INNOVATIVE PLANNING TO MEET THE FUTURE CHALLENGES OF ELEMENTARY EDUCATION

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ABSTRACT
This article is focused on identifying the current issues in elementary education in the United States. In each of these issues, elementary educators are at the crossroads looking for solutions and directions. Based on the review of literature, the authors pinpoint the upcoming challenges elementary school educators will be facing in the future. Some of these challenges relate to ongoing current issues, and some are anticipated to emerge with the rapid changes in future trends. Innovative strategies for meeting future challenges with the development of culturally responsive elementary schools that enhance student achievement are recommended. A structure of action plan implementation is also suggested.

INTRODUCTION
Elementary education in the United States is presently at the crossroads with difficulties, challenges, and opportunities. This is a golden time that offers opportunities for consideration of positive changes for the continuing development of elementary education. Recent comparisons of international student achievement have indicated that students of the United States are falling behind the students of other advanced countries in some major academic areas. Voices calling for back-to-basics curriculum reform in elementary schools are so loud and clear that elementary educators need to address these issues with sensible strategies. On the other hand, rapid advancement of technology development is urging for innovative instructional approaches with technology integration in elementary education. At the same time, the change in ethnic organization of student populations is changing with increasing number of Hispanic students who come from families needing special assistance. Additionally, recent educational reforms are pressing for educational accountability of school administrators and teachers to generate student achievement. As a result of meeting the required state standards, schools have offered less time for humanistic subjects and extracurricular activities for elementary school students. In this great time of change, elementary educators need to carefully assess the current situation and the different factors that contribute to the confusion at the crossroad. Strategic planning has to be developed with specific goals established to guide the ways of meeting future challenges.

CURRENT ISSUES OF ELEMENTARY EDUCATION TODAY
Some critical issues have emerged in elementary education in the United States. They are increasingly pressing and are the expressed concerns of elementary educators. These issues are related to technology development, diverse student populations, curriculum organization, and instructional approaches of elementary schools.
Technology Impact

Due to increasing use of technology in everyday life, parents of elementary students have urged that the school curriculum include more technology for innovative teaching and learning opportunities. Appropriate computer hardware and software need to be purchased and installed for student advancement in schools (Straub, 2009). Integration of technology in the elementary school curriculum has to be carefully studied for implementation. Technology training sessions need to be scheduled to prepare teachers to use technology effectively. Special technology support teams have to be established to help teachers with technology integration.

Diversity Issues

Reports indicate that the ethnic structure of population in the United States is rapidly changing (Restuccia, 2014). The Hispanic population is rapidly increasingly and is projected to become the largest minority population in fifteen to twenty years. Meanwhile, elementary schools nationwide have been experiencing a continued increase in Hispanic student enrollment. Schools need to be prepared to receive this large population of minority students by understanding their cultural backgrounds, educational needs, and immersions into the mainstream culture. Curriculum specialists and Spanish speaking teachers are involved in planning educational programs that can meet their special needs.

Inclusive Approach

The inclusive approach, with students in special education and students in general education studying in the same classroom, requires innovative procedures to adequately meet the needs of all students. The special education teacher and the general education teacher who work in a classroom with this range of needs and interests need to be well prepared with innovative technology and a wide range of research-based strategies to adequately challenge and meet the needs of all students. The rationale of the inclusive approach is to include students in special education in a family-oriented, positive learning environment (Walther-Thomas, Korinek, McLaughlin, & Williams, 2000). Questions have been raised by parents who are doubtful of how well this approach works and the impact of this approach on student achievement. Educators need to provide solid data to demonstrate the effectiveness of the approach (Lindsay, 2007). Inclusive education presents meaningful opportunities for students with disabilities. It is important to adequately prepare teachers who work in inclusive environments, so they will challenge all students appropriately and provide the wide range of opportunities that students need for a balanced and fulfilling educational experience.

Departmentalization

In most of the elementary schools in the United States, one teacher typically teaches all subjects in the classroom, including language, social studies, mathematics, science and reading. This one-class-one-teacher approach is designed to achieve a family environment that facilitates student learning. Since teachers may not be experts in all academic areas, students may not have the opportunity to learn from the best teachers of specific subjects. Departmentalization in some elementary schools gives teachers opportunities to teach only in their areas of expertise, and this idea has been encouraged to increase student achievement (Chan & Jarman, 2004). Although departmentalization offers extensive
benefits for students, this approach may limit the ways teachers can provide support over time through familiarity with individualized needs and interests. While experts in a subject area are highly beneficial role models, the time limitations for changing classes through departmentalization may impact opportunities to differentiate instruction and personalize opportunities across the curriculum.

