

CHAPTER III: PROGRESS REPORT

The six years since the last full WASC accreditation have been marked by continuous change and growth in the city of Murrieta, the Murrieta Valley Unified School District and Murrieta Valley High School. The first full WASC visitation occurred in 1996. The 1996 WASC Visiting Committee identified seven key areas as follows: *Instituting Systematic Assessment Process, Utilizing Schoolwide Assessment Results, Minimizing the Impact of Rapidly Rising Student Enrollment, Formalizing of Decision-making processes, Developing Academies, Enhancing the Library Collection and Developing a Curricular Path for All Students*. By the midterm visitation, significant progress was made in these areas according to the 1996 WASC Visiting Committee Chair, Dr. Jeff Davis. Nevertheless, MVHS stakeholders continue to address these issues in light of changing community demographics and federal, state and district accountability mandates. The following narrative is a description of our continuing school improvement efforts:

Key Area #1: Assessment Process

WASC Visiting Committee Recommendation

Uniform procedures are needed to properly evaluate student progress towards attainment of academic content standards.

MVHS School Improvement Objective

To have common departmental assessments, in addition to having teachers use a variety of assessment strategies to allow students to demonstrate acquisition of content standards.

Progress Towards Improvement/Reform

Murrieta Valley High School has made significant progress in the development and implementation of uniform, standards based assessments that measure student attainment of content standards. Concentrated efforts have been made to align curriculum, instruction and assessment. Common semester exams are in place in the English, social science, science, mathematics and foreign language departments. Teams of teachers created the exams after analysis of the content standards and California Standards Test Blueprints (when applicable). This process allowed faculty to reach consensus on the key standards for each subject and facilitated curriculum mapping for each course.

Common semester exams have been in place for several years in mathematics and science. They were used for the first time in English and social science in 2002-2003. Based upon student outcomes, the exams in social science and English will be “fine tuned” next year. MVHS will be evaluating how closely performance on the exams correlated with performance on the California Standards Tests.

CAHSEE tested objectives are integrated into the freshman and sophomore English courses and via the algebra courses. On the March 2003 administration of the CAHSEE, 91% of the sophomores passed the English/Language Arts test and 78% passed the

mathematics. Ninety-four percent of the class of 2004 has passed the English/Language Arts portion of the CAHSEE. Eighty-four percent has passed the math component. Eighty-three percent of the class of 2004 has successfully completed both tests.

MVHS believes that it is important to address the content standards, ESLR's and statewide accountability requirements by using a variety of assessment strategies. The school seeks uniformity on summative assessment, but encourages variety and creativity in interim assessments. In English, students are required to produce a research paper each year. This project is a collaborative effort with the Social Science Department in the junior year. The topics for the papers come from the US History standards and the history teacher assists with content. The English faculty teaches and supports the research and writing process. The results of the research paper, common final and the students' year end grade are the measures used for the district's Multiple Measures Compensatory Matrix (hereafter referred to as Matrix). In mathematics the Matrix scores are derived from the final exam score and the final grade. Benchmarks and exam questions are all standards based. The final exam score is broken down into two separate scores: multiple choice and open-ended response. Site based year-end assessment results are recorded in the district database. STAR results are also loaded into the database. The data is utilized to monitor student progress and to help identify students that need special services (i.e. academic intervention, GATE, AP).

Several staff development sessions for teachers have been spent on further developing higher order questioning strategies. Bloom's taxonomy is used as the primary point of reference. Emphasis is made on teacher designed assessments that address the higher levels of the taxonomy. It is a challenging task to assess topics in-depth in addition to covering the breadth of the standards in each content area. Students become more Analytical Thinkers and Knowledgeable Communicators via oral presentations, collaborative activities, labs and research based projects. Writing is stressed and required in all curricular areas.

2000 Midterm Review by Dr. Jeffrey Davis:

MVHS developed and now utilizes a uniform school-wide assessment process anchored by a Multiple Measures Compensatory Matrix (Matrix). The assessment system, based on the Matrix, represents the fulcrum of a coherent ESLR centered education infrastructure and standards-driven curriculum focused on systematic improvement of student performance based on established norms and benchmarks.

Key Area #2: Utilization of Schoolwide Assessment Results

WASC Visiting Committee Recommendation

Objective criteria are necessary to drive curricular, program and resource decisions.

