

Transforming Curriculum

Transforming Curriculum:

Establishing Curricular Democracy

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Abstract

Meeting the needs specified by accountability measures under the *No Child Left Behind Act of 2001* has provided the importance for schools to create innovative systems for curricular management. To meet adequate yearly progress, schools must be able to address standards and assessment changes in an effective manner. This case study chronicles one New Jersey school district's successful implementation of a continuous management system for curriculum and instruction (preK-12). The results associated with this example of continuous curriculum management are congruent with other studies that suggest significant teacher empowerment, increased student performance, and school improvement.

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Curricular Dilemma:

Pressures associated with school performance and accountability has reached paramount levels in the era of *No Child Left Behind*. Highly qualified teachers must deliver the appropriate instruction necessary for students to reach proficiency levels on state standardized assessments. Schools and communities are obligated to provide the tools and systems necessary for teachers to accomplish the task. Similar to the complexity of school structures (Hoy & Miskel, 2001); the task of academic improvement is multifaceted (Tramaglini, 2005). The connection of curriculum to student achievement of goals and related specific objectives is significant (Jacobs, 1997, 2004; Parkay & Hass, 2000). Effective systems of curricular management are necessary to ensure that schools can effectively meet the demands of the ever-changing educational environment.

Long since the *Eight Year Study* conducted in the 1930s suggested the power expansive and integrated curricula (Aiken, 1942); curriculum continues to be an integral part of the educational process. The potency of curricular inputs and outcomes has become immensely powerful in meeting the requirements of *No Child Left Behind*. Subsequently, establishing an adequate system that is flexible, open, and meets the needs of an innovative and ever-changing standards and assessment environment is difficult. Rarely are curricular designs open enough to meet the changes that educators need such as changes in standards or assessment specifications. Most schools utilize traditional curricular designs that are rotational, cyclical (5 years), and include only one person per curriculum being written. In many cases, curriculum work focuses only on the subject areas that are tested. Tanner's research affirmed (1997) that schools tend to "give priority" to the academic subjects that connect with assessments against other academic areas. Curriculum should embrace all educators and provide the framework to be successful.

Additionally, recent development of progressive curricular designs such as curriculum mapping have provided grounded empirical research indicating the successes of progressive curriculum management systems and their significance (Jacobs, 1997, 2004; Kercheval & Newbill, 2005).

In a recent anonymous staff survey in his district, the researcher conducted a survey of 158 teachers who taught at various levels K-12. Questions in the survey focused on the *No Child Left Behind Act of 2001*, curriculum, and instruction. All of the teachers responded that standardized testing was important. In the survey, 79% of the teachers who responded felt increased pressure to do well on standardized testing. Of the 158 teachers, 125 of the teachers said that they looked to curriculum as a guide for improvement on standardized assessment. More interestingly, 93% of the teachers responded that curriculum was distributed to the teacher, the teachers depended more on the textbook than the curriculum document for instructional delivery. Most textbooks do not meet the requirements of the content standards in New Jersey. Wiggins and McTighe (1998, p. 130) wrote:

One of the chief recommendations of the Carnegie report on Secondary Education in 1983 was to demand more primary-source material and more direct experience of how knowledge becomes knowledge. The report discusses the shortcomings of textbooks:

Most textbooks present students with a highly simplified view of reality and practically no insight into the methods by which the information has been gathered and the facts distilled. Moreover, textbooks seldom communicate to students the richness and excitement of original works (Boyer, 1983, p. 143).

Following the textbook can be resistant in school improvement because teachers are not using the curriculum for teaching, instead a textbook's curriculum that is most likely not aligned to standards. Additionally, in the survey 80% of the teachers who did not interact in the curriculum

writing process felt disconnected from the curriculum. 42% of the teachers who felt disconnected replied that the textbook was a major part of their classroom experience. The pattern is evident.

The need for curriculum that is open and collaborative is important to school improvement and student achievement (Jacobs, 2005). Creating a curriculum that includes input from all teachers is rare. One of the researcher's usual questions he asks at workshops and presentations is how many schools include all teachers in curriculum writing? Most teachers are reluctant to raise their hands. Additionally, most teachers also answer the follow up question similarly: how many teachers put the curriculum they receive on the shelf and rely on the textbook? Many teachers raise their hands. With the traditional system of curriculum management coupled with the new forces of assessment and accountability, new curricular processes and designs are needed that address 1) the inclusion of all teachers, 2) communication, and 3) a vehicle to change documents expediently to meet revolving standards and new assessment specifications.

