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ABSTRACT

A study questioned 26 administrators, counselors, and teachers at 6 middle schools regarding School-To-Work (STW) curriculum implementation. It asked about conceptual, organizational, and operational reasons for implementation; curriculum [illegible]us; student benefits; and issues and concerns. Five national associations were questioned about their views on including STW curricula at the middle school level. Reasons for implementing STW were as follows: enhance curriculum relevance; improve responsiveness to the needs of at-risk students; enhance student development; develop career awareness and exposure; support systemic change and school reform; build community linkages; and improve transition to high school. Over half of the interviewees had no known conceptual reasons for adopting a middle school STW curriculum; several referred to the middle school philosophy and the Carnegie "Turning Points." Interdisciplinary training was most often cited as the organizational reason for implementation. Curricula focused on career exploration and awareness, self-awareness, contextual learning, service learning, and integrated themes. Students benefited by enhanced personal development. Categories of issues and concerns about implementation were participant "buy-in," program logistics, resources, and program quality and outcomes. STW curriculum issues and concerns of association representatives highlighted philosophical differences among them. (Appendixes contain 42 references and participant lists.) (YLB)

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SCHOOL-TO-WORK OPPORTUNITIES IN THE MIDDLE SCHOOL: CONCEPTS AND ISSUES

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Related Readings from NCRVE

for **Integrating Academic and Industry Skill Standards** (MDS-1001)

by Thomas Bailey

Making Sense of Industry-Based Skills Standards

Industry-based skill standards are a central part of the effort to link schooling more closely to the changing needs of the workplace. This report evaluates 22 skill standards pilot projects and makes recommendations for future developments. Bailey and Merritt suggest we pay more attention to long-term goals of increasing the learning that takes place on the job, and helping move workplaces towards high-performance work systems. They recommend that we develop broader, more professional skill standards for all jobs, and that special care be taken to establish meaningful partnerships between employers, workers, and educators. This detailed study will be useful to everyone interested in the skill standards movement. By T. Bailey, D. Merritt.
MDS-777/December 1995/$7.00

Workplace Skills in Practice: Case Studies of Technical Work

Many believe that a "skills gap" threatens American productivity because students are not taught the generic skills of problem solving, decisionmaking, communication, and teamwork required in the new competitive business environment. The authors of this study test this belief by examining four diverse firms to see what skills and work attitudes are actually required. The study confirmed the importance of these skills, but also found that they vary considerably with work context in ways ignored by public policy. The authors noted that firms lack effective strategies for acquiring needed skills in their workforce, and that they do little to foster skill development among nonmanagerial workers. These instructive case studies will interest employers, industry groups, and policymakers, as well as educators involved with school-to-work transition issues. By C. Stasz, K. Ramsey, R. Eden, E. Melamid, T. Kaganoff.
MDS-773/May 1996/$12.50

Improving Performance Measures and Standards for Workforce Education

A recent NCRVE study of the effects of Perkins II (*Improving Perkins II Performance Measures and Standards: Lessons Learned from Early Implementers in Four States*, MDS-732) found that the performance measures and standards provisions designed to promote program improvement were not achieving their full potential. This report examines the implications of that research for enhancing accountability in future federal workforce preparation legislation. It also illustrates specifically how the language of Perkins II could be changed to carry out the recommendations of the earlier study. By B. M. Stecher, L. M. Hanser, M. L. Rahn, K. Levesque, S. G. Klein, D. Emanuel.
MDS-821/May 1995/$5.50

EXECUTIVE SUMMARY

Overview

Over the past decade, increasing numbers of senior high school educators have provided comprehensive and meaningful school-to-work (STW) opportunities for their students. Unfortunately, these opportunities may be offered too late in some high school students' studies to have much impact on them. By the ninth or tenth grade, many students have already become turned off to education and made up their minds to quit school or just comply with minimum requirements for graduation. Other students may not have received much parental and peer encouragement to study and/or do not view schooling as an avenue to future occupational and career success (Kennedy, 1996; Lichtenstein & Blackorby, 1995). In response to these and other concerns, a number of school districts across the United States have created STW opportunities for middle school students. Examples range from including career exploration activities in individual middle school courses to school- and school-district-wide incorporation of STW opportunities in the curriculum. In some school districts, educators are providing middle school students with meaningful experiential learning related to occupations and careers.

Although educators are continuing to gain experience at implementing STW opportunities in the middle school, these activities have largely been conducted on an ad-hoc basis with little knowledge about how and why they should be included in the middle school curriculum as well as the impact they are designed to have on students. This report has been designed to address these concerns and issues. More specifically, within the middle school context, answers were sought to a series of questions that were posed to middle school educators who had implemented STW curricula in their schools (Questions 1-5) and to representatives of selected national associations (Questions 4-6):

1. Why was the STW curriculum implemented?

2. What conceptual, organizational, and operational reasons exist for implementing the curriculum?

3. What is the focus of the curriculum and how was it determined?

4. What benefits does the curriculum provide to students?

5. What issues and concerns are associated with implementing a STW curriculum for middle school students?

6. What are selected national associations' views on the inclusion of STW curricula at the middle school level?

The Process

Based on an initial manual and computer-based literature and research search, interview protocols were developed to gather in-depth information from middle school educators and association representatives. Concurrently, exemplary locations where STW opportunities for middle school students have been implemented were identified. State STW coordinators, selected association representatives, and VocNet subscribers were asked to nominate middle schools where exemplary school-to-work/careers programs had been established. Thirty-six middle schools were nominated for participation in the study. In-depth telephone interviews were conducted with contact persons from 28 of these schools. The remaining eight schools either did not meet the criteria established or were unavailable to complete the interview within the time constraints of the study.

Using the interview information gathered and a set selection criteria, six schools were selected for more detailed examination. At each of these middle schools, the contact person was asked to select three to five individuals, including themselves, to participate in a taped in-depth phone interview. At least one principal, one counselor, and one teacher directly involved in the STW middle school program were to be included on the list. At these six middle schools, interviews were conducted with a total of 26 persons, including ten administrators/coordinators, six principals, four guidance counselors, and six teachers.

It was also deemed important to gather information about the views national organizations had about STW opportunities in the middle schools. Project time and dollar constraints necessitated obtaining information as rapidly and efficiently as possible. This situation precluded conducting interviews with all education-related associations—an especially time-consuming task since many associations would not be able to respond to our focused middle school questions. Thus, a small number of national associations that had some involvement with and/or concern about STW opportunities in the middle school

were identified. Information was sought from these associations since they tend to view STW opportunities from a macro- (national) rather than a micro- (local school) perspective. Additionally, since most associations' purposes and philosophies reflect the views of their membership, the information gathered would not only reflect what associations support but what their constituents (members) view as important to them. Further, official association "doctrine" may be easily located in association publications, brochures, and internet home pages. Using a multi-level screening process, a total of six associations were selected to be interviewed. Of the six, five associations had knowledgeable representatives available during the time period we had established to conduct interviews. Associations from which information was gathered thus comprised a small, purposive sample of the universe of potential associations nationwide that might have views about and/or involvement with STW opportunities in the middle school.

Results and Discussion: Middle Schools

Why a School-to-Work Curriculum?

Middle school educators we interviewed were pleased to describe why they chose to implement STW curricula in their schools. Some of their reasons were not entirely unexpected since, based on our literature searches and involvement with other STW projects, we anticipated that middle school educators would include enhancing curriculum relevancy, better serving the needs of at-risk students, and enhancing student development among their reasons for implementing STW curricula. The remaining groupings of reasons (developing career awareness and exposure, supporting systemic change and school reform, building community linkages, and improving the transition to high school and beyond) were less obvious in the literature but appear to be of no less importance. All seven of the implementation reasons were to some extent a function of school context. That is, schools' reasons for implementation were based on the particular school and community setting, student population, school district and/or state involvement in educational reform, and so forth. The reasons educators gave for STW implementation were to a varying degree compatible with suggestions provided in several recent reports advocating change in the middle schools. For example, among its recommendations, *Turning Points* (Carnegie Council on Adolescent Development, 1989) supports the implementation of personalized and cooperative learning for students and making meaningful connections between middle schools and their communities. These statements parallel several of the categories of

responses that were drawn from the interview text. Other implementation categories we identified are either generally or specifically supported in the middle school literature (e.g., see Dougherty, 1997; Mac Iver, 1990; Marshak, 1995). Unfortunately, even though a number of people we interviewed commented that their middle school STW programs were implemented at least in part to meet the needs of at-risk students, there is little discussion in the literature to support this focus. A plausible reason for such a mismatch is that the people we interviewed were at the cutting edge of educational reform but their exemplary efforts had not as yet been recognized in the professional literature. Another possible reason might be that middle school educators do not want to note in formal communication that some students begin to develop their at-risk characteristics while enrolled in middle schools.

