# **Effective Student Learning: By Implementing Three Major Components**

Rudolfo B. Rulloda

NorthCentral University

November 20, 2010

### Abstract

Over the past few years, the California educational system made the headlines in the newspapers, magazines, and radio stations describing the constant decline of our students' test scores, and the increasing number of Hispanic and African American students leaving California high schools. The public is asking why this happing, and with the large amount of tax payers' money into education, the California education system is still below than the rest of the nation. The Teaching and Learning Foundations present a new paradigm for effective teaching, which consisted of multiple intelligences and secondly, by comprehending the process of students' learning, where teachers would be able to implement proper teaching strategies for helping their students learn effectively. And finally, by utilizing the concept of reflection, the students would learn effectively and teachers would improve their personal teaching practices.

## **Effective Student Learning: By Implementing Three Major Components**

### Introduction

Over the past few years, the California educational system made the headlines in the newspapers, magazines, and radio stations describing the constant decline of our student's test scores, and that our students are not performing well academically (Dillon, 2008), which led to the decline of our the high school graduation rates. To illustrate, the California Department of Education provided several reports concerning high school dropouts. In the first report, year 2004-05, from Grade 9-12, there were a total of 31,335 Hispanic students and 8,455 African American students dropped out from California high schools. In the second report, year 2007-08, from Grade 9-12, there were a total of 43,126 Hispanic students and 10,982 African American students dropped out from California high schools. The reports suggested that there are an increasing number of Hispanic and African American students leaving California high schools.

The public is asking why this is happening, and with the large amount of tax payers' money into education, the California educational system is still below than the rest of the nation, and subsequently this country is behind the rest of the world Ravitch and Cortese (2009). The public is now accusing the teachers as the possible cause for students' poor academic performances. The blame game can go back to the 1980s and 1990s when another education reform, "A Nation at Risk," where the problem was caused by "bad teachers," and the perception then is still with us today Blake (2008). The federal government has also stepped into the fray by passing the "No Child Left Behind Act of 2002," which makes teachers accountable for students' academic performance and the "Race to the Top" grants for education reforms. The incentives for accepting these grants include: the firing of the principal and half of the staff and reopen the

school with new personnel, converting the low performing school to a charter school operator, and closing the school and sending the students to higher-achieving schools in the district Quaid (2009), as an example, one elementary school, where the author first began as a student teacher, and a middle school in our school district fired the principals and did away with half of the staff with new personnel and converted an elementary school to a charter school. With the "No Child Left Behind Act" being implemented, highly qualified teachers will think twice before teaching in low-performance schools Hardman and Dawson (2008). Also, highly qualified teachers that have their choice of schools will avoid schools that face danger of a faculty overhaul Sanders (2008).

The author was taught and trained using traditional teaching practices, where the curricula were the focal points of the instruction and students studied individually, and teach the entire class as a whole, and at that time, these were considered the best and effective teaching practices. The author taught lessons and activities to the entire class and that the students were in class to learn. The students were given homework assignments, provided afterschool activities for the students would receive additional help in reading, math, and English, and provided classroom aides that spoke Spanish and the Asian languages. Some of the consequences, to name a few, for not learning the content materials students loss their recess, for unacceptable classroom behavior, students visited the principal's office, and students received failure grades for their academic performances. As time marched on, the author felt that there is an invisible wall between the teachers and the students such as no touching of the students no matter what the circumstance – except if the students are in imminent danger, and one of the poignant questions the author kept asking is there must be a better way of teaching the students, and where the teaching practices will be useful in assisting the author's advanced students, students with

learning disabilities, Afro-American, Hispanic, and Asian students. The author's students presented a challenge and also an opportunity because all of the students in the classroom have different learning styles and techniques, and the author's a major task is to provide the appropriate instructional models that will foster students learning and by implementing the teaching models, the author would improve his personal teaching practice.

Teaching and Learning Foundations presents a new paradigm for effective teaching, which consisted of three major components for effective student learning. First, by understanding the concept of multiple intelligences and secondly, by comprehending the process of students' learning, where teachers would be able to implement proper teaching strategies for helping their students learn effectively. And finally, by utilizing the concept of reflection, the students would learn effectively and teachers would improve their personal teaching practices. Phan (2009) indicated that reflective thinking practice and achievement goals are important factors contributing to the prediction of students' academic success. Another item of importance to effective teaching is for the teachers having confidence in their ability to promote student learning, which was related to student achievement in a RAND corporation study Hawkins (2009). In addition, teachers are realizing that the teaching models are student friendly, holistic, student oriented, and where students' cooperation is valued.

