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Criticism of middle school curriculum integration: a review of the literature

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Abstract
This literature review looks at curriculum integration at the middle school level. The literature predominantly has reflected curriculum integration as a practice that benefits middle school students, but it has received criticism as well. Some of the criticism includes the following: time needed for planning, teaming of teachers, student interest, standards and benchmarks being subject specific, and the lack of critical information in specific content areas. This review of the literature examines the criticism to understand whether curriculum integration is beneficial for students.

Recommendations about the continued use of curriculum integration at the middle school level include the following: continued research about the benefits of curriculum integration, teacher training for curriculum integration, schedule changes, and the use of curriculum integration with traditional curriculum approaches.
Criticism of Middle School Curriculum Integration:

A Review of the Literature

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ABSTRACT

This literature review looks at curriculum integration at the middle school level. The literature predominantly has reflected curriculum integration as a practice that benefits middle school students (Fogarty, 1991; Beane, 1997; Manning & Bucher, 2001), but it has received criticism as well (George, 1996; Vars, 2001). This review of the literature examines the criticism to understand whether curriculum integration is beneficial for students. Some of the criticism of curriculum integration includes the following: time needed for planning, teaming of teachers, student interest, standards and benchmarks being subject specific, and the lack of critical information in specific content areas. Recommendations about the continued use of curriculum integration at the middle school level include the following: continued research about the benefits of curriculum integration, teacher training for curriculum integration, schedule changes, and the use of curriculum integration with traditional curriculum approaches.
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CHAPTER ONE
Introduction

The junior high school did not meet the needs of its students by using instructional methods that were similar to the high school. The junior high was organized as subject specific classes with little to no integration of subjects. Middle school advocates offered interdisciplinary teaming in which several subject area teachers were responsible for a common group of students and collaborated on instruction as an alternative (National Middle School Association, 1992). The purpose of this review was to identify criticism about the use of curriculum integration in middle level schools. The criticism was generated by middle school educators, middle school students, and other middle school professionals. Rationales for the use of curriculum integration in middle level classrooms were cited in professional literature and were often directed toward middle school educators. Literature in the National Middle School Association's publications brochure had many pieces advocating for the use of this model of curriculum design. Additionally, for this literature review, both pros and cons were examined, and the benefits and barriers were noted.

Personal Rationale

Personally, I chose to research the criticism associated with curriculum integration for several reasons. One reason was because I teach in a district that does not
have a true middle school. We have a small school district, so all of the teachers in the middle school make up one large team. We do not have common planning times to integrate curriculum to the fullest extent possible. I wanted to research whether curriculum integration was the better teaching method for middle school students or whether the way we teach our middle school students, using some integration and more traditional teaching approaches, was appropriate, considering our small size.

Purpose of Review

This research was intended to benefit middle level education advocates when making research-based decisions regarding curriculum integration. It focused on the misgivings of the practice and efficient and effective ways to educate middle level students.

The attitudes and perspectives of educators, students, and other professionals from the professional literature were gathered and analyzed. Information was gathered from professional publications about curriculum integration and specific reasons to substantiate educators' decisions to stop integrating curriculum were noted. Support for the elimination of curriculum integration in the middle school was investigated

Importance of Review

While much has been written about the benefits of the integration of middle level curriculum, criticism of this method of curriculum design and instruction has also existed and should be examined. It is always important to look at both sides of an instructional model to decide whether it really benefits the students. This review is intended to help educators to determine whether curriculum integration might always be the best method
or whether other options might be available for teachers to use with middle level students.

**Terminology**

In order for readers to have a common understanding of the terminology used in this study, the following definitions are provided:

- **Integrated Curriculum**: Theme or issue taught in an interrelated way by several teachers, but disciplines are still the driving force (Manning & Bucher, 2001).
- **Integrative Curriculum**: Driving force is the identified problem, concern, or issue (Manning & Bucher, 2001).
- **Interdisciplinary/Multidisciplinary Curriculum**: Theme or issues taught across several subjects, but with minimal cooperation (Manning & Bucher, 2001).
- **Middle School**: School organization containing grades 6-8 that provides developmentally appropriate and responsive curricular, instructional, organizational, guidance, and overall educational experiences. Also, places major emphasis on 10- to 14-year-olds' developmental and instructional needs (Manning & Bucher, 2001).
- **Self-contained Curriculum**: Single teacher determines content (Manning & Bucher, 2001).

**Research Questions**

The research question addressed in this study was the following:

- What is the criticism of curriculum integration asserted by key players in middle level education?

The key players in this review of the literature were classified into three categories: (1) middle school educators, (2) middle school students, and (3) other middle
school professionals other than middle school classroom teachers who specialize in middle school concepts, such as administrators, counselors, and college professors.

Additional questions examined in this study included the following:

1. What is the criticism expressed by middle school educators?
2. What is the criticism expressed by middle school students?
3. What is the criticism expressed by other middle school professionals?
CHAPTER TWO

Methodology

A review of the literature was selected to examine the pros and cons of curriculum integration. Middle school teachers have been grouped into teams in many cases. These teams then worked to organize curriculum around a theme or issue where all content areas can focus on that theme or issue. For small districts, such as the district that I teach in, this was difficult because we are not team-oriented. This made teaching students in an integrated way more difficult.