Conceptual and Organizational/Operational Reasons for Implementation

About half of the middle school educators interviewed offered conceptual reasons for implementing their STW curricula. Some referenced *Turning Points* and/or general middle school concepts as a foundation for curriculum development efforts. One principal implied a mismatch between *Turning Points* and the STW curriculum; inferring that *Turning Points* de-emphasized academics in favor of affective behavior development. Several educators saw the STW curriculum as an excellent fit with the middle school philosophy of assisting students to transition from child to young adult. Comments made by several other educators supported the need to prepare students for the future as well as the present. Interviewees' comments about the value of the STW curriculum ranged from "relevant to real life" to "produces lifelong learners" and "embedding basic skills into a thought-provoking curriculum." The statement made by a middle school principal that "it is never to early to address future needs" seemed to capture the essence of why it is important for the middle school to focus on preparing students for their futures.

Interviewees mentioned a small number of organizational and operational reasons for implementing STW curricula in the middle school. Interdisciplinary teaming, which was discussed most frequently by middle school educators as an organizational reason for implementing STW curricula, is quite visible in the literature (Carnegie Council on Adolescent Development, 1989, 1995; Keefe, Valentine, Clark, & Irvin, 1994; National Middle School Association, 1995). However, it is not very clear who should be members of these teams. Should teams include all the educators in a middle school or just a subset of these educators?

Curriculum Focus

Collectively, middle school educators we interviewed indicated that their curricula focused on five different but interrelated areas (career exploration and awareness, self-awareness, contextual learning, service learning, and integrated themes). It was in this area that STW curricula appeared to differ most from curricula advocated in the general middle school literature. However, the actual difference is quite subtle. Whereas the literature focused more directly on development of academic knowledge and skills within a framework of adolescent youngsters' current development needs, educators we interviewed sought to assist their students in developing for the future as well as meeting their present needs. For example, interviewees mentioned that career exploration and awareness experiences could assist students in evaluating their current interests and abilities and expanding their future career horizons. Several educators noted that contextual learning should be used to connect basic learning with realistic applications in real life community and workplace settings.

Educators also discussed how the focus of their curricula were determined. Implicit in the literature is a view that educators are the source of content knowledge and organization for middle school curriculum development. In contrast, several educators we interviewed indicated that at their schools a broad net was cast to capture content that should be included in their curricula. Through approaches such as faculty brainstorming, student input, district-wide needs assessments, advisory committees, and community conversations, educators were able to bring a real world focus and view into their curricula. Curriculum development processes discussed by interviewees were much more comprehensive and dynamic than what we noted in the literature on middle school education.

Student Benefits

Interviewees described a broad range of benefits that the STW curricula had provided to their students. These educators' comments underscored the contributions of STW experiences to middle school student development. Middle school educators noted that the middle school STW curriculum enhanced their students' personal development in areas such as individual growth, self-understanding, confidence, self-esteem, and motivation and responsibility to learn. Interviewees linked these outcomes directly to the STW curriculum process. Examples of the curriculum process include ways it appeals to

students at their developmental level and ways it focuses on issues that are relevant to middle school students. Teachers we interviewed were very sensitive to student outcomes and how they related to the process used to structure the curriculum.

Implementation

For the most part, implementation issues and concerns expressed by the middle school educators we interviewed paralleled those associated with general change and reform in the schools. However, the process of implementing a STW curriculum should be viewed as much more holistic than what is viewed as traditional individual teacher-centered change. Several interviewees noted that "buy-in" was sought from virtually everyone from the schools, the community, and the workplace who might make contributions or provide meaningful input to the curriculum. These potential contributors were viewed as partners in rather than merely providers to the STW curriculum effort. This contrasts to some extent with recommendations for curriculum change described in several recent middle school publications (Carnegie Council on Adolescent Development, 1989, 1995; National Middle School Association, 1995). For example, even though in *Turning Points* it is recommended that teams of teachers work with the same students, the notion of all teachers in the middle school working as teams is not addressed. In contrast, interviewees seem to view the STW curriculum as being every educator's responsibility since it is meant to be implemented by all teachers in the middle school.

Results and Discussion: Associations

Literature gathered from selected associations revealed a range of views on STW efforts. Some associations made mention of STW efforts, and others did not. Most of the association literature focused on career development needs of secondary school students but not specifically middle school students. Discussions with association representatives confirmed the wide range of views found in the literature. However, the persons we interviewed provided more expansive views of STW efforts in the middle school than was identified in the association literature. For example, representatives collectively spoke much more directly and positively about the merits of STW activities in the middle school than what was formally documented. STW curriculum issues and concerns expressed by association representatives appeared to highlight philosophical differences among the various associations and their members. The differences in views expressed by association

representatives provide a meaningful starting point for resolving these differences so more uniform STW opportunities can be provided to middle school students. Questions drawn from this area of discussion that need to be answered include

- Are the middle school years the best to time to introduce STW opportunities?
- Is there a best time to introduce STW opportunities in the middle school?
- How should STW opportunities be defined as they relate to middle schools?
- How can potential STW image problems be dealt with?
- Are STW opportunities a quick fix or a long-term investment in improvement?
- How can educators cope with external groups that do not support the inclusion of STW opportunities in the middle schools?

Possible Future Directions

Based on the results and discussion, several suggestions are offered for consideration by those interested in directions that may lead to peaceful coexistence between STW curricula and the middle school agenda. As a starting point, consider the direction STW opportunities in some middle schools appear to be taking. As described by middle school educators in exemplary middle schools where STW curricula are being provided to students,

- these students can prepare for their futures in addition to satisfying their current needs.
- teaching and learning focus on both the educational process and its outcomes.
- every educator in the school can team with each other as well as with community and workplace representatives to provide students with authentic learning experiences.
- the context for teaching is proactive and dynamic rather than reactive and static.

- the curriculum can be developmentally responsive to students and concurrently provide them with a wide range of opportunities such as career exploration and awareness, contextual learning, service learning, and integrated learning themes.

Thus, there appears to be a clear connection between what the middle school literature says middle schools should do and what a number of STW-oriented middle schools are doing. Even though STW opportunities in the middle school may not be a mainstream focus for middle school professionals, these opportunities have the potential to meet students' developmental needs in new and exciting ways. It is therefore important to better understand and document exemplary STW opportunities that are occurring in many middle schools across the United States so their successes can be shared with other middle school educators.

It also appears that middle schools where STW opportunities are being provided to students may indeed be exemplars of best practice as envisioned in the middle school literature. Broadly-based teacher teaming, extensive linking with the community, providing students with opportunities for contextual learning, enabling students to explore the real world, and providing students with meaningful development experiences are all suggested in the middle school literature and can all be accomplished within a STW opportunities framework. Descriptions about STW opportunities that can be provided to middle school students, and their potential value must be communicated to the middle school educator community. Middle school educators should have access to this information before they begin to implement major curriculum changes.

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OVERVIEW

Even though middle schools have existed for over 40 years, they are considered by many to be a relatively new phenomenon. However, what motivation existed for establishing middle schools in the first place? Kindred, Wolotkiewicz, Mickelson, Coplein, and Dyson (1976, pp. 3-9) described the growth of the middle school movement as a function of six interrelated areas: (1) dissatisfaction with the junior high school, (2) changes in young persons' maturity patterns, (3) new educational ideals, (4) developments in learning theory, (5) innovations in educational methods and materials, and (6) changes in society.

At that time, junior high schools were viewed as not providing broad exploratory and transitional experiences appropriate to adolescent students' needs and interests. Over the years, middle schools replaced junior high schools to the point where a relatively small number of junior high schools still exist (Epstein, 1990). However, the other five areas noted by Kindred et al. in 1976 continue to evolve and in doing so present a contemporary frame of reference for discussions focusing on what middle schools should and should not be. Young people continue to mature at more rapid rates and thus provide middle school educators with continuing instructional challenges (National Middle School Association, 1995). Different philosophies of middle school education continue to be discussed and debated (Dougherty, 1997). Learning research has provided middle school educators with much valuable information and, concurrently, raised a number of questions about how middle school students' needs should be met (e.g., see Anderman & Maehr, 1994). Innovations, particularly in the computer and electronic communication areas, have been touted as being important for students to learn so they will be prepared for life in our technological society. However, many middle school students are not afforded opportunities to learn about these innovations (Becker, 1990, p. 452). In addition, societal changes such as evolution of the United States from a national economic powerhouse to being part of a global economy have raised questions about what work-related education should be included in the middle school curriculum.