MVHS School Improvement Objective

To have district and site leaders use assessment data to make informed decisions related to adjustments in curriculum, services provided and resource allocation.

Progress Towards Improvement/Reform

At MVHS, data is systematically collected, analyzed and disseminated to allow stakeholders to evaluate student outcomes, programs and resource priorities. The principal and school leaders consider both site results (grades, common exams, writing rubrics) and standardized test results (STAR, AP, SAT) for purposes of program evaluation.

MVHS has not consistently met its annual API growth target. Targets were not met in 2000 or 2002. The target was well exceeded with a 24-point growth in 2001. In 2002-2003 members of the administration team worked closely with the four core departments to diagnose weaker standards clusters on the California Standards Tests. CST Blueprints were also reviewed with faculty. When the common semester exams were revised (math) or created (English, social science), the CST results and Blueprints were strong considerations. Interim benchmarks and exam questions based on the standards were established and the core departments more fully aligned their curriculum to the California Standards Tests. The efforts of the faculty and students bore fruit on the 2003 administration of STAR. Based upon CST, CAHSEE and CAT-6 results, MVHS expects that its API will be about 30 points higher than it was in 2002. Assessment results impact curriculum and instructional practice.

In mathematics, MVHS elected to switch from a two-year algebra program for less advanced students and replaced it with a double block. These students will now have 99 minutes of algebra daily throughout the year. This change was made after examination of grades and standardized test data from Algebra 1B students over several years. Data for the new program will be gathered when available.

Based upon assessment data and the CST Blueprints, math teachers changed the order of some of their topics in the CPM math program to make sure key concepts were all taught prior to testing. Social science teachers have changed their unit pacing in response to assessment results. English has addressed strengths and weaknesses specific to each grade level. English teachers are responsible for teaching no more than two grade levels. Typically, teaching assignments are in the standards grouping 9-10 or 11-12. Science teachers have also modified their instructional approaches in light of testing results. For example, lessons were reworked after it was discovered that Biology students performed relatively poorly on cell biology items.

Prior to the advent of CAHSEE, MVUSD conducted its own proficiency examinations in reading, writing and mathematics. Tutorials and intervention courses were funded based upon student needs. To date, no student who has satisfied regular course requirements has failed to graduate as the result of not passing the proficiency examinations.

Non-academic data such as the ‘Healthy Kids’ survey, senior survey and discipline and attendance records are a tool used to determine student support needs. The PLUS program, PALS, SARB interventions, Unity Forums and support groups have addressed student personal / social needs.

Renate Jefferson, principal at MVHS developed her “5squared” goals for the school in the fall of 2002. Stakeholder groups, such as the School Site Council, lead teachers and administration team, consider these goals when planning programs and resource allocations. Each goal has an assessment component and is tied to the ESLR’s and action plan. MVHS aspires to have all students meaningfully connected to the school and achieving on a high academic level. Those two elements are crucial to the overall success of the school.

2000 Midterm Review by Dr. Jeffrey Davis:

Formal and informal data on student achievement and student projects are routinely gathered. Curriculum development and revision, the provision of services and the allocation of resources grow out of a systematic focus on continuous assessment of results. Teachers use the assessment data to stimulate innovative instructional practices. The assessment results are used to determine the qualification requirements and placement of teaching staff, as well as decisions regarding professional development.

Key Area #3: Minimizing the Impact of Rapidly Rising Student Enrollment

WASC Visiting Committee Recommendation

Regardless of rapid growth, MVHS needs to continue to maintain a safe campus, provide quality academic and co-curricular programs and meaningfully connect students to the school.

MVHS School Improvement Objective

Use innovative strategies to manage significant annual enrollment growth and maintain a high quality school program.

Progress Towards Improvement/Reform

The MVHS CBEDS enrollment peaked at 4223 in 2002. Since the last WASC accreditation, the school has continued to meet the challenges of rapidly increasing student enrollment. Enrollment is expected to decline to between 3700 and 3780 students in the fall of 2003. The current enrollment of 3650 is beneath that projection. The district’s new high school, Vista Murrieta, opened its door to freshmen and sophomores in August of 2003. MVHS is proud of the innovative ways it has confronted the issues associated with becoming such a large school in a relatively short period of time. The only times that it is readily apparent that the school is so large is during passing periods and breaks.