Traditional curriculum management

The effects of curricular designs can be a major influence on the entire school community (Jacobs, 2005). Curriculum management differs in every school district and curriculum development commonly occurs in cycles. Traditional rotational curriculum development employs designs that rotate curriculum development. Figure 1.0 suggests a common curricular rotation in a school district that employs rotational curriculum development in 5-year cycles. Schools rewrite curriculum every 5 years. Some school districts split up the subjects into different cycles (e.g. middle school science year 1, high school science year 2, etc.). Several

questions and problems arise when situations challenge the traditional paradigm. What happens when the standards or the specifications assessed on state tests change?

Figure 1.0
Rotational Curricular Management

Year 1	Year 2	Year 3	Year 4	Year 5
Language Arts K-12	Mathematics K-12	Science K-12	Social Studies K-12	Related Arts, Physical Education, etc. K-12
Year 6	Year 7	Year 8	Year 9	Year 10
Language Arts K-12	Mathematics K-12	Science K-12	Social Studies K-12	Related Arts, Physical Education, etc. K-12

Note: some schools include more than one curriculum per year, in other combinations.

Do schools change curriculum immediately to meet the standards that changed? If so, is this at the expense of other curriculum documents? Because schools have limited budgets that are tightly controlled and long term curriculum budgets cycle curricula, research suggests that the subjects that are tested will be given priority for curricular re-writing and alignment (Tanner, 1997).

Curricular Bottlenecking

“There was a time when teaching-the-test was widely regarded as miseducative and even as a kind of fraudulent practice” (Tanner, 1997, p. 116). However, the reality of conforming to state assessments and changes indicates that schools are apt to give priority to the tested subjects, especially concerning curriculum development. The possibility for all schools to not only achieve on state assessments but also integrate curriculum and deliver a thorough education has fostered the need for a curricular management system that is flexible and open. In New Jersey, standard curricular revision occurs every 5 years (New Jersey Department of Education, 2004). The most recent curricular changes occurred in 2004. Schools have scrambled to re-align curriculum so that instruction meets the requirements of the new standards and assessment

specifications. The need to conform is important, yet traditional curriculum development is not usually a speedy process. The pressure to meet changing standards causes schools to adjust documents immediately. Under rotational curriculum management, schools must delay curricular work in other subject areas causing a backlog of curriculum writing, which schools may never catch up.

Figure 1.1
Curricular Bottlenecking under Rotational Curriculum Management

Year 1	Year 2	Standards Change Assessments Change Curriculum for Assessed Subject Areas Needs Revision		Year 4 or 5
Language Arts	Mathematics	Language Arts	Mathematics	What Subject Area is Next? Are resources still available?
		Bottlenecking Occurs		
Note: some schools include more than one curriculum per year, in other combinations.				

Figure 1.1 shows that language arts and math were revised during year 1 and 2 respectively. However, in year 3 the standards and assessments changed. With new revisions needed, the school pushed all curriculum development back to make room for the realignment, causing a backlog of curriculum development. When other subjects are pushed back to make way for the realignment of curriculum, curricular bottlenecking occurs. When schools then face the dilemma of choosing what curriculum supersedes other curriculums, the outcomes can be devastating. Schools need to embrace all areas across the curriculum for school improvement and student performance, but bottlenecking can cause other subjects to be disconnected from standards and assessment changes.

Continuous Curriculum Management

Curriculum mapping (Jacobs, 1997, 2004) and other alternative curricular design strategies present realistic solutions to the problems with traditional curricular development. Kercheval and Newbill (2005) concluded that curriculum alignment and management was the single most important indicator of school improvement. Jacobs (2005) cited the study as congruent to her research in curriculum management and the need for ongoing curricular management. The idea is simple: create a curricular infrastructure that creates curriculum documents that are “living documents.” Achievement of a curricular system that allows real time curricular management is important. Continuous curriculum management allows schools and school districts to continuously reflect and align curriculum daily in an open and flexible manner. Additionally, continuous curriculum management empowers teachers and administrators to become aware of standard and assessment changes, and adjust the curriculum as needed, not in 5 years.

