed by all as it relates to the various subject areas. Mrs. Doud, for one, is affirming. "It's the best! I love it."

Common readings, however, has been one of the most controversial and challenging aspects to implement. In large part, this reflects the difficulty involved in choosing what will be read. That decision itself has profound importance regarding content integration and "communication between the disciplines." (Handbook, 3-1) Emphasizing non-fiction, the teachers chose Silent Spring by Rachel Carson to start off the common readings for the schoolyear. Having much to do with environmental issues and politics, the book was not well-received by all. Parents who were under the misconception that the book was about logging were not pleased. Mrs. Doud, herself, was skeptical about using the book at first, as it was chosen just prior to her joining the team. She soon found it to be an "excellent tool in English" along with its implications for civics, science and health. "It's a great example of what happens when one person decides to research an issue and to make the truth known. And its extremely well-written," said Doud. One present minth grade student had some critical comments that, to her, the book is outdated and uninteresting. She also said it is very difficult, college-level, reading. They are still searching for the perfect book. For now, Silent Spring is as close as they've come.

Walking hand in hand toward successful integration with the common reading program is the joint homework schedule. Put simply, the joint homework schedule is a nine week calendar which targets two classes for homework every night, the same subject and assignment for each student. How much is homework actually integrated? "Almost entirely," answers Roberta Vollendorf, special education and study skills teacher for the program. One Math/Civics integrated assignment was based on the results of this Fall's presidential election. Based on the number of votes and the percentage of votes received in each state by the candidates, students had to calculate the electoral results and answer other related questions. Though assignments may not be combined every night, that is the ultimate objective, and either way all the teachers share the responsibilities of planning, assigning and grading all assignments. This guarantees the crossing of the disciplines,

helping students and teachers see education as a whole rather than individual and unrelated courses.

Ms. Vollendorf is pleased of the results of the Connections joint homework system. Asserting that homework completion among the ninth graders is the highest in the school and probably across districts as well, she offers evidence in the major improvements in percentage of homework completion over the initial years of the program. The first year, parents were notified when their child completed less than 20% of their assignments. This year, the staff is able to contact all parents of students who complete less than 70%, and the average homework completion rate is 77%. According to Vollendorf, parent involvement is the key. With the joint homework schedule, parents are able to know in advance what their child should be completing each night and are given a better opportunity to play an active role in their child's education. Mrs. Doud finds the homework system beneficial as well. "It's definitely a benefit to the kids. For me, it makes me much more organized. I look way ahead and plan so that the homework when I have it can be really meaningful. I think it has made me have a stronger curriculum, and I think it is definitely better for the kids. It helps them focus instead of being so scattered with every teacher thinking their class is the most important."

The fourth essential ingredient to Connections was born out of the belief that the world outside, waiting for the students, is one demanding not only problem solving skills, but the ability to work in groups in order to solve them. As much as that may sound sensible and legitimate, the weekly, day-long student experience called Social Studies Applications and Science Research arguably has been the most radical and resisted component of the program. "Applications" is held every Friday and divided into two three-hour blocks, one for student-centered group work on projects in social studies and the other delving into scientific areas of interest. Student interest, choice and control are high priorities of "Applications." This is coupled with active, skill-building learning which endeavors to plunge students into real world issues and experience.

For the motivated students, "Applications" affords life-changing opportunities for growth and creative achievement. This is what most excites Mrs. Doud. "Some of the things that my best students have done are things that I know they'll never forget in their whole lives, things that are really meaningful." Some of Mrs. Doud's students have been to Olympia interviewing the Governor, and another group facilitated a school-wide clothing drive. For her, though, "Applications" continues to be the most challenging part of the program. Why? "Because of my style...it's helped me to realize I'm a control freak." The whole idea, as Doud explains it, is to relinquish control and let the students decide what, how and how fast they will learn. Doud's personal feeling is that this kind of freedom is "fantastic for the kids on the top," and for the "kids in the middle who like to do things that are more hands on, it is also good." It is the kids at the bottom who don't have the motivation or self-discipline they need to be successful with that amount of freedom. For Doud, that continues to be her biggest frustration. Meanwhile it is finished projects that are radiant successes and unforgettable experiences which keep her a believer.