The Impact of Educational Reform

While national educational reforms emphasize student academic achievement in language and mathematics, studies in other core subject areas such as social studies and sciences in elementary schools are often not given equal attention. Additionally, other exploratory curricula such as art, music, and physical education also suffer from limited allocations of instructional time in the full elementary school curriculum (Elementary education: Current trends, 2014).

WHAT ELEMENTARY EDUCATION WILL FACE TOMORROW

Future challenges are anticipated in the development of elementary education in the United States. Some of these are continuations of current issues, and some are new. Strategic planning has to be designed to meet these future challenges to enhance student achievement and the quality of the curriculum.

Increased Technology Use in Daily Instruction

Increased technology integration in elementary school instruction demands that students are able to use technology to meet the expectations of class assignments (Cromwel, 1998; West, Waddoups & Graham, 2007). This raises concern about the digital divide and the equity issues of student access to technology. It is the basic goal of American education to provide equal opportunities for all students irrespective of their family backgrounds. Much has to be done to ensure that no child is left behind because of the use of technology in elementary school instruction (Moser, 2007).

Diversity of Pupil Populations

The Hispanic population in the United States, as mentioned previously, is rapidly expanding in size. As immigration creates demographic shifts in the population of the United States, it is important for teachers to design a culturally responsive curriculum that matches the interests and meets the needs of a wide range of ethnic groups. It is particularly important to design educational experiences with sensitivity to the needs of disadvantaged families (Reddy, 2011). This is an absolute challenge to educators, and they need to consistently provide equal educational opportunities to all the ethnic groups. It is important for Hispanic children and the children of families from various ethnic groups to have equal opportunities for academic success, so they can reach their full potential. Of all the academic subjects in school, learning English as a second language is becoming one of the most significant.

Increased Teacher Collaboration

Teachers today cannot manage the rigorous expectations of daily teaching all by themselves. With anticipated innovations in educational philosophy, classroom technology,
instructional strategy, and curriculum redesign in the future, teachers will need to depend more and more on team efforts in which they share their knowledge and skills with others to achieve common goals. For tasks like program redesign and assessment of learning outcomes, teachers almost have to count on close collaboration and division of labor to accomplish their goals.

**Diversity of Teaching Approaches**

The recent call for diverse educational programs to meet the diverse student needs has drawn much attention of educators and community leaders to equal educational opportunity issues. While educators have worked diligently to maximize opportunities with shifts in demographics and trends of immigration, the waves of change are gathering momentum and require new innovations on the educational shore. It is anticipated that the demand for diversity planning in elementary education will become more and more critical.

**High Demand for Basic Curriculum**

Studies have indicated the need for school curriculum that focuses on science and technology to meet the market demand of the future. However, the academic achievement of American students keeps being ranked behind that of many advanced countries in the world. Parents and community leaders are beginning to press their elementary schools to switch back to a “three Rs” curriculum (Bureau of Labor Statistics, U.S. Department of Labor, 2014) to make sure that their children can fulfill the basic expectations, which are essential for success with science and technology in the upper grades.

**Need for Specialization in Academic Areas**

As mentioned previously, most elementary teachers today are expected to teach all the subjects in a class. With increasing expectations for student achievement, the call for departmentalization in elementary schools is gaining strength. Elementary educators need to seriously consider balancing between the one teacher “family style” of learning environment and the subject expertise school organization based on expertise in subject areas (Chan, Terry & Bessette, 2009). Some schools are departmentalized for math and reading, so teachers have the opportunity to concentrate on their areas of expertise. A balanced program is important as teachers develop relationships with their students and scaffold instruction to provide needed support. Time to build a quality relationship is important as teachers demonstrate ways to learn using innovative strategies. When teachers use research-based strategies, students are equipped to explore and gain ideas with teacher guidance and independent exploration. When teachers use innovative technology and creative pedagogical approaches, they are often surprised to see the ways students gain insight through independent exploration of certain topics.