### **Multiple Intelligences**

The first key component in effective teaching is for teachers to understand the basic principle of teaching, where the students have different ways of learning. For example, in Section 4, Different Kinds of Smart: Multiple Intelligences, presented in the video, "The Learning Classroom: Theory into Practice" (Detroit Public Television and Mort Crim

Communications, 2003), there are eight learning processes listed and these are bodily-kinesthetic (learning through movement), interpersonal (learning through others), intrapersonal (learning through feelings), linguistic (learning through spoken and written words), logical-mathematical (learning through reasoning and problem solving), musical (learning through music), naturalistic (learning through classification), and spatial (learning through visual perception). McKenzie (1999) suggested the ninth intelligence, which is existential (learning by seeing the "big picture" such as "Why are we here?"). By implementing theses intelligences, teachers can identify their students' strengths and be able to accommodate their students according to their orientation for effective learning.

## **Teaching Models**

The second key component in effective teaching is for the teachers to understand the various teaching models in order to focus on the students' learning process, and later select and implement the appropriate teaching models that will enhance their students' learning. Joyce, Weil, and Calhoun (2009, p. 25) indicated that the teaching models are grouped into four families, and these families are information-processing family, social family, personal family, and behavioral systems family. These four families have one thing in common: the teaching methods will affect the students' learning process. Within the four families, there are several teaching models that will accommodate the different students' learning styles, and where teachers can focus on their students' need to determine and select the appropriate teaching models.

### Information – Processing Family

In this particular family, the focused is on the learner's thinking process and how the learner obtained the information. The author reviewed the Inductive-Thinking Model – learning and developing students' thinking process, Concept Attainment Model – learning a new process from current assignment, Picture-Word Inducative Model – seeing and learning to read, Biological Science Inquiry Model – learning and developing a logical thinking process, Inquiry Training Model – learning and developing creative thinking process, Mnemonics Model – learning by memorization, Synectics Model – learning and developing the problem solving process, and the Advance Organizer Model – learning and understanding the reading and discussion process.

The author selected the Picture-Word Inductive Model because it has a multidimensional curriculum, which is ideal for the English learners and students with learning disabilities, who are struggling in reading and writing Joyce, et al. (2009, p. 143).

A lesson plan using this model is that students would read signs and posters and write about their walk around the neighborhood. To illustrate, a teaching strategy is having the class walk around the neighborhood, and while the author is pointing to the names on signs and posters, the advanced students would take pictures of the signs and posters. With the pictures, the author and students would list the words on signs and posters, and later, the author would have the students write three sentences about the objects in the pictures for three minutes. Eventually, the author's "fun" activity is by showing the pictures before the class ends for the day and have the students read the words on the signs and posters, where students must read correctly before they can start lining up by the door. The English learners and students with learning disabilities

would be learning about their neighborhood and be able to read, speak, and write sentences quickly and increase their vocabulary.

The author would include another teaching strategy by increasing the activity through the Concept Attainment Model, an evaluation tool to determine if important ideas introduced earlier have been mastered, and where the students would learn a new concept from the present activity Joyce et al. (2009, pp. 114-116). The lesson plan using this model is for students, who completed their assignments, would sketch the neighborhood and place the signs and posters at proper location. This model would give the advanced students a challenge and provide an incentive for the rest of the students to make an effort to reach this level. This model also has a unique, salient feature by providing the students a process to develop their intrapersonal intelligence that correlates to their school character building such as trustworthiness, fairness, respect, caring, responsibility, and citizenship without the author having to make another lesson plan.

By implementing this model and adding the concept of multiple intelligences, listed in Section 4, Different Kinds of Smart: Multiple Intelligences, and presented in the video, "The Learning Classroom: Theory into Practice" (Detroit Public Television and Mort Crim Communications, 2003), effective learning is taking place. For example, the author's students are learning through their individual ways for learning such as learning through movement – walking around the neighborhood and taking pictures (bodily-kinesthetic), learning through feelings – barking dog behind a chain-linked fence running towards the students or butterflies flying around the students making their way from flower to flower (intrapersonal), learning through spoken words – "The address of his house is..." or "What is the color of the cat under the car?" or "The word on this poster is..." and "This street sign reads..." (linguistic), and learning through visual perception – making a sketch of the neighborhood (spatial). In addition,

the English learners and students with learning disabilities would also increase their verbal and written vocabulary – learning through the written words (linguistic) and writing skills – learning through movement (bodily-kinesthetic).