To support teachers and student services, we presented a staffing plan to the district that included a deputy principal, dean and an additional assistant principal and counselor so that each grade level would have two counselors and an assistant principal. Due to the uneven student enrollment numbers per grade level, we stayed with the alpha order and became university teams for a cohesive team approach. The thought behind the additional staffing was also to create a transition assistant principal and counselor who would later help to open Vista Murrieta High School. The additional staffing allowed for the student support ratio of 525:1. Additional clerical, campus supervision and custodial positions were added as well. For the 2002/03 school year, MVHS added forty new staff members to maintain our contract sizes of class size reduction for Freshmen in English and Math and 31 students in the core classes with an average of 38 students maximum distributed over all classes. While we are a large school, we have not increased class sizes or reduced student support. The district supported all staffing plans to allow for maximum possible student support.

When it was time to determine the Vista staffing needs, a counselor and assistant principal began to build that team. However, the district again supported and approved our 2003/04 staffing plan. We have kept our administrative configuration but were now able to build four grade level learning teams with a learning director and two learning coordinators, with a dean, deputy principal and principal to serve the new student population of 3,700 to 3,750. This has reduced the student support ratio to approximately 463:1.

Facilities expansion has also kept pace with enrollment growth. A two story "12 pack" of classrooms was added next to the English wing. It houses foreign language classes. Six "permanent" portables were built adjacent to the pool in 2002. These will house primarily social science classes in 2003. Temporary portable classrooms were added in front of the Performing Arts center as need arose. Eight of those have now been removed as the result of the opening of Vista Murrieta and the coinciding enrollment drop.

In addition to added personnel and facilities, creative scheduling also allowed MVHS to accommodate the enrollment growth. MVHS is on a seven period schedule with 6 rotating blocks and a standard period of 50 minutes taught daily. Teachers teach six periods, students are enrolled in seven periods. Seniors may take five classes if they have maintained satisfactory academic progress. The additional period was created to keep the blocks to 100 minutes and to give the students a wider offering of electives, including remediation for students who had not yet passed proficiency or CAHSEE examinations. Most of our students take advantage of the increased elective offerings to prepare themselves for post high school education or job training. Recent elective additions include Engineering, Shakespeare, Mythology, Advanced Sports Medicine and Web Design. The seven period day was evaluated in 2002/03 and we found that there was greater benefit for students to learn in the seven periods rather than six longer blocks. After a series of meetings and review of test scores, our graduation requirements were aligned with the increased number of credits students earned with the seven period day. Beginning with the class of 2007, all students will be required to complete a third year of

math and science. District graduation requirements were increased from 230 to 250 credits.

For 2002/03, the peak enrollment year, students were on a staggered schedule. Upper classmen attended school from 7 AM to 2 PM; underclassmen attended school from 8:47 to 3:47 PM. This allowed the school to accommodate its housing needs and reduced the traffic flow. The staggered start times had an effect on staff cohesion, however, since staff development and staff meetings were held at two different times as well. The 18 district wide minimum days were helpful for staff development but again common time was cut short since 50% of the staff were on an earlier schedule. The staggered schedule also presented a real challenge to the athletics department because practices began later. However, the goal to provide a safe environment with increased learning opportunities and to accommodate the peak enrollment growth was definitely reached. For the 2003/04 school year, the school will revert to the more familiar seven period schedule with students attending school from 7:30 AM to 2:30 PM.

With an expanding number of teachers and a seven period schedule rather than a traditional six period schedule, MVHS has added programs and courses that benefit a wide array of students. Elective offerings increased by nearly 30 courses. This allows students wider diversity in choices. AVID was added in 2000 and AP courses and sections have been added. An innovative engineering program has been established as well. Being large has its logistical challenges, however it has allowed the school to offer more academic opportunities for students.

We also addressed school culture and activities concerns during enrollment expansion. We increased student support activities with more activities, such as monthly UNITY forums, link crew (upper classmen mentoring freshmen) and Peer assistance leaders (PALS) who offered conflict mediation. HAWK WATCH addressed student safety issues. We offered numerous opportunities to praise student achievement: “New Kids on the Block” luncheons, “Wind beneath my Wing” teacher recognition lunches, award ceremonies. Counselors provided grief counseling, anger management, smoking cessation counseling and other asset building programs and activities to combat the tendency for the larger school to become more impersonal. ASB planned more activities. All of the dances were well attended (For example, 1200 students attended the homecoming dance) and the formal dances were truly done on a grand scale. Several student rallies were held twice to accommodate all of the classes who signed up and were raucous and enthusiastic. ASB leadership, Student tutors and “Student helping other Students” visited elementary schools to forge connections with the lower grades.