Scope and Purpose

This report focuses on a subset of middle school education that connects with each of the evolving areas introduced above: school-to-work (STW) opportunities in the middle school. Over the past decade, increasing numbers of senior high school educators have provided comprehensive and meaningful STW opportunities for their students. Unfortunately, these STW opportunities may be offered too late in some high school students' studies to have much impact on them. By the ninth or tenth grade, many students have already become turned off to education and have made up their minds to quit school or just comply with minimum requirements for graduation. Other students may not have received much parental and peer encouragement to study and/or do not view schooling as an avenue to future occupational and career success (Kennedy, 1996; Lichtenstein & Blackorby, 1995). In response to these and other concerns, a number of school districts across the United States have created STW opportunities for middle school students. Examples range from including career exploration activities in individual middle school courses to school- and school-district-wide incorporation of STW opportunities in the curriculum.

In some school districts, educators are providing middle school students with meaningful experiential learning related to occupations and careers (Schmidt, Finch, & Moore, 1997). One example is the Ft. Worth, Texas, Public Schools where educators have initiated a large scale middle school effort that, among other things, enables *every* sixth-grade student to spend a week in the workplace. Students shadow employees working in a variety of business, industry, and public service areas and then link their experiences with subjects they are studying in school. This experience is repeated for *every* ninth-grade student. Effective STW middle and high school opportunities are thus cumulative rather than isolated, one shot activities. As Newmann and Wehlage (1995, pp. 29-30) indicate, when schools are engaged in "innovations without sustained, long term consistency, it is difficult for even the most gifted teacher to make a positive difference for students." They go on to say, "The task for schools, then, is not simply to offer space and opportunity for individual teachers to teach. It is to organize human, technical, and social resources into an effective collective enterprise."

Although educators are continuing to gain experience at implementing STW opportunities in the middle school, these activities have largely been conducted on an

ad-hoc basis with little knowledge about how and why they should be included in the middle school curriculum as well as the impact they are designed to have on students. Our report has been designed to address these concerns and issues. More specifically, within the middle school context, we sought answers to a series of questions that were posed to middle school educators who had implemented STW curricula in their schools (Questions 1-5) and to representatives of selected national associations (Questions 4-6):

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Middle School Issues and Concerns

Framing a context for the study necessitated a documentation of the broad range of middle school issues and concerns. Examples of issues and concerns that are of both general and specific interest to middle school educators are described below. This middle school literature is revisited in the discussion (final) section of the report where issues and concerns are compared with middle school educators' STW efforts and associations' views of STW opportunities in the middle schools.

Broad Issues and Concerns

During the past three decades, there has been a growing awareness of the needs of the young adolescent. Even though this developmental stage is critical to students future academic and workplace success, until recently, little attention had been given to the unique educational needs of this group. In fact, "less attention has been paid to early adolescence

than to either of two other developmental periods: the "ready to learn" years from birth to school age and the "ready to earn" years from late adolescence to adulthood" (Michigan League for Human Services, 1997, p. 4).

Since 1963, when the middle school concept was first introduced by William M. Alexander, educators have been searching for ways to embrace it. Middle school theory surmises that early adolescents' academic, social, and emotional needs are better served by an educational experience not found in the elementary or high school environments. Some middle-level schools have been restructured and transformed to provide the appropriate learning environment that assists young adolescents to meet their potential and provide a meaningful place for young people in an adult culture. Steps for accomplishing this change have been outlined in *Turning Points: Preparing American Youth for the 21st Century* by the Carnegie Council on Adolescent Development (1989), and have been widely disseminated as a "blueprint" in restructuring efforts. These steps include the following:

- Create small communities for personalized learning (small schools or small programs within larger schools).
- Create successful experiences for all students by eliminating tracking and promoting cooperative learning.
- Give teachers and administrators decision-making power concerning curriculum and instruction.
- Employ teachers who like, respect, and appreciate adolescents.
- Employ teachers who are experts in teaching young adolescents.
- Improve academic performance through fostering health and fitness of young adolescents.
- Encourage family involvement in the education process.
- Connect middle schools with their communities. (p. 9)

The authors of *Turning Points* note that middle schoolers need to become "socially competent individuals" who are able to cope successfully with everyday life. They need to

believe that they have promising futures and the competence to take advantage of societal opportunities when they arise.

Many middle schoolers "lose ground" academically during this period. Theory suggests the declining academic achievement that commonly plagues adolescents may be directly related to "the mismatch between the developmental needs of the students and the educational environment" (Mac Iver, 1989). In turn, providing young adolescents with a combination of both challenging and nurturing experiences in appropriate settings can strengthen the possibility of them becoming more effective academic and social participants. Substantial evidence can be found of a relationship between young adolescents' perceptions of the classroom environment and their achievement and attitudes (Dougherty, 1997).

The middle school concept addresses the need to maintain the academic standards found in a high quality education but also places emphasis on other areas of growth. Potential academic ability can be achieved through activities designed to promote the development of all aspects of growth: social, emotional, physical, and intellectual (Mac Iver, 1990). For example, the middle school curriculum may consist of thematic units developed from young adolescents' concerns about world issues. Students gather information, organize it meaningfully, evaluate its usefulness, form conclusions, and plan action in relation to a specific theme or concern. The long-term project can be a useful vehicle for developing both intellectual skills and an understanding of humankind (McKay, 1995).

According to Marshak (1995), the most important structural change that can be made in middle schools is to create structures that generate and foster relationships over time between the student and the teacher. Structures that encourage these qualities are as follow:

- teams of teachers working with the same students
- restructuring the staff to dramatically reduce student loads
- teachers who are generalists and teach integrative, interdisciplinary courses
- teachers who teach the same students for several years

- teachers who care about the lives of young people
- teachers who understand the interrelationship between academic learning and the physical, mental, emotional, moral, and spiritual growth of teens (p. 33)

Focusing on what schools must do to be successful in meeting the needs of all early adolescent learners, Crocket (1995) offered a detailed view of the conditions that should exist. To be successful, the following school conditions should be present:

- positive school culture and climate
- inquiry-based learning
- integrated curriculum
- opportunities for success
- student and teacher empowerment
- varied assessment (pp. 48-50)

Most of these conditions parallel the blueprint for middle school restructuring advocated in *Turning Points.*

Curriculum and Instructional Issues and Concerns

Recent commentary about middle-level curriculum and instruction reflect some divergence in views of what the educational process should be. Reporting the results of a national survey of education in the middle grades, Becker (1990) noted commission reports "urged that schools put greater emphasis on active learning and higher order thinking so that students can learn how to write better, how to work more productively in groups, and how to learn" (p. 453). National survey results supported these concerns; it was indicated that "schoolwide instructional emphasis on higher-order thinking and active learning is still the exception than the rule in middle-grade education in the U.S." (p. 453). More recently, the Michigan League of Human Services (1997) noted that "there is a solid national consensus among educators, researchers, and youth advocates regarding the key features of effective middle-grades schools" (p. 18). They went on to say "all young adolescents require high academic and social expectations supported and modeled at school, at home,

and within the community. Further, young adolescents need a strong academic setting with teaching tailored to developmental needs. These settings include curricula that integrate learning opportunities across subjects, and provide enhanced attention to reading and mathematics" (p. 18).

In *Turning Points* (Carnegie Council on Adolescent Development, 1989), it was emphasized that a tremendous mismatch existed between middle grade curriculum and the needs of young adolescents. As Felner, Kasak, Mulhall, and Flowers (1997a) stated, *Turning Points* provided educators with "comprehensive and researchable constructs and exemplars of those constructs to undergird their reform efforts" (pp. 521-522). In fact, the eight major recommendations for reform provided in *Turning Points* (cited earlier) served as a framework for the long-term evaluation of a model for high-performing learning communities (Felner et al., 1997b).

Middle-Level Career Development

The U.S. Department of Education (1990) conducted a National Education Study (NCES–NELS-88), which included 23,000 American eighth graders. Evaluation of the findings revealed some disturbing trends concerning middle schoolers and career development:

- $^1/_2$ to $^2/_3$ of eighth graders plan on completing college but only 25% plan on taking any college preparatory courses
- 25% of eighth graders don't know which high school program they will enter
- 64% of eighth graders have never discussed their future high school program with their counselors
- 50% of eighth graders have never discussed their high school plans with a teacher
- 74% of eighth graders are learning very little about people's work activities in the next century
- Approximately $^1/_3$ of eighth graders have little knowledge about different occupations, the relevancy of school to future work, and career selection

- 51% of eighth graders are learning very little about the vocational courses offered in their high school (pp. 2-3)

More recently, it was noted in a middle school curriculum document prepared by the Wisconsin Department of Public Instruction (1991) that vocational education is viewed as being less significant at the middle school level than at the high school level. In response, vocational education at the middle school is often characterized by inconsistency between programs, significant "gaps" in course offerings, and an outdated and non-integrated focus, resulting in an unsuitable preparation program for work in the 21st century. It was also noted in the document that "[a] systematic examination of what educators are currently doing in the middle grades to prepare students for work is likely to show that little consensus exists about what role vocational education plays, or should play, at this level" (Wisconsin Department of Public Instruction, 1991, p. 13).