The final primary component of *Connections* is the monthly parent meetings. Ninth grade students and teachers meet with interested and concerned parents every month in the Mt. Baker library. This forum for questions and suggestions is a continuation of the initial involvement of parents and community members at the outset of the program. Early on, it was parents who decided that the grades given to students for their effort and achievement in research and applications should count for 20% of their total grade in proportion to its percentage of class time. Initially, research and applications was alotted two days out of the week as well. Since then, too, as a result of the monthly meetings, parents have given input which changed the day on which teachers assign the common readings as well as how they collect and distribute assignments. The ninth grade team professes to have sought involvement from parents with multiple perspectives and continues to welcome constructive criticism. Even critics, they say, have been complimentary of their efforts to involve and inform parents. They recognize the

enormous importance of making the Ninth Grade Connections Project a community affair with success hinging on the involvement of families as well as school staff. (Handbook, 7-1)

Mt. Baker school district, the high school administration, parents, students and especially the teachers involved in *Connections*, have invested a tremendous amount of time, energy and resources creating and implementing the program. In light of the dark reality of freshman academic performances and attitudes, the risk involved in seeking transformative change was to them, worth facing. Now, three years along in the life of the program, the question of success and significant improvement looms large. Has *Connections* proved itself? Was the experiment successful? These are questions of significant scope, complexity and obvious importance. Aware of this from the outset, the program pioneers included evaluation and assessment as a crucial part of their overall model. Assessment would be an ongoing process and cooperative effort between staff, students, parents and community.

A variety of tests and surveys were used to evaluate the impact of Connections after its first year. In terms of the results, Roberta Vollendorf said: "The test scores speak for themselves." She explained the history of the typical decline in standardized test scores after the fourth grade. Last year, though, the ninth grade students thwarted this trend scoring as high, relatively speaking, as the fourth graders. Results of the first year of Connections also showed that the doubling trend in failures from 8th to 9th grades was halted. According to Vollendorf, the second year's assessment results are even more positive and are on the verge of being presented.

If the scores, statistics and conclusions of the *Connections* evaluation team can be trusted, then the program has seen significant initial success in achieving its goals of improving students' academic performance and reviving the estranged relationship between students and their schooling, particularly in the challenging transition from junior high to high school. It would not be extremely presumptive to expect the continuation of

Connections and for growing support of it to cause some of its changes and methods to be incorporated into other grade levels and classrooms at Mt. Baker. Yet, there is more to the Connections story and the experience of educational reform at Mt. Baker High School than is manifestly expressed by the staff involved. The future of the program remains a question mark. Digging somewhat deeper into the recent history and consequential context of the project reveals challenges and issues related to the process of change itself and the effects of this process at Mt. Baker. As Mrs. Doud remarked, "change is painful," and this is no less true for public education than for any other arena of life.

Challenges to reform, resistance to change

"The way that the members of the ninth grade team have held up against the criticism... if that had been a mandated change on my part, for example, they would have bailed out early on in the first year." -- Mt. Baker High Principal, Brian Rae

In order to truly understand and learn from the example of Mt. Baker's ninth grade project, the project must be considered in view of the larger context into which it was born, and, in many ways, has struggled for existence. The description of Connections given thus far has, in large part, come straight from the ninth grade teachers themselves, who have created, lived and breathed the project. Understandably, they resemble proud parents describing the attributes and achievements of their wonderful child. Teachers in particular know how parents often react to negative reports regarding their children. Naturally, they are not unbiased. While much of educational value can be gleaned from the testimony of those leading Connections about the program itself, so also much can be, and has been, learned in regard to the process of change in schools, particularly in responding to challenges put forth by opposition inside and outside the school. Mr. Rae joined the team

of Mt. Baker faculty in the Spring of 1994, the initial year for the fledgling ninth grade program. Since then, he has been a first hand witness to the criticism directed toward the *Connections* program, and would be the first to acknowledge that no matter how good a program might be in theory, its survival in reality depends significantly on factors beyond control and how those factors are handled.

Public education, a child of America's cherished democratic system, cannot be successfully fashioned in contrast to the ideals, beliefs and desires of the public it is set up to serve. To the frustration of the ninth grade staff, many Mt. Baker parents, community members, teachers and administrators have not shared the same vision for change. In some cases their resistance has been based on misconceptions wrapped up in the politics of national educational reform, and for some any change is seen as a detriment. For the sake of the program they have poured their lives into over the past three years, the ninth grade staff, including Mrs. Doud, is quick to disassociate their project from the stigmas of controversial educational reform models, and one in particular. "It's not OBE. It's not a state-mandated program.... I think that there's a huge misconception out there that what we have is some program run by someone higher up. It's not. We're the only people in the whole state doing it..." Doud also hinted that value-ridden debates over educational issues involving community and administration have a recent and more than relevant history in Mt. Baker school district. "History in this district is really important. There are things that have happened in the past that get in the way of this program. Some of the things that have happened have become so personal that they'll never be OK." One example she mentioned of past controversy revolved around the teaching of evolution in biology classes. The same vanguard of conservatism and skepticism toward change remains and has reacted to Connections. Mr. Rae believes these are not the sentiments of the majority, however. "We have a small but very vocal group of community members who see any change as being part of a national conspiracy, if you will, to dumb-down education and to take kids

away from the basics." These feelings have been expressed by teachers and administrators alikr, who have significant power for "sabotage," as both Doud and Vollendorf put it.