### Social Family

Cooperation between students is found in this family, and the author reviewed the Partners in Learning Model – learning from each other, Group Investigation Model – learning and developing students' investigative process in a large group setting, Role Playing Model – developing acting skills in order to learn about proper behavior, and the Jurisprudential Inquiry Model – learning about social problems and public polices.

The author selected the Partners in Learning Model because of the cooperative learning process where students work together and learn from each other. This model provides the opportunity for the students to learn all curriculum areas and benefits all students of all ages Joyce et al. (2009, p. 29). In addition, there are positive results for implementing this teaching model; it generates motivation, produces cognitive and socialization, increases positive feelings, and increases learning capacity to work productively when working together Joyce et al. (2009, p. 268). Lehigh (2008) argued that mastering skills such as English, math, science, history, analytic and workplace skills means learning to think critically and creatively, and work collaboratively. This model would provide and develop the students for building their school character of caring, responsibility, and citizenship.

The lesson plan is for the students to count the number of chocolate-covered almonds, and multiply the total number of almonds by the number of students present in the classroom. A teaching strategy is having the English learners and students with learning disabilities partner

with the advanced students, and the advanced students will also be mentors to the English learners and students with learning disabilities.

The author would include another teaching strategy by increasing the activity through the Concept Attainment Model, an evaluation tool to determine if important ideas introduced earlier have been mastered, and where the students would learn a new concept from the present activity Joyce et al. (2009, pp. 114-116). The new teaching model is for the students to classify the candies by colors. This model would give the advanced students a challenge and provide an incentive for the rest of the students to make an effort to reach this level. This model will provide students the opportunity to develop their school characters of caring, responsibility, and citizenship.

The second key component in effective teaching in effective teaching is by including the concept of multiple intelligences. To illustrate, the author's students learn through their individual ways such as comprehending the lessons by learning through movement – counting, multiplying the number of chocolate-covered almonds, and later classifying the candies by colors (bodily-kinesthetic), learning through interaction with other students – partnerships (interpersonal), learning through problem solving – obtaining correct answers and solutions (logical-mathematical), learning through the spoken word – counting (linguistic), learning through classification – classifying the chocolate-covered almonds by colors (naturalist).

This model would affect the teacher's participation in the classroom, and this is a straight forward teaching technique. The author would announce and write the instructions on the overhead, let the students' partner, distribute the chocolate-covered almonds to the students, walk around the classroom, observe students working on their assignment, provide feedback to

the students, and assist the English learners and students with learning disabilities in completing their assignment.

### **Personal Family**

It is an area where learners have the opportunity to learn about themselves, and the author reviewed the Nondirective Model – learning and developing the cooperation process between teachers and students, and the Enhancing Self-Esteem Model – learning and developing confidence.

The author selected the Nondirective Teaching Model because the students will greatly benefit from this model such as the acceptance, empathy, and understanding from the author Joyce et al. (2009, p. 338). From the video, "The Learning Classroom: Theory into Practice" (Detroit Public Television and Mort Crim Communications, 2003), Section 5, Feelings Count: Emotions and Learning, the teacher makes the effort to discuss matters with the students so that the students will know that the teacher wants the students to learn in a safe environment.

The behavior of the schoolyard bullies is an ongoing problem, and a study conducted by the Committee for Children victims of bullying in the elementary schools indicated that 78% of children in Grades 3-8 experienced bullying within the previous month and about 5% to 6% experienced severe bullying Osterman and Kottkamp (2004, p. 119). Harding (2009) further explained that violence is a critical social characteristic of disadvantaged neighborhoods. Some of these schoolyard bullies have older brothers or relatives associated with street gangs in the neighborhood or have a family member in the prison system.

The lesson plan employing this model is that the students will communicate with teachers or school administrative members whenever confronted with schoolyard bullies and be able to discuss the incident with the homeroom teacher.

The author would increase the activity through the Concept Attainment Model, where the students would learn a new concept from the present activity Joyce et al. (2009, pp. 114-116). In the students' journal, the students would write about the incident and how they felt about encountering schoolyard bullies and reflect on what they have learned about the encounter. This model would also provide and develop students' school character of fairness, respect, trustworthiness, caring, responsibility, and citizenship.

By using this model and adding the concept of multiple intelligences, there is effective learning. Case in point, the author's students are learning through their individual ways such as learning through interacting with schoolyard bullies (interpersonal), learning through feelings (intrapersonal), learning and understanding the spoken and written words (linguistic), learning and developing the problem solving process (logical-mathematical), and learning and developing visual perception about the behavior of schoolyard bullies (spatial).