Initial Topic Selection

When I began to consider my research project for my master's degree, I spoke with my middle school principal (personal conversation, J.A. Butler, January 15, 2001). Some topics were suggested that might have been of interest to me and the one that really appealed to me was looking at the negative side of curriculum integration. This seemed to be a good topic to investigate because curriculum integration had been referred to frequently in the literature related to the middle school concept.

Method to Locate Sources

To begin the research process, I explained my interest in curriculum integration to my program advisor, Dr. Donna Schumacher-Douglas. She suggested that I begin to investigate the topic by reading the November 2001 issue of the Middle School Journal. It contained several articles about curriculum integration and included critiques of the use of curriculum integration from the following professionals: Gordon F. Vars, Gary Weilbacher, Cheryl Erlandson, Janet McVittie, and Mike Muir. The references located at the end of many of these articles also led me to other appropriate sources.
I also went online to the “electronic resources” section of the University of Northern Iowa Rod Library webpage. From UNISTAR, UNI’s online library catalog, I connected to databases to research journal articles. My search ensued using the key word of “curriculum integration.” I also used key words such as “integrated curriculum,” “integrative curriculum,” “interdisciplinary instruction,” and “thematic units.”

One final search for relevant literature was employed. I used www.google.com, an on-line search engine, to search for criticism of curriculum integration. I utilized a wide variety of keyword searches including the following: curriculum integration, criticism of curriculum integration, concerns about curriculum integration, curriculum integration criticism, curriculum integration concerns, curriculum integration disadvantages, curriculum integration problems, and negative aspects of curriculum integration. Most of the websites that I located contained positive aspects about curriculum integration or suggestions on how to integrate curriculum. I did discover one website that contained some useful information about a project in New South Wales (Board of Studies New South Wales, 1999).

Selection of Sources

To select relevant sources, I read to find negative responses to curriculum integration. I also assessed the legitimacy of the publication, the legitimacy of the author, and publication dates to validate each source as reputable for use in this review. I limited most sources to a recency of ten years unless it seemed especially relevant to the topic of this review. Author legitimacy was based on the profession of the author. The author had to be a middle school educator or other middle school professional. Legitimacy of the publication was based on the fact that the publication dealt with middle level
education and curriculum integration. Journals had to be widely circulated and well-known.

Analysis of Sources

Professional literature was gathered related to the negative criticism of curriculum integration at the middle school level. The information was analyzed by themes to identify reasons why curriculum integration was no longer being used or was receiving less support from middle school educators. The themes were based on educator responses to curriculum integration, student responses, and other middle school professionals’ responses. Information was also gathered on the positive aspects of curriculum integration and how it can be beneficial to students. The sources were used to determine whether curriculum integration is beneficial to students.
CHAPTER THREE

Literature Review

In this chapter, definitions of curriculum integration were explored. Some problems of defining curriculum integration were mentioned in the research. Benefits of curriculum integration were also discussed. The focus of the criticism of curriculum integration was the final portion of this chapter. Research was cited on criticism from middle level educators, middle level students, and other middle level professionals.

What is Curriculum Integration?

In an interdisciplinary approach to curriculum, teachers consciously related different subject and skill areas of the school program in their teaching. Teachers created interdisciplinary units organized around a theme, problem, issue, or project (Schurr, Thomason, & Thompson, 1996; Wood, 2001). According to Manning and Bucher (2001), an integrated middle school curriculum had several characteristics: a central problem or issue identified by teachers and students collaboratively, an issue of personal and social significance, and a problem or issue as the central focus of curriculum. Also, learning experiences were planned that related to the issue, and these experiences integrated knowledge from all disciplines and domains (Manning & Bucher, 2001).

Problem of Defining Curriculum Integration

Czerniak, Weber, Sandmann, and Ahern (1999) stated that a common definition of integration did not exist. The ambiguity was evident in the sheer number of words used to describe integration: interdisciplinary, multidisciplinary, transdisciplinary, thematic, integrated, connected, nested, sequenced, shared, webbed, threaded, immersed, networked, blended, unified, coordinated, and fused (Czerniak et al., 1999). Other
synonyms abound, such as the following: interwoven, correlated, linked, and holistic (Board of Studies New South Wales, 1999). Lederman and Niess (1997) pointed out how the labels of “integration,” “interdisciplinary,” and “thematic” were often used synonymously. At other times, these terms were used to distinguish between critically different curriculum or instructional methods. Those involved in education could be confused when such terms were used to describe both similar and different practices under the general description of curriculum integration.

**Elaboration of terms is needed to support meaning.** The main concern of Lederman and Niess (1997) was that the users of these terms rarely elaborated upon the meaning of their labels, and the result had been nothing less than widespread confusion among classroom teachers, curriculum developers, state departments of education, and school administrators. Additionally, Davison, Miller, and Metheny (1995) expressed that neither curriculum theorists nor practitioners have reached an agreement on how curriculum integration should be defined.