Transformation to Curricular Democracy: A case in point

The need for curriculum that is open and flexible, and living is important (Jacobs, 2005; Tramaglino, 2005a). This is the base for curricular democracy to be a reality.

Hass wrote (1979):

“Who should plan the curriculum? Everyone interested in the future; everyone concerned for the quality of education being experienced by the leaders of the future who are now in our classrooms” (p. 304). Active curriculum development and management (including all teachers) is beneficial to schools and students as a mean for school improvement and increased student performance (Jacobs, 2005). However, curricular bottlenecks are a realistic problem and

happens frequently. How can schools avoid curricular bottlenecks? How can schools address curricular needs in the *NCLB* era?

One school district in central New Jersey created a system for continuous curriculum management. Using grounded research in curriculum development and management (Aikin, 1942; Hass, 1979; Jacobs, 1997, 2004; Tanner & Tanner, 1995), the school district created a model for curricular management that 1) is flexible and is continuously updated to match data as well as changing assessments and standards, 2) uses technology as a vehicle for curricular management, and 3) focuses on teacher empowerment. Additionally, all teachers use the curriculum as a hub for making decisions about teaching and learning (Jacobs, 2004, p. 126-127). The development of this system took two years, and the district supervisor of curriculum and instruction carried out coordination of the project.

Importance of technology as a vehicle for curriculum management

To create a system of curriculum management that was appropriate, the school district capitalized on the integration of computer technology. First, a cost-free component of the Microsoft networking software, SharePoint Services was the basis computer application used in the creation.¹ Using SharePoints, a Internet based portal (<http://curriculum.newegypt.us>) was developed that 1) allowed password protected access, 2) empowered teachers to be able to change curriculum documents immediately as part of their planning (cleared by their principal or supervisor), and 3) was user-friendly. Additionally, the program served as a web based Internet portal, which is a shared online workspace that allows communication, access to documents, posting of messages, communication via e-mail, etc. The portal allowed teachers and administrators to view and change curriculum and post lesson plans daily.

¹ For a complete description of Microsoft SharePoint software, visit or contact Microsoft at www.microsoft.com

The number of programs that map and manage curriculum is constantly growing. Choosing the right program is important. The districts supervisor of curriculum and instruction developed the portal system by asking the teachers (beginning with the 10 teachers who claimed that they were the most computer illiterate) what they were most comfortable with using. The teachers felt comfortable with Microsoft Word. Additionally, the Jacob's model (2004, p.135) was used in professional development sessions addressing the need for technology as an important component of the curricular process. Professional development was provided on how to use the portal for curriculum management. Most importantly, in the most recent survey, 97% of the teachers responded that they felt comfortable using the curriculum and instruction portal for curriculum management.

Building consensus for continuous curriculum management

Creating a curriculum management system is a complex task that takes coordination and communication, and most importantly, the teachers. The teachers are where the democracy occurs. "The capacity of a school to maintain such complex, highly interdependent patterns of activity is limited by its ability to handle communication for these purposes" (Hoy & Miskel, 2000, p. 374). A most important component of creating a system for continuous curriculum management is establishing the communicator(s). In other words, the person or persons who will articulate, create, sell, communicate, etc. is essential. The communicator or communicators are the middle person with the teachers. His/her goal as communicator – collect and use as much input from as many teachers as possible to 1) build support for the new system of curricular management, 2) identify and address needs of the teachers, 3) identify resources, 4) educate

school community members, and 5) provide ongoing technical support and instructional leadership.

Communicators must value what they learn from the teachers. The author adapted the communication/change model employed by Tienken (2003) in his studies of professional development.² The communicators are the change agents in the process. Michele and Tienken stated (2005), “the change agent employs communication elements that become more personalized the closer the individual gets to independent use of the PD.” Modeling the techniques of the communication/change and adapting the model for curriculum management, the communicator built relationships to foster curricular change. In the current example, curriculum/change is an ongoing process. Following the building of relationships with teachers, the communicator(s) set curricular philosophies, goals, and objectives for all curricular areas K-12. The curricular philosophies, goals, and objectives combined the values of the teachers, administrators, students, board of education, and the community.