Perhaps the most comprehensive treatise on adolescent development and the middle schools has been produced by the National Middle School Association (1995). In *This We Believe: Developmentally Responsive Middle Level Schools*, a comprehensive description of young adolescents' development characteristics is presented. The five developmental areas described include intellectual development, moral development, physical development, emotional/psychological development, and social development. Using these development areas as a frame of reference, the authors detail what developmentally responsive middle schools should provide to students:

1. curriculum that is challenging, integrative, and exploratory
2. varied teaching and learning approaches
3. assessment and evaluation that promote learning
4. flexible organizational structures
5. programs and policies that foster health, wellness, and safety
6. comprehensive guidance and support services (p. 11)

These six major areas of emphasis collectively provide a meaningful view of what it takes to be a middle school that is developmentally responsive.

Inherent in providing middle school students with career development experiences is the defining of what career development actually is. Over twenty years ago Donald Super, one of the foremost authorities on this topic, viewed career development as a lifelong process characterized by a number of stages (Super, 1974). He noted that each stage was essential and included certain developmental tasks that individuals must achieve if they were to make career choices that led to satisfactory and productive lives. The middle school years include two career development stages: growth and exploration. Growth (birth to 15) characterized by the development of attitudes, interests, and needs associated with self concept, and exploration (age 14 to 25), a phase in which career choices are narrowed but not finalized.

Unfortunately, certain aspects of Super's (1974) theory have not been fully tested. This dilemma has caused some middle school educators to take sides either for or against Super's career development framework; others may just forget about career development altogether and make curriculum decisions based on personal feelings and emotions.

However, the need for middle school students to have meaningful career development experiences persists. Even though debate over the type of development experiences continues, guidance and direction for planning these experiences is available from many different sources. Several examples of the suggestions for planning middle school student career development experiences are provided below.

In an article titled "Career Awareness: Successful Strategies That Work," Hogan (1995) noted that the more students know about themselves and the world of work, the more likely they will be to make satisfying, realistic decisions about their future. Middle school students need the opportunity to investigate skills and abilities required for different occupations, and to assess their own abilities in relation to opportunities of interest to them.

Sears (1995) noted that many middle school students have preconceived notions of what they want to become based on things they have seen or heard from others or the media. What they need is the opportunity to explore and experience the large variety of potential job opportunities through career exploration activities and work-based experiences. Often, students must make choices about high school curricula regardless of their vocational maturity or readiness levels. When middle school students choose their high school educational course of action, they can limit or eliminate alternatives available to

them in the future: "Without solid career planning programs at the middle school level, many students will make poor educational and career choices in high school" (p. 41).

Gathering Useful Information

The process we used to gather needed information was rather straightforward. Based on an initial manual and computer-based literature and research search, a preliminary summary of information was prepared to assist in developing the interview protocols. Interview protocols were developed to obtain selection criteria-related information from nominated middle schools, gather in-depth information from middle school educators at selected sites, and gather information from association representatives.

Middle Schools

We next identified exemplary locations where STW opportunities for middle school students have been implemented. State STW coordinators, selected association representatives, and VocNet subscribers were asked to nominate middle school sites which had established exemplary school-to-work/careers programs. Thirty-six nominations were received, representing 16 states. The states included Indiana, South Carolina, Florida, Washington, North Carolina, New Hampshire, New York, Michigan, Texas, Oklahoma, Arizona, North Dakota, Wisconsin, Illinois, Kentucky, and Massachusetts. Nomination criteria defined middle schools that have a fully operational, successful school-to-work/careers program; are graduating students from the program; have effective linkages with high school school-to-work/careers efforts as well as the workplace and the community; and have a long-term commitment to STW transition at the school-district level.

Information related to the criteria used for the selection of school sites was obtained through in-depth telephone interviews with contact persons. Contact persons were designated by the nominator as the individual responsible for coordinating STW efforts at the nominated middle school. Thirty-six middle schools were nominated for participation in the study. In-depth telephone interviews were conducted with contact persons from 28 of these schools. The remaining eight schools either did not meet the criteria established or were unavailable to complete the interview within the time constraints of the study.

Using the interview information gathered and the selection criteria mentioned earlier, 6 of the 28 schools were selected for more detailed examination. At each of the six middle schools, the contact person was asked to select three to five individuals, including themselves, to participate in a taped in-depth phone interview. At least one principal, one counselor, and one teacher directly involved in the STW middle school program were to be included on the list. At these six middle schools, interviews were conducted with a total of 26 persons, including ten administrators/coordinators, six principals, four guidance counselors, and six teachers.

Each interview included several areas of focus, including a description of the school-to-work/careers curriculum currently in place; reasons why the curriculum had been implemented, including conceptual and operational bases for implementation; the extent to which the program provided opportunities to link with high schools, workplaces, and communities; personal involvement of the interviewee in STW opportunities, especially curriculum development activities, teaching activities, and collaborative activities; the curriculum focus or themes; ways the STW curriculum benefits students and contributes to their success; and issues and concerns voiced about implementing STW opportunities for middle school students.

Associations

It was also deemed important to gather information about the views national organizations had about STW opportunities in the middle schools. Project time and dollar constraints necessitated obtaining information as rapidly and efficiently as possible. This situation precluded conducting interviews with all education-related associations—an especially time-consuming task since many associations would not be able to respond to our focused middle school questions. We thus identified a small number of national associations that had some involvement with and/or concern about STW opportunities in the middle school. Information was sought from these associations since they tend to view STW opportunities from a macro- (national) rather than a micro- (local school) perspective. Additionally, since most associations' purposes and philosophies reflect the views of their membership, the information gathered would not only reflect what associations support but what their constituents (members) view as important to them. Further, official association "doctrine" may be easily located in association publications, brochures, and internet home pages.

In order to focus the association identification and selection process, three criteria were formulated. To be selected, the association must have (1) some involvement in younger adolescent development and/or education, (2) some documented formal concern about and/or involvement in middle school student career development, and (3) a nationwide rather than only a state or local membership. Obtaining information about potential associations was accomplished in two ways. First, we scanned lists of national organizations to determine which had some involvement with middle schools and middle school students. Second, we sought nominations of organizations from the middle school educators we interviewed. This resulted in a short list of potential organizations. Each organization on the list that had potential to meet the criteria was contacted by telephone to verify its formal concern about and/or involvement in middle school student career development. Information gathered from associations during these initial telephone calls was then confirmed through reviews of associations' internet home pages.

Using this screening process, a total of six associations were ultimately selected to be interviewed. Of the six, five associations had knowledgeable representatives available during the time period we had established to conduct interviews. Associations from which information was gathered thus comprised a small, purposive sample of the universe of potential associations nationwide that might have views about and/or involvement with STW opportunities in the middle school. It is also important to recognize that views of the associations from which we gathered information may not be representative of national associations involved in middle schools as a whole. The five associations that participated in interviews were the American School Counselor Association (ASCA), American Vocational Association (AVA), International Technology Education Association (ITEA), National Association of Secondary School Principals (NASSP), and National Middle School Association (NMSA).

Interviews with association representatives focused on their views about the benefits of STW opportunities, issues and concerns they felt were related to providing middle school students with STW opportunities, and formal statements or positions their associations had taken on STW opportunities for middle school students. Additional information that described association involvement in STW opportunities was requested from each person interviewed. Formal association mission/position statements and related information were gathered from the respective associations' internet home pages.

Taped information gathered during the in-depth interviews was transcribed for comprehensive analysis using *The Ethnograph* (Qualis Research Associates, 1990). This software provided us with the capability of coding, grouping, and regrouping information according to prominent and underlying themes.

VIEWS FROM THE MIDDLE SCHOOLS

The school personnel that were interviewed responded to questions concerning four areas: (1) the reasons for the implementation of a middle school STW curriculum, (2) the curriculum focus, (3) ways the middle school STW curriculum contributed to student success, and (4) the issues and concerns that have been voiced about implementing a STW curriculum at this level. Categories of interviewee responses have been determined for each question with the most dominant (frequently cited) category appearing first.

Why the School-to-Work Curriculum Was Implemented

An examination of interviewee responses concerning reasons for implementing a middle school STW curriculum revealed the following seven categories of responses:

1. Enhancing Curriculum Relevancy
2. Serving At-Risk Populations More Effectively
3. Enhancing Student Development
4. Developing Career Awareness and Career Exposure
5. Supporting Systemic Change and School Reform
6. Building Community Linkages
7. Improving the Transition to High School and Beyond

These categories are described below. Selected comments made by interviewees (teachers, principals, guidance counselors, administrators, coordinators, and program evaluators) have been included to assist in describing the nature of each category.