**Student Interest Driven**

Elementary education futurists (Barseghian, February 4, 2011; Cromwel, 1998) have started to explore new approaches to the delivery of instruction at the elementary school level. A new idea is focused on teaching students to learn in areas that they have expressed keen interests in. Innovative elementary educators believe that students need to be encouraged to learn in area in which they are highly motivated and learning activities
need to be designed around their interest to be most effective (Hanover Research, 2012). This new instructional strategy for elementary education is receiving more and more support nationwide. Elementary schools in many states have started trying it out to see the student learning outcome.

**Skills vs Facts**

While the last century of elementary students learned with emphasis on facts and figures as a basis for analysis and further studies, in this new century, students have been taught to learn all the basic skills of academic work. With the advancement of technology, information stored in websites can be retrieved at any time in any format with high level of accuracy. Instead of memorization, the focus of elementary education tomorrow is the master of learning skills with which students can study independently (Barseghian, February 4, 2011).

**Core Curriculum - Standardization**

While the national movement of core curriculum calls for curriculum standardization, the pros and cons of standardization continue to be points of dispute among elementary educators (Khrais, 2014). There are definite educational advantages of core curriculum (Common Core Standards Initiative, 2014). However, this is certainly not a one size fits all situation. Should individual school districts be allowed to retain uniqueness of curriculum development at the elementary level? Many questions about the future of core curriculum remain unanswered.

**INNOVATIVE PLANS TO MEET THE FUTURE CHALLENGES**

Since educators are pushed between current issues and future challenges, elementary educators need to carefully evaluate the direction in which elementary education is heading. Innovative ideas and practical strategies have to be implemented to resolve current issues and to meet anticipated future development. Careful consideration has to be made to ensure that the launching of one strategy does not set back the development of other aspects of elementary education. Students need variety and unique opportunities to develop critical thinking skills and zest for new insights.

**Redesigning the Elementary Curriculum and School Organization**

The elementary school curriculum needs to be redesigned to focus heavily on the learning of the basic 3Rs, so that students develop basic competence as they seek to meet expectations of the Common Core State Standards and various curriculum components (Bureau of Labor Statistics, U.S. Department of Labor, 2014). Studies have evidenced that children’s solid learning experiences in reading, writing, and arithmetic in elementary schools help lay the foundation of their successful academic performance as they move up to higher levels of learning. At the same time, elementary schools need to be reorganized to form teaching teams or departments to assign teachers to teach the subjects they teach most effectively. Redesigning curriculum and reworking school organization are unique ways to enhance the quality of elementary education (Barseghian, February 4, 2011).
Redesigning College Teacher Preparation Programs

Major strides are being made on the educational landscape as administrators and faculty collaborate to redesign college teacher preparation programs in response to issues in elementary schools. In some universities teacher practitioners have the opportunity to choose the subject areas they intend to teach and undergo course preparation to be expert teachers in specific academic areas before they launch into pedagogical training. Only quality teachers will support quality programs (Hardman, 2009). To encourage higher levels of expertise and collaboration, special preparation workshops offer general education teachers and special education teachers opportunities to explore innovations and exchange ideas. These collaborative sessions equip teachers, so they are better prepared to work together in inclusive classroom environments. Simultaneously, student teaching is being enhanced, and teacher education programs are being redesigned to reflect the corresponding course and curriculum changes. Co-teaching and yearlong teaching opportunities prepare teacher candidates to walk into the classroom with greater confidence, expertise, and innovative pedagogical understanding as they face challenges in the classroom.

Forming Professional Learning Communities

To meet the need for increasing teacher collaboration, elementary educators offer professional learning communities as a possible solution (Dufour & Dufour, 2008). In addition to academic planning, the community members can enrich one another by sharing their knowledge, skills, and experiences as part of the professional development activities.

Working with Parents and Communities

While parents and community members continue to expect more of the performance of teachers and administrators, golden opportunities in elementary education now allow teachers and school administrators to build strong working relationships with parents and community members. During innovative programs parents in many elementary schools enthusiastically support school functions by participating in school activities (Bagin, Gallagher, & Moore, 2007). Winning parents and communities is the key to success in elementary education.

Tightening the Teacher Accountability System

Elementary teachers are increasingly aware that the national movement of educational accountability is gaining momentum (Chan, Crain-Dorough & Richardson, 2012). This makes teachers at all levels aware of their own responsibilities as professionals and the importance of demonstrating their teaching ability and learning outcomes. The system of educational accountability calls for teachers to reflect on their own performance and take responsibility for their actions and reputations as they serve as role models for the next generation.