2000 Midterm Review by Dr. Jeffrey Davis:

MVHS is a modern well-equipped high school. However, the modern facilities with state-of-the-art features are still becoming increasingly inadequate in light of the increase in student enrollment. The school community is working hard to secure the funding to build an additional

high school. In the meantime, the MVHS staff have done several things to help deal with increasing enrollment. These actions have included:

- Implementing a two lunch bell schedule
- Adding portable classrooms
- Implementing a new school wide block schedule
- Adding additional staff

Key Area #4: Decision-making Processes

WASC Visiting Committee Recommendation

Formal methods are necessary to ensure that communication is maintained with stakeholders and that education remains a collective district / school / family student partnership.

MVHS School Improvement Objective

Establish formalized decision-making processes and communicate them to all stakeholders.

Progress Towards Improvement/Reform

Over the past three years, the decision making process and communication with all stakeholders has improved but remains a focus area for MVUSD and MVHS. The philosophy of the district support center is to communicate and support site based decisions. When an issue arises at the site, the principal discusses the issue with the administrative team and lead teachers. Site leadership then informs the appropriate support personnel at the district and if it is an issue that needs to be brought to the senior cabinet and board, for example, an Assistant Superintendent or director will bring the issue forward. The site receives feedback/input and often a site decision is made with the leadership team or board approval comes forward. For example, beginning with the class of 2007, our graduation requirements were changed. From the leadership team at the site came the proposal to change graduation requirements from 230 credits to 250 credits, with a third year of mathematics and science added to the basic requirements. After initial discussion with the assistant superintendent of instruction, a discussion at the site that involved all stake holders including lead teachers, teachers and school site council ensued. The site then sent a formal proposal to the district support center for formal approval. After board approval, we informed all parents, teachers, school site council and students of the increased requirements through parent meetings, newsletters, and staff meetings.

The communication process has never been formalized in the form of a communication chart since each piece of communication often involves different components and departments. The following are communications patterns:

- At MVHS, the learning coordinators meet on a weekly basis to communicate with each other.
- Deputy principal meets with the learning coordinators.
- The learning directors meet with the principal and meet with their learning teams on a weekly basis. Each week, this team, together with the activities director, the

- athletic director and school resource officer meet to discuss school issues, safety issues, instructional issues and student support concerns.
- The head learning coordinator is also a part of the lead teacher meetings so that all issues are communicated.
 - The principal meets with PTSA and school site council to elicit feedback or provide information to both. The deputy principal is the official representative for the school site council.
 - Each Learning Director has specific areas of responsibility and shares concerns or solves problems with appropriate personnel. Each Learning Director then gives that feedback to the leadership team.
 - Principal meets with student leadership team: A Senior Advisory Committee.
 - Staff meetings are held each week for different purposes: Staff meets for general staff information, input and information items; another meeting is set for staff development; a third meeting is set for WASC/instructional leadership and the fourth meeting is scheduled for department meeting times.
 - Lead teachers report back to administration and learning teams. Learning teams also go into the classrooms and have opportunities to learn firsthand about concerns or problems.
 - Formal communication tools include e-mails, telephone, newsletters, meetings, phone caller system to parents, morning announcements and our new cable network that will start up for the 2003/04 school year. The school's web site and individual teachers' web sites provide information. A student reports to the board/community at each board meeting.
 - District communication: Monthly meetings with the superintendent and assistant superintendent for curriculum and instruction. Both meetings are scheduled to be on site and include classroom visits. Curriculum study team meetings, monthly principal's meetings and a monthly administration meeting for all administrators to meet for staff development takes place. Leadership focus for the 2003/04 school year was Covey's *Four Roles of Leadership for Educators*.

2000 Midterm Review by Dr. Jeffrey Davis:

The MVHS school community adheres to the sound tenet that educating students is a cooperative responsibility. The WASC leadership team has synthesized the investigative findings of stakeholders participating in numerous focus groups and monitored the follow-up process for the accomplishment of the school action plans.