Enhancing Curriculum Relevancy

The most frequently cited reason for implementing a middle school STW curriculum was to help students make a connection between school learning, the workplace, and future living. Several interviewees indicated that middle school students generally do not connect the classroom and the "real world," and that middle-level educators needed to find more creative and innovative ways to answer the question, "Why do I need to learn this stuff?" One technology director stated,

> We really felt like, even at this age, that some kids were having some difficulty seeing the correlation between what was going on in the classroom and what was going on in the world of work. And some of the kids do not see the relevance for getting an education and studying the things that we study in our curriculum. Giving kids the opportunity to get into the workforce and see how various language arts skills and mathematics skills and science skills are being applied, really seemed to make sense. We felt that it would really give them a good understanding as to what education was all about.

Interviewees indicated that in order to bridge the gap between schooling and the workplace, instruction and classroom activities must link career experiences and academics in relevant ways. Curriculum content must be viewed by students as having a meaningful and lasting connection to their lives. The STW approach was viewed as a way to "give the content a context." A technology coordinator remarked that "School-to-work gives validity to what we do as educators." A dean of students explained,

> I think that when you teach kids out of books, they don't always understand why they're learning something. And some of them learn it just because that's what they're supposed to do. But the population that we work with, they need to see, they need to know, it's relevant to their life. School-to-work is meaningful to the kids. They know why they're learning something. It applies to real life. It gives them a purpose for everything they do.

Interviewee responses also revealed that for curriculum to be relevant, it must be realistic. One seventh-grade language arts teacher stated, "We thought the students would

be much more interested in learning if we could give them an experience that was realistic." An eighth-grade language arts teacher also emphasized this point:

> To me, school-to-work is the best, it's realistic. It sets up a goal for a student to reach. It's okay to learn the things that are valuable at school, but if you never do anything with them, by the time you get to twelfth grade, it's a moot point. So, school-to-work in my opinion, gives a very realistic place for skills to be used. In order to be able to hone and sharpen your skills and perfect your craft, you have to be able to use those skills in other places outside of where you learned them.

Another eighth-grade teacher felt this realistic and relevant approach gave meaning to the curriculum content and allowed students to see how what they were learning now would be helpful in the future:

> Well, I think it [the school-to-work curriculum] lends itself to letting the student know that they're going to school for a purpose. You know, you're not just going to school to put in your time. You're going to school to learn, and what you learn in school can be applied to a job. And not just that, what you're learning now can carry on to the job and it can carry on to whatever school you want to go to . . . I'm going to school for an education, but I'm also going to school for something else. I'm planning for something that's going to happen to me. I think that's why we did it. They've got to feel a connection, if they feel a connection then they're going to do it, but if they don't feel any connection at all, then they're not going to feel like they should put anything into it.

Since the STW curriculum was viewed as being relevant, realistic and meaningful, many interviewees concluded that this approach would be motivating to the students. Motivation, or perhaps, lack of motivation, was frequently mentioned as a reason for implementing a STW curriculum. This curriculum approach was considered motivating because it was "hands-on," innovative, active, interactive, and allowed students to visualize the end results. As one magnet school principal pointed out, "The traditional approach is too one-dimensional and we are losing students. We want to bring the world of work alive to students." A guidance counselor explained how STW education "motivates the kids by giving them a goal to work toward educationally, so that they can really focus on their academics and to know there's a lot of choices for them." A seventh-grade academic teacher emphasized the "hands-on" and interactive component:

> Our goal is also to keep students wanting to learn. There's just no better place to do it than to actually put them in a situation where they're using skills, that they can actually learn while they're using them and use them while they're learning them.

Several respondents had particular groups of students in mind when discussing the need for a motivating curriculum. One eighth-grade teacher explained how STW education motivated some students:

> And then we also have a group for students who tend to be less motivated. We have internships that are designed for them where they actually go out in the community and work with the business partner at the business worksite and actually receive a salary. It's kind of innovative because it allows students to be paid in the real job site and actually leave school to do it. At the middle school level that doesn't happen too often.

Serving At-Risk Populations More Effectively

Many interviewees stated that their STW middle school programs were implemented, at least in part, as an alternative education program or a drop-out prevention strategy for at-risk students. According to one city school principal,

> This [school-to-work program] is an alternative for dysfunctional kids. They don't need to come to school and fail. We need to break the cycle of failure by putting them in an environment to succeed.

A STW coordinator commented,

> Our school had the highest school suspension rate and lowest test scores in the district. An assessment survey was sent to parents and the community. 96% of the respondents wanted career counseling, goal setting for the future, and job skill preparation for the students. The main goal was to stay in school.

The STW program was also viewed as a way to individually address learning styles and interests, ability levels, self-esteem issues, motivation issues, and remediation needs. A guidance counselor stated,

> It kind of grew out of a need of a way to communicate with some of the special needs students that we had here. We started to find that working with at-risk students using "learn and earn" and school-to-work job experiences, job shadowing and so forth, had a lot of meaning for these students. This was an area that they were probably deficient in because positive working relationships weren't always modeled at home for some of these students.

It should be noted that several sites considered special populations to include not only the traditionally defined "at-risk" students, but gifted and talented and nontraditional

students too. STW curriculum was viewed at several sites as a way to address gender equity issues and eliminate tracking in certain career paths.

Enhancing Student Development

Interview responses revealed that there were two concerns within this category: (1) developing personal awareness and (2) developing work-related skills. Interviewees commonly identified student personal awareness as a reason for implementing a middle school STW curriculum. They referred to planning a purposeful and developmental STW program that addressed the areas of personal responsibility and dignity, self expression, self-knowledge, and self-discipline. STW education was viewed as a way to "provide a source of knowledge, so that students can see where they fit into career pathways." One junior high school principal felt STW education allowed students to determine "where they see themselves in relation to others and as an individual."

Others focused on using STW education to enhance work-related skills such as, future goal clarification, informed decision-making, team building and problem-solving, collaboration, critical thinking, and leadership. One junior/senior high school principal believed STW education "allows kids to explore as many options as possible and helps them in making well-based decisions about what they want to be when they grow up." Another rural site principal stated, "School is not an isolated event. Students must tie everything together and decide what they need to focus on now and what needs to be done to meet future goals."

One middle school had even developed a report card, called a résumé, that evaluated both personal qualities (responsibility, self-management, sociability, and integrity) and workplace competencies, based on the SCANS competencies. As one career counselor reported, "school-to work can be viewed as a comprehensive approach to both personal awareness and career awareness."

Developing Career Awareness/Exposure

Both career awareness and career exposure were frequently cited as key reasons for implementing a STW curriculum. Interviewees felt it was important for middle school students to "see what's out there beyond the school walls." One rural site principal felt "students need to have a good understanding of the careers available and must be sensitized

to all the occupations in the outside world." Several interviewees commented on the need to expose students to a variety of occupations, not just the more common ones. An eighth-grade teacher expressed this point,

> I think every school should be emphasizing work with the work ethic and what skills are needed and what particular jobs are out there for people. Not everybody is going to grow up to be an actor and an actress and a professional ball player, and they have those dreams when they are young.

In addition, interviewees were concerned that schools were not able to keep up with changes in the business world and that work-based opportunities could help by exposing students to "real world applications and experiences."

Interviewees at several sites also addressed developing the teacher's career awareness as part of their STW agenda. Teachers were exposed to a variety of occupations through summer externships, worksite visits, on-the-job experiences, and shadowing activities. Teachers were also exposed to the career curriculum through conferences, resource library materials, weekly meetings, and specific training sessions. These experiences were expected to impact the teacher's instruction, curriculum implementation, and assessment practices. Out-of-school opportunities were intended to "train teachers how to weave STW ideas into their daily curriculum" and "change the teacher's way of thinking about relating instruction to the workplace." One district administrator commented,

> I think teachers, generally, can be so isolated. I think it's very good for them as professional development to be linked with people in the business community who are actually—who have jobs that are connected to the content areas that they're teaching. They can see how it's done and transfer that.

Based on his personal experience, a sixth-grade social studies teacher commented about the effect career exposure has on teachers:

> Letting teachers get out there and work in these different jobs and see what skills and stuff are involved is an education in itself. You're just automatically going to throw this back on the kids. That's good. That's an improvement.

A program evaluator also commented on the positive effects of the STW curriculum:

> It's having effects on how they teach in the classroom in terms of their adopting new strategies, trying new strategies, and keeping them. They're using more technology, doing more performance type assessment events, and so on.

Supporting Systemic Change and School Reform

Interviewees cited the STW program as a vehicle to long-lasting and systemic change. It was not viewed as a short-lived funded program but as a way to build a foundation for establishing a seamless, streamlined, comprehensive system. Some sites described their schools as "in crisis" or "in trouble" and mentioned using the STW approach as one of many strategies for initiating and sustaining school reform. As one county administrator reflected, often teachers were the catalyst for change:

> There were some changes that needed to be made at the school. The school, as it was functioning, was not a place that kids were learning. It was not a place where teachers felt safe, and it was not a place where people enjoyed being. The teachers got together and decided some changes needed to be made. They did some research to find out what type of changes would be most effective and would effect the learning environment, effect the test scores, things of that nature.