**A definition is needed to support research.** Most of the literature on curriculum integration could be characterized as “testimonials.” Generalizations about integrated curriculum based on research were difficult to make because of the lack of an operationalized definition of curriculum integration. A coherent, concise definition of curriculum integration was a necessary first step in stimulating research on the impact of integration on student learning, as suggested by Czerniak et al. (1999).

The Board of Studies of New South Wales (1999) expressed that there are differing views among educators about the benefit of curriculum integration. This was largely due to the range of approaches that the term, “curriculum integration,”
encompassed and because research findings in the area were both limited and inconclusive.

**Definition Used for Review**

For this review, curriculum integration was defined within four major components: integration of experiences, social integration, integration of knowledge, and integration as a curriculum design (Beane, 1997).

Beane (1997) indicated that integration of experiences operationalized integration in two ways: first, as new experiences were "integrated" into our schemes of meaning and, second, as we organized or "integrated" past experiences to help us in new problem situations. Social integration was defined as making students feel that they were members of the school community. Integration of knowledge involved combining all subject areas in the study of one topic. Integration as a curriculum design, according to Beane (1997), had several operant components:

1. Curriculum was organized around problems and issues that were of personal and social significance in the real world (i.e. "organizing centers").

2. Learning experiences in relation to the organizing center, the main theme of integrated study, were planned so as to integrate pertinent knowledge in the context of the organizing centers.

3. Knowledge was developed and used to address the organizing center currently under study rather than to prepare for some later test or grade level.

4. Emphasis was placed on substantive projects and other activities that involved real application of knowledge, thus increased the possibility for young people to integrate curriculum experiences into their schemes of meaning and to experience the democratic process of problem solving (p. 8-9).
Benefits of Curriculum Integration

The Board of Studies New South Wales (1999) suggested that some integrated approaches had been found to enhance learning for some learners in some contexts, but other approaches had been found to have had little benefit for other learners. Curriculum integration helped with brain-compatible learning because isolated learnings were difficult to recall and use (Wood, 2001). Recent research on effective schools suggested that students learn and remember best when subject matter was reinforced and integrated, activities required higher-order thinking, and students were actively involved in drawing connections among subjects, making decisions, and problem solving (Schurr et al., 1996).

Students also needed opportunities for the kind of social interaction and guidance that teachers and capable peers provided quite naturally in the course of interdisciplinary studies (Wood, 2001). Schurr et al. (1996) suggested that choices be made available, collaboration be encouraged, and students see the whole context of what they are learning with curriculum integration.

Wood (2001) also suggested that most real problems in life were investigated or solved by using more than one discipline at a time. The integrated model built understanding across departments and fostered appreciation of teacher knowledge and expertise (Fogarty, 1991).

Reasons to Choose Curriculum Integration

Weilbacher (2001) reported that there were three reasons for choosing to use curriculum integration:

1. Assisted educators in forming relationships with their students and also establishment of relationships among the students.
2. Increased learning relevance for students.

3. Provided opportunities for students to make connections among the traditional academic disciplines, the community, and their own experiences (p. 19).

Beane (1996) indicated that the movement toward an integrated middle school curriculum was being driven by professional educators. These educators were seriously interested in progressive educational ideas such as whole language, unit teaching, thematic curriculum, and problem-centered and project-centered methods. Beane (1997) also proposed eleven reasons why teachers should use curriculum integration:

1. Schools had an obligation to promote democratic social integration. This could be accomplished through persistent use of democratic practices such as heterogeneous grouping, participatory planning, and collaborative problem solving.

2. A general education curriculum for a democratic society ought to be organized around personal and social/world concerns.

3. Learning about and working on social/world issues gave young people experience with democratic problem solving.

4. Young people had a democratic right to participate in planning the school curriculum and to have their ideas taken seriously.

5. Learning to participate in collaborative planning was a critical citizenship skill in a democratic society.

6. Making room for personal concerns in the curriculum gave students a stake in the curriculum and encouraged the integration of experience.

7. Everyday knowledge and experience as well as popular culture ought to be as important in the school curriculum as the disciplines of knowledge.

8. Significant self and social/world issues offered a meaningful context for bringing knowledge to young people.

9. The primary use of knowledge in the curriculum ought to be in responding to significant self and social issues.
10. Understanding and working on significant self and social issues required (re)integration of knowledge.

11. (Re)integrated knowledge most nearly resembled the organization of knowledge as it is used in everyday life outside of educational institutions (p. 95-96).

**Criticism of Curriculum Integration**

The decision of many educators to abandon integrated curriculum and return to more traditional curriculum methods might have been in response to several factors (Goodlad, 1964; Mason, 1996; Weilbacher, 2001). It was necessary to have analyzed the viewpoints of educators, students, and professionals to triangulate this investigation of the negative criticism of curriculum integration in middle level schools.

Richie and Hampson (1996) and Wicklein and Schell (1997) were concerned that some students had difficulty in grasping the content of integrated courses. Venville, Wallace, Rennie, and Malone (1998) also recognized several other difficulties for students in regards to curriculum integration: lacking the ability to plan and manage time effectively for long-term integrated projects, not enjoying the work, and not working hard enough to accomplish the tasks that had been set.