Which document is right for you?

One of the goals of the researcher was to establish a system of curricular management that uses teacher input to create documents that work. One common occurrence in traditional curriculum development is that documents are one size-fits all. That is, the templates for curriculum development are the same for all classes and teachers. Commonly, schools have a template used for all curricular areas; however, curriculum developers must conform to teacher needs when designing curricular formats (Tramaglini, 2005a). Using this approach promotes teacher empowerment. Teachers reflect their curricular styles around how they teach. Curricular

² Tienken (2003) adapted the Communication/Change model from Achilles, et al. (1997, pp. 132-133) Reference used with permission from C.H. Tienken, Ed. D.

styles should include choice as per design that is thematic, sequential, or linear, differentiated instructional components, or learning by design. Nevertheless, including the teachers in the development of the curriculum template is a form of teacher empowerment and provides teachers a sense of ownership over the document.

The process used by the researcher in the creation of curricular documents focused primarily on the teachers. Following philosophy, goal and objective design, the communicator identified the needs of the teachers and the schools. Template documents were created around teacher, and included the necessary requirements of the school administration. Additionally, all documents contained central areas important to the school district such as assessment, core activities, and Understanding by Design (UbD) (Wiggins & McTighe, 1998). Once the curriculum document was completed, the teachers were ready for the input sessions and the development of the curriculum.

Curriculum development

Before the curriculum input sessions, teachers met in sessions during team planning, during and after school staff development sessions, and online collaboration to arrive at course scopes and sequences. Again, the teachers under the supervision of the communicator facilitated the curriculum development. Teachers arrived at common scopes, sequences, and alignment of standards. Most importantly, curriculum writers of the same subject area were able to work together to prevent gaps, vertically articulate curriculum, and horizontally coordinate each grade level (Jacobs, 1997, 2004, 2005). Teachers could communicate and address scoping or sequence needs while managing difficulties such as the limitation of the number of class sets of books across a grade level.

Also during the component of development, curriculum maps were created from previous lesson plans to provide the groundwork for curriculum alignment. Curriculum mapping includes constant alignment of curriculum to eliminate curricular gaps (Jacobs, 1997, 2004, 2005).

Alignment of standards and curriculum ensures that what is being taught in different classrooms at a specific grade is similar. Not noticed before, countless gaps were found in the curriculum and in some cases, teachers were not teaching common concepts across grade levels. For instance, the skills in one Algebra I class were different from another. A significant result in the new curriculum was that the curriculum became common in each class.

The communicator is the essential component for change (Tienken, 2003; Michele & Tienken, 2005), and the communicator is an essential agent in the curricular development process. Curriculum is a complex process (Hoy & Miskel, 2000), however, teachers need direction that is seamless. The communicator is vital. The communicator articulates and coordinates consensus among the stakeholders in the curricular process. It is important for the communicator to be able to seek compromises, make corrections, trust the teachers, provide support when necessary, and have vision. In continuous curriculum management, curriculum is a living being. No document is final; No document is ever complete. The school district must see this as a benefit to the process, not a complication.

Curriculum input sessions should be that where teachers have already articulated and coordinated curricular scopes, sequences, created a usable document. Readiness rests on these components. Endless time is wasted if curriculum documents are not read for input. During the input sessions, teachers should be ready to map or write their curriculum to achieve the philosophy, goals and objective. The curriculum is the plan for effectively teaching what the students need to learn. During curricular sessions, the communicator must facilitate the sessions

so that they are productive. Importantly, the communicator focused on the values of the district while achieving the vision.

Continuous curriculum management

Once curriculum documents are finished, the documents need to be specific for each teacher. Jacobs (2005) postulated that it was important for every teacher to have a curriculum map. Educators owe it to the children to be involved in the mapping process (2005). Curriculum documents were created with the assumption that the documents would be living documents. Curriculum was uploaded onto the curriculum portal and teachers had full access to their individual documents. All changes to the documents were set up using the software alerts, in which all changes needed to be approved by the communicator. Different programs have features that can control this process, which varies controls.