A dynamic principal was frequently cited as the promoter of innovative change. An independent evaluator offered her view:

> The principal has been there about three years, and when she came in, she looked at the population, looked at the school, and the status of things there and thought that school-to-work might be right on target for this population. She's using this project, as well as a number of others, as a vehicle for school reform.

Several respondents also discussed the need for a new guidance delivery system, a comprehensive, developmental guidance model that included both career guidance and work-based learning activities for all students. People at several sites commented on attempts to revise, renovate, and refocus their career exploration programs to emphasize STW issues. This would, they felt, give the school a common focus rather than every teacher having their own agenda. The intention of this emphasis was on linking career experiences with both guidance and academics.

Building Community Linkages

The concept of community emerged as a dominant reason for implementing a middle school STW curriculum. In fact, several subcategories noted in this category included (1) building community/business linkages, (2) addressing business/industry/ community concerns, (3) supporting local economic development, and (4) encouraging student participation in the community.

Interviewee responses suggested that linking with the community was a two-way process. Schools attempted to address community, business, and parent concerns by surveying and assessing their needs and forming task force committees and partnerships to help determine avenues to successful improvement. Some sites tried to "align curriculum based on research from employers." However, in return, schools expected the community and business members to become actively involved in the education of their young people. It was deemed important to "bring kids out into the world and bring the community people in." Many interviewees viewed the business community as willing but apprehensive participants in this process. As one eighth-grade teacher explained,

> I think the business world was kind of interested in . . . "we're not getting what we want out of schools and the only way to get what we want is to maybe relate a little better to the school system, do some type of partnership with them, and start putting out better workers."

A STW coordinator expanded on this view:

> We are finding businesses are quite interested in involving themselves in schools, they just don't know how, they don't know who to approach. Also, they need to see what they can get for their money, and if we can get them students that fulfill the needs they are looking at, then they'll gladly pay for it, but they're business and they're not going to throw money in without a product.

Strong business and industry linkages were viewed as a vital part of the STW curriculum since worksite experiences and workplace understanding are essential ingredients for future success. One city school principal discussed how his site encouraged business participation:

> We worked hard to make sure businesses were well-served by the school. We don't want businesses to have liabilities. We tried to reduce risk and provide validation and support. The participating businesses are referring us to other businesses. Businesses feel a sense of mission that goes way beyond just work experiences.

Several interviewees indicated that these linkages were developed primarily in response to concerns voiced by employers and community members in neighboring areas. A STW curriculum was seen as addressing the needs of very economically depressed areas. In some cases, STW activities were implemented as part of a larger workforce preparation initiative to prepare students for more skilled jobs since the local area had lost its unskilled employment base. In other instances, entrepreneurship was encouraged as one way to

provide local work experiences for the students, bring new businesses into the community, and encourage graduates to stay in the area or return to the area to live. One rural county administrator commented,

> Entrepreneurship is the heart of the future of the community. The hidden message has been "you have to move somewhere else to be considered successful." We're trying to turn that around.

A STW program coordinator explained further:

> In our area . . . because we're so remote and rural, we can't rely on businesses to give us jobs. We have to create our own jobs. So, what we're doing is work mainly with high school students and middle school students on having them develop a product, market a product, and try to get that to a customer-based business in our area. That's the guiding light behind school-to-work: it's basically an entrepreneurial initiative. The other aspect of that is that we again are . . . trying to be the catalyst to involve businesses in school. We're trying, you know, to help ourselves.

Entrepreneurship was also seen as a viable way to encourage students to expand their career options and aspirations or, as one STW program coordinator stated, "to think beyond 'I want to be a farmer.'"

In addition, local employers were becoming more and more concerned about the quality of graduates entering the workforce. Students were seen as being unprepared or underprepared for the high-tech workforce and lacking in basic skills such as written communication, problem solving, social, math, and reading skills. In response, schools asked the community to take partial responsibility for educating their youth. The business community needed to "help prepare students for the workplace, address the skills not being addressed in school, and make educators aware of workplace needs." One guidance counselor highlighted this situation:

> A big part of it came from employers in the county. The employers were complaining about students not being able to fill out applications and so on, and we thought maybe they should share in the educating of these students and maybe understand a little bit about these students. Not all students come to school with the same attitude and the same skills and a lot of these employers are screaming and hollering that the people that come to their business aren't prepared. We found out that the reason why was because the students that had all the skills they were looking for were going on to college or vocational schools and they weren't willing to work for minimum wage. So it kind of grew out of a little bit of the frustration from the businesses and the community.

Community involvement and service were frequently cited as reasons for implementing a STW curriculum at the middle school level. School personnel at several sites felt it was important to "help kids understand who they are in a community and to develop a sense of place in that environment." Interviewees commented that middle school students often feel people don't care about them and that they needed to consistently see that those in the community cared about their futures. The STW curriculum was viewed by a rural site community education director as "an opportunity to learn *in* the community and contribute *to* the community through community development projects." These projects, explained one inner-city site principal, would "allow the students to see the living relationship between school, work, and how they live." Many of the respondents commented that STW efforts helped to create well-rounded, productive citizens. On the other hand, STW can "give the community a more real perception of what goes on in schools." One school-to-careers coordinator elaborated,

> They [community members and employers] need to have an understanding of what the student of today is, what kind of student they are dealing with, and how to work with that student.

Improving the Transition to High School and Beyond

Several interviewees indicated that middle-level educators must help to ease the transition into high school by providing a "continuum of services that link and build on previous experiences" and assisting students in "speaking the language of the high school." Middle school personnel discussed becoming partners with the high schools in a long-term process. They indicated a need to examine how middle school activities and learning can influence high school decisions. A guidance counselor commented,

> I think the middle school curriculum really allows students, while they're in middle school, . . . to get a good sampling of everything that's offered while they're in high school so they can base their decisions on firsthand knowledge and experiences rather than hearsay or reading it in a booklet. I think that's real helpful for them."

Middle school was seen by many interviewees as a time when serious decisions about the immediate future needed to be made. In some instances, eighth graders were required to choose a high school based on its occupational focus or college preparation program and apply for admittance. Others needed to enter high school having identified a career cluster of interest and a four-year plan of study. One eighth-grade teacher explained,

> They need to choose a particular high school that will lend itself to college, the area of interest that they might be interested in when they go to college. It also let's them see that there's something beyond eighth grade and "I'm serious." There are a lot of them that think that once I get out of eighth grade, that basically "I'm going to high school but I may not stay very long." So I'm trying to let them see beyond eighth grade; there's high school and there are lots of high schools to select from, but after high school, you've got to plan for your future: "What am I going to do when I get there, and what am I going to do when I finish?"

It is important to note that a majority of respondents indicated their STW curriculum was seen as a way to "combat tracking." STW programming was viewed as an effective alternative to traditional tracking because it increased the students' achievement and had a more positive impact on the personal development of students with learning difficulties or delays. STW programs were seen as more readily adaptable to the pace and level of instruction needed for certain individuals. The STW curriculum was viewed by an inner-city principal as a means to "provide students with a different way for students typically in low tracks to demonstrate competence and be rewarded for their effort." A STW coordinator at a different middle school commented on the ability of this curriculum to "target the actual needs of students and, therefore, motivate them more effectively." Several interviewees commented on the STW curriculum encouraging students to work with and meet students who were different from themselves.

Although middle-level educators interviewed saw the importance of preparing students for high school, most indicated a wider reaching influence. STW programs were intended to "help students with both short-term and long-term planning." Interviewees indicated that STW programs at the middle school level would develop students who were better prepared for post-high school education and careers in the future. An executive director of professional technical education stated that his district focused on providing a "smooth transition for students from school to school, school to postsecondary opportunities, and school to work," and that they intended to assure their students "learn more about the requirements, skills, and benefits of a full range of career options and opportunities to help prepare them for the future." Preparation for future work was frequently cited as a reason for implementing the STW curriculum. For example, one interviewee reported that "it is never too early to address future needs, to make sure students are ready for the workplace." One rural school principal insisted, "We have been too academically inclined. We must look at each student as a future worker." Some respondents specifically addressed the need to prepare students to live in a technical world

and to "provide training for the high-tech workplace." STW education was seen as an avenue to expose students to a wide range of technological careers and encourage interest in technology opportunities.