**Middle School Educators’ Criticisms of Curriculum Integration**

The vast majority of educators lacked understanding of the concept of integrated curriculum (George, 1996). This might have been part of the problem of defining curriculum integration and all of the terms associated with the idea. It was also difficult when examining its effect on student learning. Teacher preparation, qualification, and expertise were some areas of concern that posed possible threats to the process of curriculum integration. Control and trust in the classroom might have also posed problems to the integration process. Some contents might suffer and not have been
covered in as much detail as they would have in the regular classroom. Process, time, and team concerns were also mentioned as barriers to curriculum integration. Finally, educational traditions presented barriers that made change difficult.

**Teacher preparation and qualification.** Teacher preparation was a major hurdle to integrating, as well as teacher-related obstacles: teacher knowledge, experience, attitudes, and beliefs (Berlin & White, 1992). If teachers lacked knowledge and skills within disciplines, their ability to integrate those disciplines was highly problematic (Mason, 1996).

Mason (1996) pointed out that typically, secondary teachers were prepared as content specialists and elementary teachers as generalists. Secondary teachers received limited exposure to knowledge and pedagogy in disciplines other than their own, and elementary teachers received only superficial exposure to ideas, concepts, and teaching methods in the various disciplines and subject matter areas. Schug and Cross (1998) reported elementary teachers had difficulty doing meaningful integration of the curriculum. The lack of subject matter expertise on the part of many elementary and middle school teachers made the integration of subjects particularly burdensome and difficult.

Excellence in teaching required a profound grasp of disciplinary content and of methods of presenting such content to students (Ross & Hogaboam-Gray, 1998). Many teachers felt threatened by a curriculum with which they had no familiarity. They were uncomfortable when they were asked to teach what they themselves did not already know (George, 1996). Good teachers improved what they taught from year to year as they accumulated more resources and refined their lessons. Also, intellectually rigorous
curriculum integration could only be planned by educators who had sufficient content expertise – educators who had enough confidence in their subject knowledge to see the bridges between the disciplines (Schug & Cross, 1998).

Ross and Hogaboam-Gray (1998) were concerned that curriculum integration was likely to have led to a deterioration in instruction, with negative effects on student performance. Several researchers (Hashweh, 1987; Ringstaff & Haymore, 1987; Carlsen, 1993; Sanders, Borko, & Lockard, 1993) had discovered that evidence was accumulating that even experienced teachers behaved differently when they were teaching outside the content area familiar to them. Some teachers reported that they simply did not have the skills or time to plan an integrated curriculum (George, 1996). The integrated curriculum required teachers to constantly plan new curriculum experiences, develop new resources, and test new learning activities (George, 1996). Although teachers met, becoming more aware of expectations in other subjects, they were not required to teach these other subjects nor were they required to sacrifice disciplinary integrity (Ross & Hogaboam-Gray, 1998).

Teacher certification was one of the few instruments that helped determine whether teachers were at least minimally qualified to teach their subject area (George, 1996). George (1996) stated that in most states the integrated curriculum ignored teacher certification, and vice versa.

Teacher control and trust. Curriculum integration identified little about how students were to be taught (Schug & Cross, 1998). Beane (1995) noted that many teachers were expected to actively plan with students in curriculum integration (as cited in Bergstrom, 1998). Some teachers felt uncomfortable giving this much control to
students and not planning the curriculum on their own. Many teachers felt it was their responsibility to plan the curriculum for their classroom.

There was no evidence that the integrated curriculum allowed teachers more opportunity to be “facilitators” (George, 1996). Some students trusted teachers to be the leader in the classroom and might not function as well in the integrated setting where students were taking over the leadership roles.

Relationships, trust, and respect emerged as critical motivators to students (Muir, 2001). These factors, possibly present in a traditional classroom setting, might have been missing from the integrative classroom setting. Teachers feared violation of the trust that they had attempted to build with their students (Weilbacher, 2001). Students identified their teachers with the subjects they taught, their classroom management styles, and their expectations. These reputations created impressions or expectations for students. Teachers might have feared violation of this trust when attempting to integrate the curriculum, which they themselves might not have been comfortable or confident in doing.

Underrepresented curriculum. When integration was implemented, it was accomplished by using the content and skills with which the teachers were most familiar. The result was that important areas of the curriculum were often left out or underrepresented in the school day. Curriculum integration might result in a narrowing of the curriculum and fewer opportunities for learning, rather than more (Schug & Cross, 1998). Schug and Cross (1998) pointed out that integration is often accomplished with reading and language arts, but is rarely accomplished in science and social studies.
The deeply rooted culture of subject disciplines, underwritten by curriculum documents organized in terms of subjects, meant that there could be few incentives for teachers to teach and students to learn in an integrated manner (Venville et al., 1998). Venville et al. (1998) expressed teachers' concerns about the breakdown of departmental structures and students not being exposed to the depth of content from specialist teachers in each of the respective disciplines. Teachers felt responsible to cover their subject in an in-depth manner for students to gain understanding.