The difference between a revolutionary overhaul of the curriculum and delivery system at Mt. Baker and the prevailing conservative guard is apparently a difference in fundamental beliefs relating to education. An article entitled "A New Paradigm for Educational Change" in Education magazine proposes a major cause for the short-lived life of many "seemingly powerful change-oriented innovations" in education. The article focuses on the change process itself and the need for a paradigm shift as the most significant barrier to expansive innovative change. (Education, p.162) Two approaches to change are presented and compared in the article, both of which are reflected in the involvement of stakeholders in the Connections program. The psychological approach to change is the first described and it "assumes that any innovation must be assimilated into the beliefs and basic operating principles of those for whom the innovation is proposed." (Education, p. 162) If a new model or change is not integrated into the pre-existing paradigm, the innovation is rejected. Innovations are often doomed simply because they do not fit into the present paradigm. (Education, p.163-4) The second approach answers this quandry by centering on the phenomenon introduced by Thomas Kuhn, the paradigm shift. Controlled and safe paradigm shifts occur when members of a group conclude that their paradigms are "no longer useful or effective as tools to interpret and interact with existing situations." This healthy sort of paradigm shift takes place, then, when existing paradigms are judged to be "bankrupt." (Education, p. 165) This is the basis for what is referred to as the ontological approach to change, where individuals are enabled to "try out new paradigms that might allow them to be more effective in dealing with current problems." (Education, p.167)

Mr. Rae, as the principal, finds the idea of paradigm shifts quite relevant to the situation at Mt. Baker. "One of our school improvement plans is to look at the best schedule for Mt. Baker High School and that would be more like the second approach....If

we choose to go that route, to longer and fewer periods in a day, that's going to very much affect the way people traditionally have taught their classes." Traditional teaching methods have been questioned and replaced with the curriculum integration and application focus of the ninth grade program at Mt. Baker. Yet there are many who do not believe in these innovations because their paradigm itself is traditional. Paradigms have been referred to as a "theory of the world in our heads." (Education, p. 163) As some perceive the educational world, in terms of student needs and methods of meeting them, to be changing, a monumental, perhaps impossible challenge persists: How to make changes while, in general, the traditional educational paradigm remains? Has this "paradigm paralysis" been a significant barrier at and around Mt. Baker? "Very much so," says Mr. Rae.

During the two-year life of Connections, and even in planning stages, steps were being made to answer or perhaps prevent the challenges of public misunderstanding. opposition within the system, and inflexible paradigms. Possibly the most important means of combatting the critics and opening minds to innovation is summed up in one phrase from Mr. Rae: "The data don't lie." Mr. Rae explains how the small, vocal parent group who opposed Connections vehemently, began to attend the monthly parent meetings, using that as a forum to lash out against the program. But as the data from the tests and surveys revealed successful first and second years for Connections, the opposition was diffused significantly. The same pattern was true for skepticism among staff, adminstrators, and school board members. Mr. Rae feels that the strongest argument that could be made is in the proof of the data. "I've already seen it break down parents who are opposed to it. Teachers who have gotten kids who have gone through the program... I think it has changed some of their viewpoints. And I think it has at the district office too," Though the evidence has not been overwhelming and concerns such as continued high failures among sophmores still remain, the importance of documented proof as a general method of gaining acceptance for a new paradigm, is obvious.

Another crucial pair of factors in dealing with opposition is communication and compromise. Again, Mr. Rae admits there has been room for improvement from the outset in the arena of gaining large and diverse amounts of public input. The inclusion of parents and community in the initial planning as well as through ongoing meetings has been very beneficial, yet more of an effort could have been made to involve the parents opposed to change. In this way, he thinks, some of the crticism could have been avoided. Two of the beneficial compromises which have resulted from communication with the community have been the reducing of applications and research to one day per week and the offering of a section of traditional ninth grade classes as an alternative to the program. In regard to a complete paradigm shift, Rae said, "I think the ninth grade team realized that things move slowly. Change occurs slowly in this community and so they used the present and very traditional structure, the six-period day, and they've adapted that to their use." Though this sort of compromise has enabled *Connections* to continue on, working within the existing paradigm also makes its survival somewhat precarious. Indeed, the ultimate compromise and sacrifice for the ninth grade staff may be just around the corner.