Identifying Factors of Teacher Motivation

The best way to keep a strong team of elementary teachers is to examine the factors that motivate teachers to stay in the teaching profession. Recent studies have identified two significant factors that contribute to teacher sustainability: professional honor and compensation (Boyle, 2014; Thoonen, Sleegers, Oort, Peetsma & Geijssel, 2011). While most elementary schools have established cultures of teacher recognition, salaries of the
teaching profession are still averagely low. State and local school systems need to work hard on improving the monetary and fringe benefits of the teaching profession to keep their best teachers in place.

**Providing Educational Opportunities for All**

Equal opportunity of education for all is more than an American dream. It is an educator’s commitment to the profession (McClure, Wiener, Roza, & Hill, 2008). While we come up with innovative ideas like peer tutoring opportunities to build empathy and teamwork in inclusion classes, we need to continue to follow up with observation and evaluation to check on the implementation issues and achievement outcomes. For many educational innovations, much revision has to be made after implementation to make them work efficiently and effectively. Elementary educators are encouraged to be creative and at the same time to boldly experiment with innovative programs or strategies to make sure that they are achieving their goals.

**IMPLEMENTING THE INNOVATIVE PLANS**

School district administrators need to assume the leadership to achieve consistency and continuity as they implement plans to meet future challenges of elementary education. A step by step approach has to be taken so that teachers and site administrators can follow the process systematically. The components of plan implementation are identified as follows:

**Committee**

A district office committee can be formed to take the overall responsibility of directing the implementation process. The committee can consist of the district office curriculum director, elementary school administrators, and lead teachers. The major task of the committee is to take a participatory planning approach to carefully implement the plans to address elementary education challenges. It starts from assessment of planning needs and ends in the evaluation of the planning effort.

**Needs assessment**

Committee members need to put their heads together to identify the future challenges of elementary education with reference to the situations of their individual districts. What needs to be done to meet future challenges has to be examined. Before determining the needed actions to take, the committee needs to evaluate all available options to see the advantages and disadvantages of different options.

**Prioritizing Needs**

When all the needed actions have been identified to address future challenges, the committee is ready to explore the urgency of each of the needed actions. This is particularly important when the implementation resources are tight. All the needed actions can be prioritized to reflect the different stages of the plan implementation.

**Required Resources**

Any action determined to be taken to address future issues in elementary education
has to be supported by human and financial resources to be successful. The committee needs to seek advice from the human resource directors and the financial directors of school districts to decide on the timing and possibility of plan implementation. The amount of support from human and financial resources could change the priority and timeline of plan implementation.

Timeline

After prioritizing the needed actions to be taken and securing the resources needed for plan implementation, the committee needs to take a practical approach to determine on a preliminary time table for plan implementation. The time table is particularly important because it calls the attention of all the stakeholders to prepare to take actions by playing their required roles in the determined actions. This is also time to decide on concurrent actions and coordination of actions.

Procedures

As part of the procedures, the committee needs to submit its proposed action plan through the superintendent to the school board for approval. School board approval will give the committee a free hand to start implementing the action plan. Some of the components of the action plan may need to be tried out in pilot projects to test if the plan works before full implementation in the entire school district.

Evaluation

An evaluation activity has to be included in the action plan to solicit feedback on the action plan implementation. Before the final phase of plan evaluation, an interim evaluation of the action plan is highly recommended to determine whether the plan is carried out on the right track. Anything detected going the opposite direction can be duly corrected before running to the end of the action plan. Interim and final evaluation feedback will be forwarded to the committee for improving the implementation of the action plan.

CONCLUSION

Elementary education forms the basis of other higher levels of education. It is important that elementary education programs are solid so that children learn in ways that benefit them for the rest of their lives. At the same time, elementary education programs need to be designed and delivered with innovations that attract the attention and motivation of students. New educational philosophies, teaching concepts, and strategies have emerged to add complexity to the upcoming issues in elementary education. Elementary educators need to work together collaboratively as a team to carefully examine the foci of these issues and discover alternative ways to address them. They are encouraged to always look to the future of elementary education and explore new innovations to meet these future challenges. The authors would like to end this paper by citing the Total Quality Management Theory by Deming (1982). The theory focuses on seeking improvement by continuously exploring new ways of getting things done. It is through the spirit of Total Quality Management that we see the prospect of the future development in elementary education in the United States.
REFERENCES