Many educators who viewed themselves first as teachers of young adolescents and second as teachers of their particular discipline had the possibility of failing young people by attempting to teach outside their area of expertise. They might have felt criticized for their strong belief in the importance of their subject disciplines and in their role as subject specialists (Gatewood, 1998b).

Mason (1996) also identified that it was sometimes appropriate for teachers to address ideas within a single content area. For example, some topics in mathematics were strictly mathematics. It might have been necessary for students to have basic math facts and those would have been taught best in a strictly math setting. Integration of other subjects might have only confused a student in the process of learning basic math facts. Also, some ideas in science were best understood without introducing confusing or inconsequential subject matter. Sometimes in a science classroom a teacher would use a laboratory experiment to help a student actually "see" a concept. The idea might not have been as easily understood without the laboratory experiment and the integrated curriculum might have ignored this fact.
Time concerns. Teachers indicated difficulty with time management was the major reason fostering discontinuance of curriculum integration (Weilbacher, 2001). Specifically, primary problems with implementing an integrated curriculum were identified as time and structure of the school day. A 90-minute segment of time in a block schedule, rather than the traditional 45- or 50-minute periods, might have afforded teachers the necessary time to integrate the curriculum (Czerniak et al., 1999). Time for learning was also a concern because students applied what they learned to other situations. Learning for application, touted by advocates of the integrated curriculum, took much more time to achieve (George, 1996).

Lack of time in the school day diminished the time teachers had to plan integrated curriculum units or themes. If a teacher had time to plan individually, as well as planning time with his or her team, that would have greatly enhanced the curriculum integration process. As suggested in the literature, when teachers on a team had regular, weekly curriculum conversations about what they were required to teach, they discovered many natural links between and among subject areas. This helped teachers to develop many creative ways that these links could contribute to the study and solution of complex, real-world problems (Gatewood, 1998b). Adequate time would have also allowed teachers to increase their skill or expertise in the other subject areas with which they were less familiar. However, most school districts did not allow teachers enough planning time to build up their skills in areas out of their own area of expertise. Teachers had precious little planning time as it was and the likelihood of acquiring more time was minimal (George, 1996).
Team concerns. A major reported factor which caused teachers to revert from curriculum integration to more self-contained curriculum practice was the loss of their co-teaching partner through such incidents as staff changes or retirement (Weilbacher, 2001). A team or partner tended to help with the planning and support of the integrated curriculum. If this support had broken down, then many teachers might not have had a willingness to continue with the process.

Educational traditions. Goodlad (1964) cited that one of the major facets contributing to the persistence of the academic disciplines in education was the traditional organization of the university and the secondary school into departments based on academic fields or areas. Getting away from department-based fields required a willingness for communication, collaboration, and the abandonment of the safe haven of subject-matter expertise, a threatening prospect for many secondary school faculty members (Mason, 1996).

Middle School Students’ Criticisms of Curriculum Integration

Middle school students were also cited in the literature as having some concerns about curriculum integration. Studying one topic in all content areas might have presented some problems for students’ learning: Real life concerns, motivation, interest, and topic importance were mentioned to be possible reasons for students not faring well with an integrated curriculum.

Real life concerns. George (1996) was concerned that there was little evidence that an integrated curriculum would address the real life concerns of students any more directly or effectively than the best traditional curriculum practices. There was little evidence also that an integrated curriculum presented more opportunities for real
problems or puzzling situations to motivate or provoke persistence in learners (George, 1996). One goal of schools was to produce life-long learners. If the students were not motivated or faced with real life concerns, this goal might not be accomplished.

Advocates of the integrated curriculum often repeated the claim that people in real jobs, in the real world, rarely solved problems that fit neatly into the narrow categories suggested by the academic subjects (Schug & Cross, 1998). Real people, in real jobs, used communication and problem-solving skills that cut across the disciplines. But many of the jobs in the real world also involved high levels of specialized knowledge. In fact, jobs in the private sector often involved certification and qualification of specialized training (Schug & Cross, 1998). It might have been beneficial for students to have had specialized subject knowledge when entering the job market. The integrated curriculum might not have prepared students properly for specialization.

**Student motivation and interest.** Underachieving students provided insights to help teachers select teaching strategies that more closely matched how students learn. A student, M (a pseudonym selected by the student), found little of meaning or relevance in his experience with integrative curriculum. Little personal integration took place largely because M’s negative attitude to school reduced the probability that it would happen. Even potentially motivating activities, such as those that might be incorporated in an integrated curriculum, were often responded to in such a way by the student that failure was almost guaranteed. These negative responses reinforced the individual’s beliefs about school being a place to be “despised” (Erlandson & McVittie, 2001). Consequently, if the theme of the unit did not appeal to the student, he or she could lose motivation because the student lacked ownership and interest.
Criticism from students indicated a lack of interest or boredom with the topics of study. "We’ve studied some great themes this year, but I don’t like studying the same theme for more than two or three weeks. I get tired of the same thing, especially if the themes are boring. Then, studying them all day is really bad," reported a seventh-grade student (Manning & Bucher, 2001, p. 84).