On the horizon for Mt. Baker school district will be a decision for educational change related to the changes in delivery and goals of the *Connections* program, but much larger in scope. Many schools around the state have drastically changed the scheduling of a typical school day, reducing the number of classes from six to four and extending their length to 85 or 90 minutes. This is the prospective change Mt. Baker is looking at, which Rae referred to in a previous quote, as one along the lines of the second paradigm-shifting approach to educational change. Rae describes the planning stages, already set in motion, as reflective of the lessons learned through *Connections*. "We just started our 'time team,' as we're calling it, this month and we're going to meet from now till Spring. It is gonna include staff, students and parents on its committee." Participation of parents and community presumably will be even more crucial for the approval such a comprehensive tradition-breaking change, and one that is modeled after a broader movement in education.

This is again where Rae plans on data and results from other schools falling upon open minds. "They're taking a look at the different schedules that are out there. They'll visit some of the schools. Probably we'll have some of those schools who are using different schedules come here and talk to our staff and also our parents. My hope is that when we begin to hold parent meetings, we'll have parents that will have actually visited other schools or looked at the models, and they will answer the questions of parents. They will give their perspective rather than me or a teacher who parents might see as being somewhat biased." Other factors such as money would also come into play and ultimately the switch would not be made unless community was supportive and the majority of the staff voted in favor of it.

As for the future of ninth grade Connections, it may very well be wrapped up in the possibility of this dramatic scheduling change. Somewhat ironically, if the four-period day were adopted, Connections would possibly have to be sacrificed for the sake of a major shift toward the paradigm under which it was conceived. As Rae explains, this should not be a tragedy. "I would hope as principal that if they believe that longer periods of time allow them to make more connection with kids, to go into more depth, and to apply skills better, and I would guess that they would say yes to all of those, that they would have an open mind to the whole school going that route, even if it would effect what they have done." Coupled with the immensely hard work it required to forge and maintain Connections in the face of strong opposition, stong feelings of pride and devotion exist, not unlike those felt by parents for their children. Often love justifies irrationality, but in the case of an educational program as opposed to that of a child, the "parent" may have to relent. Rae anticipates a possible conflict where there should not be. "They've put a lot of hard work into this. But I think that if they were to selfishly buck any kind of a change even though they deep down realize it's for the better of the kids, I think the other staff members would be offended by that."

Whatever fate becomes the Mt. Baker Connections program, one thing cannot be argued. It truly stands as a strong "testament to what can be done when teachers, administrators, and parents identify the need for change and work together to make change happen." (Handbook, 1-1) Its two main non-traditional innovations of curriculum integration and student-centered application projects may be further and more broadly implemented by the more expansive change which could soon shake the small Mt. Baker community loose of its conservative paradigm. This, if it happens, though it would most likely consume the ninth grade program and erase its distinction, should be perceived by the pioneers of Connections as for the greater, long-term good of Mt. Baker education. ninth graders included. Yet without the trailblazing sacrifice of that impassioned group of teachers who were committed to making a difference, nothing would be changing at all, test scores and apathetic student attitudes included. Mr. Rae sums it up well: "I'm amazed that these guys have stuck it together with the enthusiasm and drive that they have for as long as they have. If it doesn't work out, I think that we've all learned some things from it and I think they are stronger teachers for it. We've learned a lot about collecting data and how to use it. We've learned a lot about involving parents and community ahead of time in making change. So there's been some really good spin-off." And perhaps the most significant "spin-off," a major scheduling overhaul, is yet to be realized.

Eisner believes in inviting our communities to join in a conversation that "deepens our understanding of the educational process and advances our understanding of its possibilities." Connections offers valuable testimony in this regard, as it has taken vital steps toward potentially rewarding and transforming reform at Mt. Baker High School. Presently, other schools are using Connections as a model for similar changes. In taking the exploratory risks they have and by not succumbing to the strong opposition, the ninth grade team at Mt. Baker has, at the local level, begun a paradigm shift that could eventually grow to national proportions. If so, perhaps genuine education reform in America would result — reform that would not be about "shallow efforts that inevitably fade into oblivion,"

but rather "vision, conversation, and action designed to create a genuine and evolving educational culture." (Eisner, p. 764)

Bibliography

Eisner, Elliot W.. "Standards for American Schools: Help or Hindrance?" Phi Delta Kappan. Vol. 76, 10, June 1995.

Marzano, Robert J.; Zaffron, Steve; Zraik, Linda; Robbins, Sanford, L.; Yoon, Lois. "A New Paradigm for Educational Change." Education, Vol. 116, 2.

Connections Handbook, "Connections: An Integrated High School Model," Mount Baker School District, second draft.

Interview with ninth grade teachers Lalani Doud and Roberta Vollendorf, Mt. Baker High School.

Interview with Principal Brian Rae, Mt. Baker High School.