Conceptual Reasons for Implementing the Curriculum

Over half of the interviewees had no known conceptual reasons for implementing the STW curriculum. However, several respondents referred to the middle school philosophy and the Carnegie *Turning Points* as their conceptual basis for adopting a middle school STW curriculum. People we interviewed at some sites saw the STW initiative and the middle school philosophy as "a total fit" for this age group since their real task is to help the student transition from a child to a young adult. A science and technology magnet school principal felt there was "a unique and wonderful alignment" between the two:

> It [the school-to-work curriculum] is very interactive, synergistic, and relevant to "real life." It opens doors to new ideas, builds a full range of communication, uses multiple intelligences, develops thoughtful citizens, provides opportunities for service, accommodates special needs, assesses strengths and weaknesses, produces life long learners, and focuses on a moral and democratic society. Isn't this what the middle school philosophy states?

Some respondents indicated that STW educational reform would advance the middle school agenda by "embedding basic skills into a thought-provoking curriculum" and "providing a holistic approach to the child."

At other sites, interviewees suggested that the "fit" between STW curriculum and the middle school philosophy depended on a person's definition and interpretation of each concept. They commented that there was no conflict between the two if STW was seen as simply an effort to begin to explore careers and develop self-awareness.

Some questioned the compatibility of the two concepts. One rural site principal commented, "The liability of the middle school philosophy is you become more elementary in nature. The needs of adolescents are just human needs. It's never too early to address future needs." Another rural school principal stated, "school-to-work and *Turning Points* are not congruent. *Turning Points* philosophy de-emphasizes academics and works on affective behaviors. We don't buy into this."

In addition to Carnegie's (1989) *Turning Points*, several interviewees cited specific sources as conceptual reasons for implementing the STW curriculum. These included the SCANS competencies, National Career Development Guidelines, local and statewide learning standards for excellence, Equity Outcome Guidelines, Microsociety concepts, and state educational reform acts. Other interviewees were more simplistic and all-encompassing in their philosophies. "Any child can gain success" and "making education something you take with you and value" were two such responses.

Organizational/Operational Reasons for Implementation

Only one third of the interviewees noted any organizational or operational reasons for implementing a STW curriculum at their site. Interdisciplinary teaming was most often cited as the organizational reason for implementing the STW curriculum at the middle school level. The teaming concept allowed for greater infusion of career materials and information across the different teaching areas. A director of vocational and technical education viewed teaming as "a way to expand options and reduce departmentalism." A suburban school principal saw the STW curriculum as a "method for redesigning instruction and learning environments to include practices such as interdisciplinary teaming that encourage career infusion and integration by teachers." Some sites referred to the career cluster organizations and block scheduling at area high schools as reasons for organizing their curriculum in a similar or complementary fashion. Others felt the STW curriculum supported the nature of a small school or school-within-a-school (academy) structure. Block scheduling is discussed further in the section titled "Implementation Issues and Concerns."

The Curriculum Focus

A review of interviewee responses concerning the curriculum focus revealed the following five categories of responses:

1. Career Exploration and Awareness

2. Self-Awareness

3. Contextual Learning

4. Community-Based and Service Learning

5. Integrated Themes

Career Exploration and Awareness

One of the main focuses of the STW curriculum at the middle school level was career exploration and awareness. Curriculum activities and experiences were designed to "catch the interest of the students" and "expand their horizons." Students were encouraged to evaluate their individual interests and abilities and build goal setting and decision-making skills through career exploration participation. Interviewees indicated that students were carefully guided through these developmentally appropriate experiences that focused on "exploring the world of work."

Self-Awareness

Student self-awareness was also frequently mentioned as a curriculum focus. According to one academy principal, participation in the STW exercises would "create awareness of individual talents and build generic skills such as, problem-solving, decision-making, negotiating, finding resources, and working with others." Another suburban site principal felt that a STW curriculum should focus on helping students to "understand what their passion is." Other interviewees indicated that the curriculum focus was on building student self-esteem and self-understanding.

Contextual Learning

Some interviewees felt strongly that the focus of the STW should be on real-life community and workplace experiences rather than simply exploration. They indicated that the information and workplace skills learned in the classroom needed to be applied in actual workplace settings, in other words, the curriculum needed to "connect basic learning with practical application." According to one suburban school principal, their STW curriculum focused on "providing workplace experiences, more than just exposure, *real* activities." A district administrator stated, "the school-to-work implementation focus is the actual fusion of related skills into the curriculum and the actual practicing of those skills in career experience opportunities." Actual workplace experiences were viewed as a valuable way to

"give students a method to apply what they learn and see how school fits with career preparation." Several interviewees indicated the need to focus on preparing students for a changing economy. In order to accomplish this goal, one technology education coordinator suggested students become "involved in the actual workplace setting, working with the newest technological advances, and seeing technology at work firsthand."

Community-Based and Service Learning

Several sites indicated community-based learning and/or "service learning" as an integral part of their STW curriculum focus. Most interviewees viewed community-based learning as a way for students to build respect for themselves and acquire a stake in their community. Community-based activities such as clean-up projects and community safety campaigns concentrated on the developmental needs of the students and involved them in the planning and implementation of programs that serve others. Fewer respondents referred to "service learning" in the sense of "students performing meaningful service to their communities and to society while engaging in some form of reflection related to the service" (Giles, Honnet, & Migliore, 1993, p. 7). Interviewees indicated service learning activities helped to "develop a sense of civic responsibility" and "channeled energy into helping solve local problems." Service learning activities were integrated into the academic curriculum and enhanced what was taught in school by extending student learning beyond the classroom. A district executive indicated that her school focused on service learning because it "encouraged volunteerism as a way to explore the reality of jobs." Many interviewees agreed that community-based and service learning were necessary parts of students' educational growth leading to adult life and lifelong learning.

Integrated Themes

Many of the respondents indicated that STW education itself provided the focus for their academic curriculum. STW curriculum was not viewed as a separate curriculum, but carefully embedded within their daily routines. STW education was seen as a way to "reinforce the classroom curriculum" and "focus on continuous progress and was viewed as valuable for "every single child." One principal, referred to his school's curriculum as having a "school-to-life focus with a very integrated scope and sequence." People at some sites indicated specific curriculum themes that heavily focused on STW content—for example, technology, medical careers, legal careers, economics, manufacturing, and entrepreneurship. One district coordinator explained,

> All of our curriculum is based on specific themes. Our total school curriculum is highly organized and highly structured and centers around a variety of different themes. School-to-work is within each theme.

A guidance counselor explained how teachers weave career information into their content area courses:

> We call it careers across the curriculum. We try to wherever and whenever at least make mention of how this may pertain to a job or making a career decision or to help open doors to different opportunities later in life.

Determining the Curriculum Focus

Interviewees discussed several ways in which the STW curriculum focus was initially determined in their locality. These processes included faculty brainstorming, student input and selection, area needs assessments, community "conversations," trial and error, individual teacher initiatives, and soliciting advice from those localities with past experience. These selection processes ranged from simple, unstructured in-house discussions to highly structured community-wide efforts. One eighth-grade academic teacher described the curriculum development process at her school as follows:

> So what we did is we sat around and we talked about it, and basically the principal said what you come up with, what you create, it's not going to be wrong, because this is the first year that we've done this. So that gave us the opportunity to kind of feel like "Okay, I don't mind experimenting." We had a few guidelines and things like that, but basically each individual teacher kind of came up with the way they wanted to do it.

A city school principal explained how both teachers and students were involved in determining the curriculum focus at her school:

> The entire faculty worked on it. We looked at one hundred topics of interest that we thought we could support with our resources and expertise. After narrowing that down, the students selected the themes that heavily addressed school-to-work. We asked for input from students and actually let students vote at different age levels which themes they would like to explore.

A rural site administrator discussed how themes emerged from a number of activities designed to discover a community's concerns and priorities:

> It's kind of an organic process here that goes out ten years or so. A lot of conversation within our community through school improvement teams,

> focus groups, community education, advisory councils, action teams, ad hoc committees, school reform teams, where people were just talking a lot about what it is we need to do to create good teaching and learning environments for students. A lot of our priorities were changed within our district through a variety of these conversations and themes really have emerged in part from that, and part from individual teacher initiative and various expertise. We didn't adopt it from anywhere else. It was an internal organic process.

A junior/senior high school principal described the purpose and results of their district-wide needs assessment survey:

> Basically, we asked a lot of questions like, "What do you like about the school system as it is?" "Where do you see room for improvement?" and "What do you think the school district should be all about?" The purpose of that was to identify what the priorities of the community were and how we can implement those things when we look at things like curriculum, school-to-work, and instructional improvement areas. One of the things identified as a top-ten priority item was doing a good job of preparing kids for work, technical school, or college.

Many of the site respondents indicated that the curriculum focus or themes were constantly "under construction" and "always evolving." Efforts were being made to keep up-to-date and anticipate possible roadblocks and new avenues of interest. One guidance counselor elaborated on the continuous effort required in developing a viable STW curriculum:

> I think it just kind of slowly evolved from year to year and not really being static and not just saying "that's good enough," but every year we try to put another layer on top of what we did the previous year. Each year we try to find a new way, integrate something new into our curriculum or our opportunities for our students or in our career educational package. To take it one step further and try to stay on top of it rather than be static for three or four years and then have to catch up again.