Importance of topic. Two teachers at Richvale School taught a group of eighth graders using the theme “Conflict with the Environment.” Student attitudes were assessed to see what meaning the students were able to derive from an integrated unit of study (Erlandson & McVittie, 2001). Masimilliano (a pseudonym selected by the student) had explained that, for him, learning not only had to involve being exposed to something new, it had to be something that he judged as "important." During an environmental study, Masimilliano responded in a negative manner to the unit because he didn’t think like the “tree huggers.” His attitude toward the theme itself greatly influenced his ability and willingness to derive meaning from the “Conflict with the Environment” theme. Although he responded negatively to this theme, Masimilliano did speak in glowing terms of other integrative units in which he had been involved (Erlandson & McVittie, 2001).

Other Middle School Professionals’ Criticisms of Curriculum Integration

A review of educational research led to the conclusion that the empirical evidence for the separate disciplines approach was more compelling (Schug & Cross, 1998). Reviews by Cotton (1982) and St. Clair and Hough (1992) suggested that few studies conclusively have shown that multidisciplinary, crossdisciplinary, or interdisciplinary teaching enhanced student learning in measurable ways.
National curriculum standards and benchmarks. Accountability was murkier and less certain when the curriculum was integrated. Curriculum integration made it difficult to know what was being taught and learned. Standards and benchmarks were not written for curriculum integration (Schug & Cross, 1998).

Gatewood (1998b) also stressed that although many national curriculum-standards projects had called for more integration of curriculum, none called for elimination of traditional disciplines. Also, none of the organizations that had developed and supported curriculum-standards were “planning to go out of business.” Standards and benchmarks had been developed to facilitate the teaching and learning process. They set up guidelines as to what the curriculum should cover from year to year as students progressed through their education. Curriculum integration might have covered these standards and benchmarks, but not as in-depth as the traditional classroom approach could. Time was a factor that caused traditional classroom teachers to be better able to address the standards and benchmarks than the classroom teachers who integrated the curriculum. In the traditional classroom, a teacher only had to focus on his or her subject area standards and benchmarks, but in the integrated classroom, a team of teachers worked to cover all standards and benchmarks related to the theme of study.

Empirical evidence had shown that instruction in the various disciplines was a highly effective means for improving, not reducing, student achievement (Schug & Cross, 1998). The pressure of state proficiency and standardized tests was identified in the literature as a limiting factor in implementing integrated curriculum. It was ironic that despite the interest in integrated curricula, standards for individual disciplines remained separate (Czerniak et al., 1999). Both the standards and the proposed tests were
arranged along separate subject lines and favored the traditional high status of the English, history, geography, mathematics, science, and foreign language courses in isolation (George, 1996; Beane, 1999).

Vars (2001) stated that the problem did not exist with the standards themselves, because society had a right to define what it expected children to know and be able to do. Instead, the problem came from tying standards to high-stakes tests and expecting all students to reach the same adult-determined level of performance at the same time. Future discussions for establishing a set of standards for integrating content areas would be essential if progress was to be made in moving toward integrated instruction (Czerniak et al., 1999).

Effect of standards and benchmarks on the integrated curriculum. Weilbacher's research (2000) reported on educators who had worked closely with two of today's leading advocates and practitioners of curriculum integration, James Beane and Barbara Brodhagen. The educators who collaborated with Beane and Brodhagen had reduced or abandoned their commitment to the integrative approach, due at least in part to the current emphasis on mandated standards enforced by high-stakes tests (Vars, 2001). While many middle school educators reported that they thought the standards movement would have focused on the high school level and not affect them at the middle school level (Beane, 1999), the reality was that standards and benchmarks were solidly in place in grades K-12.

Effect on separate subject areas. Gatewood (1998b) had expressed some concern about curriculum integration practices. He was concerned that curriculum integration as proposed by most advocates seemed to diminish and devalue traditional subject
disciplines – ironic when so much exciting change was occurring within some of them to bring about more real-world problem solving and critical thinking (Gatewood, 1998b). A second problem with integrated curriculum was that its advocates believed the principle source of curriculum content should be what students and teachers deemed most important. The question of curriculum content was to have been determined with parents, local and state school boards, and a diverse amalgam of groups, many with special interests.

The integration of subjects in schools was often done at lower complexity levels of content (Schug & Cross, 1998). According to the literature, as suggested by Bloom’s Taxonomy, knowledge, comprehension, and application were considered lower levels of thinking, while analysis, synthesis, and evaluation represented higher-order thinking (Schug & Cross, 1998).

The integrated curriculum literature downplayed special subject areas with which teachers had become specialists in. Also, some subjects, like history or math, may not have fared well or may have even suffered when used as the focus of an integrated curriculum (George, 1996). Many subject assessments did not require integration of the sort required in a formally integrated curriculum.

**Effect on individual student learning.** Davis (1997) supported George’s claim suggesting that curriculum did not integrate for individuals; only individuals integrated, only individuals made their own meaning. What another (e.g., the teacher) had integrated still must be engaged and – optimally – integrated by the pupils. Even as they engaged the curriculum, pupils might not have integrated the serious meanings taught; in fact, they might have remembered isolated fragments (e.g., names of rivers, titles of novels) and
might have integrated errors or stereotypes or platitudes (Davis, 1997). There was no evidence that integrated curriculum permitted learning in greater depth than might be achieved through other curriculum experiences (George, 1996). Curriculum integration also might not have allowed more application of curriculum outcomes than was present in traditional approaches (George, 1996).