Each year, curriculum documents are changed, however, to ensure that documents are consistently approved by the board of education, curriculum re-approval occurs each year. During the summer of each year, curriculum documents are sent for board approval satisfying strategic planning requirements. More importantly, curriculum is continuously managed (living documents), each teacher has direct influence in their academic program, and rotational curriculum management becomes obsolete. Lesson planning is integrated into curriculum management, ultimately making curricular development job-embedded. In New Jersey, social studies standards were revised in August of 2004. Curricular changes were made almost instantaneously, and there was no need for a major revision. In addition, assessment scores on the recent assessments reflected improvement in the areas which have received focus with regards to curriculum management.

Conclusion

Continuous curriculum management is a viable and potent vehicle for school improvement and student achievement. Rotational curriculum management has become inadequate due to the nature of changing standards and assessment to meet the requirements of *No Child Left Behind*. Unless a school or school district is munificent, schools will have enormous problems meeting the demands of standards and assessment changes in the time specified by the federal government. Curricular bottlenecking can be a reality if schools do not have the capability to address changes immediately. Using curriculum portals and the and establishing curricular democracy, continuous curriculum management is a viable means to adjust the curriculum as needed. Teacher empowerment and curricular design has a strong relationship with school improvement and student performance (Kerheval & Newbill, 2004). In this case, student assessment scores improved and teacher awareness of curriculum increased.

References

- Aiken, W.M. (1942) *The story of the eight-year study*. New York: Harper and Row.
- Achilles, C.M., & Norman, C.D. (1974) Communication and change in education. *Planning and Channing*, 3, 132-133.
- Hass, Glen. (1979) Who should plan the curriculum? In Parkay, F.W. and Hass, G., *Curriculum planning: A contemporary approach*. (7th Edition) (pp. 301-313). Needham Heights, MA: Allyn and Bacon.
- Hoy, W., & Miskel, C. (2000) *Educational administration: theory, research, and practice*, 6th ed. New York, NY: McGraw-Hill.
- Jacobs, H.H.. (1997) *Mapping the Big Picture: Integrating curriculum and assessment K-12*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Jacobs, H.H.. (2004) *Getting results with curriculum mapping*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Jacobs, H.H. (2005, March 31-April1) Making curriculum mapping the hub for school improvement and increased student performance. Presented at the national conference for the Association for Supervision and Curriculum Development, Orlando, Fl.
- Michele, P., & Tienken, C.H. (2005) *Teachers, testing, training: making it work*. Paper presented at the New Jersey Association for Supervision and Curriculum Development in East Windsor, New Jersey on February 1, 2005.
- New Jersey Department of Education. (2004) *New Jersey core curriculum content standards*. Retrieved on March 20, 2005 at <http://www.state.nj.us/njded/cccs/>

- Kercheval, A. & Newbill, S.L. (2005) *A case study of key effective practices in Ohio's improved school districts*. Bloomington, IN: Indiana center for evaluation. Retrieved from http://curriculum.risd41.org/committee/best_practices/04-05/OhioFullReport.pdf
- Parkay, F.W. and Hass, G. (2000) *Curriculum planning: A contemporary approach*. (7th Edition) Needham Heights, MA: Allyn and Bacon.
- Tanner, D. (1997) Standards, standards: high and low. *Educational Horizons*. 73 (n. 3), p. 115-120.
- Tanner, D., & Tanner, L. (1995) *Curriculum development: theory into practice*, 3rd ed. Englewood Cliffs, NJ: Prentice Hall.
- Tienken, C.H. (2003) *The effect of staff development in the use of scoring rubrics and reflective questioning strategies on fourth-grade students' narrative writing performance*. UMI No. AAT 3081032.
- Tramaglino, T.W. (2005a) *Designing curricula as living documents*. Paper presented at the New Jersey Association for Supervision and Curriculum Development in East Windsor, New Jersey on February 1, 2005.
- Tramaglino, T.W. (2005b) Standards Not Standardized. *New Teacher Advocate*. Spring 2005
- Wiggins, G., & McTighe, J. (1998) *Understanding by Design*. Alexandria, VA: ASCD.
- Wiggins, G., & McTighe, J. (2005) *Understanding by Design*. 2nd ed. Alexandria, VA: ASCD.