By using this model, the author assumes the roles of facilitator and reflector Joyce et al. (2009, p. 333). A facilitator's role is to keep the discussion moving until there is a solution, and a reflector's role is for the discussion to focus on the problem. Thus, the author would open the discussion with the class on the differences and consequences between confronting and avoiding schoolyard bullies. The author would list the students' input on the board and further discuss each input with the class.

### **Behavioral Systems Family**

In this family, the learner learns to make self-correction and the author reviewed the Mastery Learning Model – learning and developing concepts through reading and activities, Direct Instructional Model – learning directly from teachers' lessons and activities, Theory-to-Practice Model – learning and developing skills through practice and coaching, and the Simulation Model – learning and developing roles in real-life situations.

The author selected Mastery Learning Model because students are able to work on their own and at their own pace, develop content mastery, self-initiation and self-direction of learning, foster the development of problem solving, and encourage self-evaluation and motivation for learning Joyce et al. (2009, p. 359). In this model, the students would be building their school character of trustworthiness, respect, caring, responsibility, and citizenship.

A lesson plan using this model is: At group tables, the students draw and color the animals they touched at the country fair. The teaching strategy is to take the students on a field trip to the county fair.

The author would increase the activity through the Concept Attainment Model, where the students would learn a new concept from the present activity Joyce et al. (2009, pp. 114-116). In the students' journal, the students would write about their field trip to the county fair and how they felt touching the animals, and reflect on what they have learned about the field trip.

By using this model and adding the concept of multiple intelligences, there is effective learning. For example, the author's students are learning through their individual ways such as learning through movement - walking through the fair grounds and touching the animals at the livestock barn (bodily-kinesthetic), learning through interaction with others – buying snacks at various food booths and asking questions to animal exhibitors about the animals (interpersonal),

learning through feelings – liking or disliking touching the animals (intrapersonal), learning through the spoken and written words – listening the to various announcements on the PA system and reading the different types of bulletins and posters describing the county fair and events (linguistic), learning through reasoning – counting the number of lambs, as the lambs frolic here and there, in the exhibit area (logical-mathematical), learning through categories – sheep grouped at one area of the barn, goats are grouped in another area of the barn, and chickens are grouped in another area of the barn (naturalistic), and learning visually – seeing the entire county fair full of people and animals (spatial).

This model would affect the teacher's participation in the classroom, and this model is a straight forward teaching technique. The author would announce and write the instructions on the overhead, walk around the classroom, observe students working on their assignment, provide feedback to the students, and assist the English learners and students with learning disabilities in completing their assignment.

### Reflection

This is the third key component to effective student learning, and where the teacher would improve personal teaching practice, which is through reflective practice. It is a method that facilitates improvement in performance (Osterman and Kottkamp (2004, p. 158). York-Barr, Sommers, Ghere, and Montie (2006, p. 16) described the reflective educator as: a person who stays on focused on education's main purpose, which is student learning and development, a person who assumes responsibility for his/her own learning, a person who demonstrates awareness of self and others, and a person developing the thinking skills for effective inquiry. Reflective practice also provides direction for the teacher in a different role, where the teacher

becomes a facilitator, a person keeping discussion moving until there is a solution, and where the teacher is considered a change agent.

Reflective educators commonly use direct observation to look at their behavior and learn about their own practice, and the use of videotapes is a tool for best practices. York-Barr et al. (2006, p. 192) suggested that videotaping is a means as an objective record of what actually took place in a specific instructional context, where the purpose of using this method is to specifically examine and reflect on instructional practice, and not to evaluate. In essence, the educators increase their understanding of reflecting on the video, and where educators become more aware of habits and mannerisms that educators are now trying to change.

Videotaping is able to address some of the issues. Educators would be able to discover how they are reacting with their students. This would also give the educators the opportunity to reflect on how to improve their teaching and how to make their lessons more interesting. Rosaen, Lunderberg, Cooper, Fritzen, and Terpstra (2008) indicated that videotaping enable educators to write more specific rather general comments about their teaching, and helps educators to revisit, notice, and investigate how they facilitate classroom discussions.

Another aspect of using reflection is the outreaching process to students' families.

Kyle, McIntyre, Miller, and Moore (2005) suggested that teachers that visited their students' home over a period of time and reflected after each family visit, focusing their reflection on what took place, what was learned about the family, and what this new knowledge would be in teaching that particular child, the teachers' reflections assisted in their evaluation on whether and how they were reaching that goal of academic achievement, and what possible modifications might be. This would be an effective way of understanding the students' point of view and their environment, and eventually, the students and their families would realize that the teachers really

do care about the students and students' academic learning as a whole. Also, it will promote a sense of trust between the students and families and teachers. In the long rung, families will be open to assist teachers to fulfill teachers' goal of effective student learning.