Within the school site, decision-making remains a collaborative process propelled by trust, professionalism and high expectations for all students. "Team effort" underlies the decision making process at MVHS.

Key Area #5: Academies Program

WASC Visiting Committee Recommendation

Evaluation of the program was required to determine its viability and role within the overall academic program.

MVHS School Improvement Objective

Determine whether or not the program should continue.

Progress Towards Improvement/Reform

The academies were eliminated to allow the school to more fully focus on other instructional objectives, including the full implementation of aligning instruction and assessment to the course content standards. The academies struggled with a lack of funding and were not attractive to a full cross section of the student population. At the time, requirements of California's new accountability and assessment system dictated a shift in school priorities and there was not a groundswell of support for the academies among any stakeholder groups.

MVHS began looking at the development of a medical science career pathway and the establishment of high school "majors" in 2002. The plan included majors in science, communication, technology and performing arts. This effort received a setback when Mt. San Jacinto College was forced to pull its concurrent enrollment courses from MVHS due to the state budget crisis and legislation. MVHS will continue to explore course articulation and development of partnerships with MSJC. Articulation agreements already exist for the Anatomy/Physiology, Advanced Bio. Med., Accounting I, Computers I and Business Principles courses. With the articulation agreements, students receive college credit for the completion of articulated courses after they have finished 12 units at the community college. MVHS continues to develop curricular paths that allow students exposure to career related courses in conjunction with a rigorous academic program. We have met with the local hospital to develop training for health care. Guidant, a major employee in the valley, will be offering a six week training course on-campus after school. The school's seven-period schedule provides opportunities for students to take applied courses in addition to their academic load.

2000 Midterm Review by Dr. Jeffrey Davis:

The MVHS Academies have been eliminated since the last WASC visitation. The staff made this decision so they could fully concentrate on stakeholder-mandated priority areas.

Key Area #6: Enhanced Library Collection

WASC Visiting Committee Recommendation

Students require sufficient resources to conduct research. In order to meet the ESLR's and prepare for life in this information age, students need research skills and technological competence.

MVHS School Improvement Objective

Build a collection of 30,000 volumes and have modern database access.

Progress Towards Improvement/Reform

The MVHS library and media center is now a first class facility. It houses over 32,000 volumes and features modern technology. In addition to "paper" resources, it features a 30 station computer lab with an LCD projector and 20 additional, networked computer terminals.

Students may access fiction, non-fiction, reference, career, biography and periodical print materials. Non-print materials include periodical databases, reference CD-Roms and the internet. The card collection is available on-line and some of the research databases may be accessed by students at home by utilizing a user name and a password.

Available databases include: EBSCO, SIRS, COIN Career Library, SIRS Renaissance and Scribner's Writers. The library is a popular destination for class groups, who are taught the skill of doing research. Students receive guided practice in-class and then are turned loose for individualized research. Research-based writing activities are a major component of the curriculum at every grade level. Students have the opportunity to perform at a high level due to the number and quality of resources, a professional, certificated librarian and committed paraprofessionals.

2000 Midterm Review by Dr. Jeffrey Davis:

The MVHS staff created a plan in 1994 focused on funding basic library materials for student's recreational reading and research needs. In 1994 there were 6,400 titles in the library. Currently the library has 18,000 titles and is progressing towards their goal of 30,000 titles.

Key Area #7: Development of a Curricular Path for All Students

WASC Visiting Committee Recommendation

Students require a rigorous, sequential curriculum that will provide them with the skill sets necessary for future success.

MVHS School Improvement Objective

To facilitate individual academic success for all students in a rigorous

K-12, articulated curriculum sequence.

Progress Towards Improvement/Reform

During the 2002/03 school year, all departments were able to put their previous planning into place. All courses were aligned with the California Content Standards and core subjects designed interim benchmark assessments and common midterms as well as common finals for the core classes within the discipline. Algebra I, for example, has common midterms and finals. This facilitates a transfer between classes, if necessary, and ensures that uniform teaching of standards takes place. Each teacher is responsible for teaching the standards outlined for the specific discipline. We do not have one hundred percent completion of all subjects and levels within the discipline, but each department is at a review of assessment point in the cycle.