George (1996) also identified other concerns. First, the integrated curriculum might not have encouraged more independent learning or more involvement or interaction with the environment. Second, students might not have gotten more involved in planning the curriculum (George, 1996). Third, it was important for students to use their prior knowledge. Curriculum integration might not have led to this more than the conventional curriculum. Finally, curriculum integration might not have encouraged more transfer or retention of what was learned (George, 1996). Many things were important for students to do to really "learn" information.

Gardner and Boix-Mansilla (1994) knew it was trendy to advocate "interdisciplinary" work. However, they expressed concern that such work could only be legitimately attempted if one has already mastered at least portions of the specific disciplines. Much of what is termed "interdisciplinary" work was actually predisciplinary work or work based on common sense, not on the mastery and integration of a number of component disciplines. Students needed some basic knowledge in order for curriculum integration to be successful.

Summary

There was no conclusive evidence that integrated curriculum approaches more effectively promoted what were the three most central goals of the middle school
curriculum experience: increased academic achievement, more positive personal
development of individual students, and more harmonious group citizenship (George,
1996). Also, what was taught in an integrated curriculum at the middle level was not
likely to be taught and reinforced at the high school level or recognized as having value
by the majority of high school or college instructors (George, 1996). Finally, outcomes
of the integrated curriculum might have had little congruence with the knowledge and
skills which were required for admission to advanced placement courses in high school.

For 2000 years, education has emphasized the individual nature of teaching and
learning. The integrated curriculum underestimated the value of that tradition and had an
uphill battle even when the integrated approach reportedly provided a better way
(George, 1996). It also made assessment of individual students more difficult.

Analysis of professionals’ criticism in the current literature identified several
related issues. Gatewood (1998a) proposed that while curriculum integration was an
important consideration for middle level educators, it should not currently be our number
one priority. The issue of classroom instruction was much more critical according to
Gatewood (1998a). Gatewood (1998a) concluded his argument by stating that the model
proposed by advocates of integrated curriculum presented intellectual, practical, and
accountability problems. Clearly, educators, students, and other professionals were not
completely satisfied with curriculum integration.
CHAPTER FOUR

Conclusions and Recommendations

Middle schools might have used curriculum integration because many reputable professionals supported the idea. Looking at the literature helped in gaining a view of why it might not be the best method to use, exclusively. Curriculum integration could be beneficial when used properly and with a blend of other strategies.

Conclusions

After reviewing the literature, conclusions might be drawn from educators, students, and other professionals. The criticism from these groups of individuals suggested that curriculum integration might not be the better method of instruction for the middle school.

Teachers' view of curriculum integration. Teachers viewed curriculum integration with mixed emotions (George, 1996). They felt it could be very beneficial to students if implemented in a correct way. Teachers felt one major factor would be proper training on how to implement an integrated curriculum in their classroom. Most middle and high school teachers were subject matter specialists, so they might have required additional training to integrate the curriculum (Mason, 1996). That additional training would have helped elementary-trained teachers, who teach at the middle level, become more than subject matter generalists.

Time was also another important factor that schools needed to consider (George, 1996). Teachers benefitted from a common planning time with their team (Czerniak et al., 1999). They might also have needed an individual planning time to do general bookkeeping work. Teams were important to keep the momentum going and to keep
ideas new and fresh (Weilbacher, 2001). Helping teachers to implement curriculum integration was important to the success of the integration process.

Students' view of curriculum integration. Students needed to enjoy school and needed to be motivated to learn (Erlandson & McVittie, 2001). Curriculum integration could have accomplished this when the subject matter appealed to the students. That was why it was important to include the students in the planning of the curriculum (George, 1996). It was also important that they became the leaders and the teacher was more of a facilitator in the classroom setting. It was also important that the goals and objectives would be defined at the start, so students knew what they were to be learning and accomplishing. The students should have known how they were going to be assessed on the unit. Real life problems needed to be addressed and students needed be able to work with others and to work individually (George, 1996).

Other professionals' view of curriculum integration. Professionals associated with the middle level curriculum voiced concerns about curriculum integration (Gardner & Boix-Mansilla, 1994; Gatewood, 1998a; Gatewood, 1998b; George, 1996; Schug & Cross, 1998). One of the major concerns expressed was the fact that standards and benchmarks and standardized tests were still based on separate subject areas (Gatewood, 1998b). Additionally, it was important that students do well on standardized tests. Many schools based their curriculum on the standards and benchmarks, so it seemed logical that those standards and benchmarks were used to determine what information was important to be covered. In many cases, the concern was that the information was not covered as in depth in an integrated setting as it would have been in the traditional setting (Schug & Cross, 1998).
Another major concern is that if curriculum integration was the focus for the middle school, then students might not be ready for the separate subjects they would encounter in the high school and college. Educators would need to consider this as they approached the middle school curriculum because they were preparing students for high school. It also might not have been helpful to some students to integrate curriculum. The brain might have needed to integrate the information from the separate subjects on its own (Davis, 1997). Finally, no one wanted parents or other community members to lose trust in the academics provided to students.