### Conclusions

There are three major components for effective student learning, and these are the understanding of the concept of multiple intelligences, comprehending the process of students' learning, and utilizing the method of reflection. Theses three major components established the foundation for effective students' learning. If these three major components were implemented at the elementary school level and the teachers were able to identify their students' learning strengths and developed their students' learning strengths throughout their students' formal education process, there might be less high school dropouts and more students graduating high school because of effective students' learning.

Also, in using the Concept Attainment Model, there is the evaluation process that would let the teacher know if the students are doing well in their work and a flag for the teacher to note that the students need additional help. And by using this model, the students would build and develop their school character of trustworthiness, fairness, respect, caring, responsibility, and citizenship.

#### References

- Blake, S. (2008, April). A nation at risk and the blind men. *Phi Delta Kappan*, 89(8), 601-602. Retrieved from http://proquest.umi.com.proxy1.ncu.edu
- California Department of Education, 2004-05 Dropout reporting: Dropouts by grade, ethnicity. Retrieved from <a href="http://dq.cde.ca.gov">http://dq.cde.ca.gov</a>
- California Department of Education, 2007-08 Statewide summary data California department of education report: Dropouts by grade and ethnicity.

  Retrieved from <a href="http://dq.cde.ca.gov">http://dq.cde.ca.gov</a>
- Detroit Public Television and Mort Crim Communications. (Producer). 2003. *The learning classroom: Theory into practice*. Available from <a href="http://www.learner.org/resources/series172.html">http://www.learner.org/resources/series172.html</a>
- Dillon, S. (2008, October 13). Under 'No Child,' even solid schools falter. *New York Times*, p. A1. Retrieved from http://proquest.umi.com.proxy1.ncu.edu
- Joyce, B., Weil, M., Calhoun, E. (2009). *Models of teaching* (8<sup>th</sup> ed.). Boston, MA: Pearson Education, Inc.
- Harding, D. J. (2009, December). Collateral consequences of violence in disadvantaged neighborhoods. *Social Forces*, 88(2), 757- 785. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- Hardman, M.L, & Dawson, W. (2008, Winter). The impact of federal public on curriculum and instruction for students with disabilities in the general classroom. *Preventing School Failure*, 52(2), 5-12. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- Hawkins, V. J. (2009). Barriers to implementing differentiation: Lack of confidence, efficacy and perseverance. *New England Reading Association Journal*, 44(2), 11-19. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- Kyle, D. W., McIntyre, E., Miller, K. B., & Moore, G. H. (2005, Spring). Family connections: A Basis for teacher reflection and instructional improvement. *School Community Journal*, 15(1), 29-51. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- Lehigh, S. (2008, November 19). Teaching students 21<sup>st</sup>-century skills. *Boston Globe*, P. A19. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- McKenzie, W. (1999). It's not how smart you are, it's how you are smart! Howard Gardner's theory of multiple intelligences. Retrieved from http://surfaquarium.com/MI/mi.htm
- Osterman, K. F., & Kottkamp, R. B. (2004). *Reflective practice for educators: Professional development to improve student learning* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Corwin Press.

- Phan, H. P. (2009, May). Exploring students' reflective thinking practice, deep processing strategies, effort, and achievement goal orientations. *Educational Psychology*, 29(3), 297. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- Quaid, L. (2009). Obama puts \$3.5B toward fixing failing schools. *USA TODAY*. Retrieved from <a href="http://usatoday.printhis.clickability.com">http://usatoday.printhis.clickability.com</a>
- Ravitch, D., & Cortese, A. (2009, September). Why we're behind: What top nations teach their students but we don't. *The Education Digest*, 75(1), 35-39. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- Rosaen, C. L., Lundeberg, M., Cooper, M., Fritzen, A., & Terpstra (2008, September/October). Noticing noticing: How does investigation of video records change how teachers reflect on their experiences? *Journal of Teacher Education*, 59(4), 347. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- Sanders, A. (2008, October). Left behind: Low-income students under the no child left behind act. *Journal of Law and Education*, 37(4), 589-597. Retrieved from <a href="http://proquest.umi.com.proxy1.ncu.edu">http://proquest.umi.com.proxy1.ncu.edu</a>
- York-Barr, J., Sommers, W. A., Ghere, G. S., & Montie, J. (2006). *Reflective practice to Improve schools: An action guide for educators* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Corwin