Murrieta Valley High School has a strong curricular path for all 9 through 12th grade students. The mission of the district is carried out at our site: We provide a K-12 sequence of teaching, learning, assessment and support for each student. It is our district-wide goal to prepare each child for college. Students may opt for a number of various pathways after high school, and not everyone may attend college. However, the goal is to prepare students for all post high school options. If students choose to work, they will be well prepared workers who can think analytically and make sound decisions and choices. If a student wishes to attend the two year college, he/she will do well on the placement exams and begin with college level classes or enter a two year training program. If a student wishes to attend a four year university, the student has met all requirements and has been prepared to do well on the SATs and entrance examinations. District wide, we are communicating these goals through vertical alignment:

- High school administrators, teachers and learning coordinators attend functions at the middle school level and elementary school level.
- MVHS is part of the “Red Team” and fosters MVHS pride and spirit at different functions at the elementary school assemblies. For example, MVHS sends a “Say No to Drugs” assembly to elementary schools. Basketball players, cheer leaders, student leaders all put on an assembly to transmit the no drug message but also to let the kids know what they can look forward to when they come to our high school.
- Learning teams go into the middle schools for 8th grade articulation.
- Lower level middle school teachers meet to articulate with core subject area teachers at MVHS.
- ASB invites the middle school leadership students for a day of common leadership sessions.
- In all meetings, from parent meetings to student led activities, the message to students is to do well academically and to prepare themselves for college.

For the past eight years, Murrieta Valley High School has had a partnership agreement with the local community college, Mount San Jacinto, Menifee campus. We completed our goal this year to articulate several courses with Mount San Jacinto (MSJC). New articulated courses would have been drafting, media technology, health, medical dosage, advanced bio-med. With the California budget cuts, MSJC has pulled all concurrent

enrollment and is not able to continue with the articulation process. Therefore, we had to replace our college math classes (College Algebra, College Pre-Calculus and College Calculus) with Advanced Placement Calculus, Math Analysis and Advanced Trigonometry.

Instead of academies, MVHS is in the planning stages for “High School majors.” We will begin with the health major because we have a strong science program that includes Advanced Bio Med, Anatomy and Physiology. We have met with our local hospital, and they will be offering internships to our medical students. Students will rotate through different departments at the hospital in an eight week program. The dosage course and pre-nursing course offered by MSCJ would have rounded out this program. Instead of offering concurrent classes, we will explore the possibility of offering the classes on our campus. This would not be a funded partnership but a matter of convenience and higher enrollment for our students. A second major is planned in the discipline of communication, film and media technology. We will group classes and develop a pathway that will include community partnerships. Since funding for career development/pathways no longer exists, we are planning to develop the majors program and eventually establish four majors: Health, Communications, Engineering and Technology. We have begun a partnership with Guidant Corporation who has been looking for post high school workers for their medical technology plant. The company will come to our campus in 2003/04 and hold 6 week training sessions for students who are interested in getting basic employee training. Students will meet once a week for two to three hours after school. The units will include completing accurate paper work, work ethic, communications with supervisors, collaboration with co-workers, for example. Guidant would give students a certificate of training completion which would not guarantee a position but would certainly be of advantage when a student applies at Guidant. The valley’s high schools have had two meetings with Guidant and expect for the program to be in place in the fall of 2003.

Murrieta Valley High School’s strong academic program and the wide selection of elective courses give students the opportunity to become well educated and well rounded young adults. Besides our academic courses, we offer photo, drafting, ROP auto, ROP technology, ROP Fashion and ROP Retail as well as ROP Small Business classes, Engineering, Sewing/Home Economics, Theater Arts and Fine Arts, sports medicine, theater tech, advanced media productions. Our goal is to provide students with the opportunity to be well prepared so that they can choose the work place or an academic setting. We believe that regardless of their post-secondary educational goals, if students have sound writing, mathematics, reading and analytical skills, they will be successful. SDC/Special Education students have the opportunity to enroll in the workability program. Their coach and advisor is well connected in the community and has provided numerous work and training opportunities for the students.

2000 Midterm Review by Dr. Jeffrey Davis:

To create curricular paths to success the interdependent concepts of “Academic Success” with a K-12 Sequence” have been adopted by the district. The main

curricular thrust focuses on enabling students to successfully participate in a college-preparatory curriculum that is rigorous, sequential and coherent reflecting current pedagogical principles and educational research.