Recommendations

Although curriculum integration was considered to be a major component of the middle school concept, there were some problems with this process. It is necessary to continue to research this idea and to decide whether curriculum integration will be appropriate for each school district.

Define curriculum integration. If curriculum integration is going to be incorporated into a school district, that district needs to define what they intend “curriculum integration” to mean for them. If the teachers share the same definition, they will be more successful in the process. The kind of integration chosen will be more important than whether or not to integrate (Ross & Hogaboam-Gray, 1998).

Research the benefits. Additionally, it will be crucial that more time be taken to research the benefits of curriculum integration. Maybe then the research will shed a more compelling light on the topic of curriculum integration. It will also be important that some time be taken to research the criticism that has been expressed about curriculum integration. The research that is done on curriculum integration will allow educators,
administrators, parents, and students to have more background knowledge about this teaching approach. This background knowledge will help all involved to decide if curriculum integration will be worthwhile.

Research the concerns. Professionals have expressed many concerns that need to be evaluated and considered. With so many concerns about curriculum integration, those concerns must be examined to determine whether they were legitimate reasons to stop using curriculum integration in the classroom. When these concerns are examined more thoroughly, then it can be decided whether they are unfounded concerns or whether educators really should be wary of using curriculum integration all of the time.

Teacher training. Teacher training will also be a major component that will need to be considered when deciding whether to implement curriculum integration. Mason (1996) described a situation in which a secondary school administrator, in an effort to lead his school toward developing an integrated curriculum, reorganized a portion of the school day into large time blocks and assigned faculty to interdisciplinary teams. This action occurred during the summer with the expectation that the program would be on-line the following September. Mason (1996) pointed out that, unfortunately, practices such as this could doom integrated teaching to imminent failure. In this example, teachers were not consulted in the development process, school resources were not surveyed, teacher interest and motivation were not assessed, and sufficient time was not allocated for designing the program. Ross and Hogaboam-Gray (1998) stressed the need for teachers to take time to learn how to integrate before leaping into an overly ambitious program.
For schools to successfully use curriculum integration, there are a few things that should be considered. For teachers, it will be very important that they receive training to know other subjects areas and also how best to integrate curriculum. It cannot be acceptable to expect teachers to know how to do this on their own without the proper training. Training will also enhance teachers’ willingness to tackle something new.

**Time needed.** Time will also be another important factor that teachers will need to consider. Block-scheduling will allow teachers to focus on the themes more in-depth on a daily basis. Teachers will also need time to plan with their interdisciplinary team. Schools might have to reorganize the school day to accommodate the team planning time and a block-schedule.

**Teaming necessary.** Teaming practices could be very important to the success of curriculum integration. A team of teachers could help each other integrate ideas, concepts, and themes. It might be more difficult for an individual teacher to think of the depth or breadth of ideas that a team can create on his or her own. Teams also provide support for the members involved through discussion of ideas, concerns, and questions.

**Student interest.** Student interest will need to be analyzed before implementing curriculum integration. When choosing themes for the units of study, it will be necessary to cover the interests of all students at some point. Units will need to be planned that interest all students.

**A blend of strategies using curriculum integration.** School districts will need to integrate some of the time using themes, but use traditional classroom practices, also. It will be necessary to cover important concepts within individual disciplines. Standards and benchmarks necessitate this traditional approach. It will also be important that
students see there are distinct lines between subject areas and that each subject area is unique and important. While subject areas are important, it will also be important that students see and make some connections between the subjects. One way for them to do this would be through themes used in curriculum integration. Focusing on three or four themes per school year might help students make their own connections when they are in the traditional classroom setting. It will be important that the theme has a specific purpose, possible level, and natural conditions so teachers have a focus to the course of study.

A definite blend of the traditional classroom teaching approach and integrated curriculum might be the best course of action for school districts. Teachers will still feel comfortable as subject specialists, but also will become more proficient in other areas. It might also appeal to students, so that they will not have separate subjects all of the time, but also so they will not have themes for the entire year. Finally, professionals might see the benefit in blending these two ideas because it will still take advantage of the traditional approach, but it will also take a break from it occasionally. This blending will allow the standards to be covered so that assessments that cover separate subjects will be feasible for students. Students will have knowledge in the separate subjects to be used in these assessments. Also, the professionals that see the benefit to curriculum integration may find that covering a few themes per year could benefit students in their traditional classrooms. Students will use the integration ideas from the themes to integrate knowledge and experiences on their own. Integrating ideas from different subject areas on their own will be what educators really want students to be able to do.
Sharing with parents. It will also be very important to share these themes of study and the idea of curriculum integration with parents. Parents will express concern if they do not think that the information covered in schools is appropriate or meaningful. One way to battle this potential problem will be to share information with parents ahead of time. The themes could be explained in detail to show how they will be meaningful and appropriate for the children.

Curriculum integration could be beneficial to students at the middle school level. It will be necessary for a school district to research the concerns and benefits. The school must also consider how using curriculum integration will affect the teachers, students, and parents in the district.
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