Benefits the Curriculum Has Provided to Students

A review of interviewee responses concerning the benefits their middle school STW curriculum had provided to their students revealed the following seven categories of responses:

1. Connected Classwork and the "Real World"

2. Enhanced Student Personal Development

3. Improved Student Behaviors and Attitudes

4. Strengthened Business and Community Linkages

5. Strengthened Existing Academic Curriculum

6. Served Special Populations Needs

7. Prepared Students for the Future

Many of the benefits related directly to reasons previously mentioned for having implemented the STW curriculum. In other words, students benefited in ways that educators had hoped they would. However, some of the other benefits mentioned such as, "improved student behaviors and attitudes" and "strengthened academic curriculum," were not specifically mentioned as reasons for having implemented the curriculum. These seven categories are not mutually exclusive and thus may have some overlapping characteristics.

Connected Classwork and the "Real World"

A majority of respondents indicated that the number one benefit derived from the STW curriculum consisted of opportunities for students to apply what was learned in the classroom to real life situations, settings, and problems. STW activities and experiences were viewed as beneficial because they were "realistic," "relevant," and "meaningful" to the students. This "connection" with reality was seen as not only between the classroom and the workplace, but between the classroom, the community, and students' future goals. One inner city school principal shared her overall view:

> They [students] begin to see the connections between what they do, what they learn, what they produce, and what opportunities are available to them. The major issue would be that there's real life application; real-life application of values, real-life application of what do we think a good society ought to have, and how do we support that, and a real-life application for the various academic areas that one is studying.

A guidance counselor commented on how the students connected the requirements and expectations at school with those they will confront in the workplace:

> I think it [the school-to-work curriculum] made coming to school, . . . relevant to them [the students]. They saw the reasons that attendance and punctuality and cleanliness and getting assignments done on time and being able to work with different individuals in the public do mean something. It

> makes it real. It brings it to life, and you see a real change in some of these people now.

One seventh-grade teacher explained how students recognized that the structure within a school genuinely reflected the existing societal structure:

> My number one thing that it has contributed to, I go back to realistic application of concepts and strategies and skills learned in school. Relating them to a definite outside connection, outside of the school setting, showing them that there are already infrastructures that are working like this. You can see these things operating and create your own little microcosm right here at your school and be able to compare it with what's already out there in the workforce and world.

One school system had hired independent evaluators to assess the benefits of their curriculum. An eighth-grade teacher within that system described how the assessment results indicated that students had "connected" certain levels of academic preparation with future educational and occupational goals:

> The surveys that they [independent evaluators] have taken say that our kids are very much aware that there is a lot more needed to go to school. They are more aware of different occupations. They are more aware of the things that are involved in getting to a career, things like that, you know, colleges, postsecondary education or some type of training. So, they're really aware of the world, the career-world outside . . . much more so I think than a lot of other middle schoolers around us would be. They are definitely aware of it.

Enhanced Student Personal Development

Interviewees revealed that one of the major benefits of implementing a STW curriculum for middle schoolers is that it appealed to the students at their developmental level. This curriculum had more "personal meaning" for the students. One inner city school principal elaborated on this point, "It empowers them, and what we know is that children at this age need to feel that their voices are heard. It also addresses the issues that are germane to a young adolescent." This opinion was echoed by a rural site administrator:

> I think junior high students are particularly . . . looking to try and make sense of what it is they're studying and of their world and their place in the world. They are really eager to connect with the real world and some of the issues that are going on in the world and the stories that are happening in the world. So curriculum projects, project-based learning, hands-on learning, service learning, learning connected to the community in some way are really important to them.

Several respondents indicated that the STW curriculum helped the students to build meaningful relationships with adults and peers. Students were also viewed as having improved in their ability to work as members of teams. A science and technology academy administrator explained how her students have come to understand teamwork:

> They [students] understand the whole issue of team work in a very different way, because for the society to function, you need people with different areas of strength, with different expertise, and you have people with different levels of commitment. They come to terms with how to work in the society and make it a successful society.

A seventh-grade math teacher echoed this response:

> The kids get a real sense for people, that sometimes people are lazy bums and they don't do their share in the groups. They have to deal with their frustration and decide how to deal with somebody like that.

A career counselor suggested that the nontraditional aspects of the curriculum helped to nurture the student-teacher relationship and that both sets of individuals ultimately benefited:

> It's helped nurture that [relationship] and bring it along, down to a more human level, almost a family focus type level where the teachers are beginning to get real concerned with the student's career outcome. I think it's just another contact with an adult that the middle school student has that helps them with their ability to work with adults.

According to another guidance counselor, group dynamics were improved. He said, "The kids, especially middle schoolers, developed that bonding with one another and with positive adult role models."

Many respondents also indicated that students benefited in the area of individual growth and self-understanding. Personal growth was witnessed by educators in the increase of student pride, poise, sophistication, patience, self-esteem, confidence, and the motivation and responsibility to learn. Students were able to "reflect on and think critically about their experiences" and "recognize the intrinsic value of education and of success and the work ethic." The students' ability to "learn for the sake of learning, for the sake of having fun" was seen as a major benefit.

Improved Student Behaviors and Attitudes

Frequent references were made to the STW curriculum's direct and positive effect on student behavior. Interviewees had witnessed an *increase* in active learning behaviors such as, asking questions, participating in discussions, task engagement, and attendance. A few schools specifically stated that they had seen a "steady rise" in standardized test scores for those students involved in the STW curriculum. Improved behavior and attitude adjustment were also evident to educators because of the *decrease* in truancy, delinquency and discipline referrals, social service interventions, arrests, insolence toward adults, and general "acting out." One dean of students explained her reasoning behind the positive changes in student behavior at her school:

> I think overall the gains we've made here are a reflection of our emphasis on school-to-work. I think all of that improvement is a reflection of the way that school-to-work is infused in almost every aspect of our school life.

Positive behavior and attitude changes were also witnessed by school personnel outside the classroom. For example, a community education director commented,

> One of the things that I keep hearing throughout our school, from our cooks to our janitors to our teachers, is that students aren't acting out as much. They're more respectful. There are still problems in that area but people have observed a different kind of environment.

A guidance counselor shared similar information:

> I did see some of the kids who are behavior problems turning around a bit because of this curriculum. That's what I saw. They weren't coming to my office so much because of behavior problems; they were coming and telling me the things they were doing on the worksite and on field trips. It was a positive thing instead of getting a negative thing out of them.

Strengthened Business and Community Linkages

Interviewees indicated businesses and industries that had invested time, personnel, and funds in the career component of the STW curriculum were beginning to re-evaluate their initial apprehensions about the program and middle school students. A careers counselor responsible for recruiting businesses to participate in a STW internship program explained the "change of heart":

> A lot of the business people were "What can you do for me" when I was trying to recruit, but then at the end of the internship program, it was like "When can I have another one." It's like, not all of them, but most of them, they got an intrinsic reward, and they're not used to that.

Interviewees also noted that over time, businesses, industries, and community agencies offered more extensive and varied firsthand worksite experiences for both the teachers and the students. In addition, businesses provided more reliable and more involved adult worker role models and mentors for the students. Participating businesses were also eager to recruit new businesses into the STW program.

The STW curriculum was viewed by many respondents as a benefit because it provided a way for parents, teachers, and community members to "talk the same vision and goals." The curriculum was seen as a way to bring the community into the schools and the schools into the community. A few interviewees used the popular adage "it takes a community to raise a child" as their STW motto. One rural site administrator extended this idea to include the building of a participatory culture:

> I think there's a cultural change here, the way we think about our community. I think there's this idea of community building within the school and being active players in a kind of community building process. I think that's really the heart of how our teachers and a growing number of parents and students are starting to think about school and our community. I think that's an indicator that people are telling us there's something that's working there. I don't think it's just the curriculum, you know; it's the culture that's kind of emerging.

Strengthened Existing Academic Curriculum

One of the benefits commonly expressed by the interviewees was how the STW curriculum focus had strengthened the academic curriculum currently in place in the schools. The STW focus was said to incorporate traditional educational experiences and values with innovative techniques and methods. One academy principal referred to the curriculum as a superior way of "integrating theory, practice, and hands-on activities." Interviewees indicated that the STW focus benefited students by "tying our current curriculum to something that's important to students" and because "it's a curriculum that makes sense to the kids." Teachers from several schools commented that students were drawn to this STW curriculum focus because of its "realistic," "different," "more involved," and "experiential" approach to learning. A site administrator explained how the STW focus benefited middle-level students by stimulating and maintaining their interest:

> Well, the kids are doing stuff they're interested in. The kids, it's really neat, the kids sort of catch on fire. If the kids are interested in some things, they're going to put more energy, time, and effort into learning it and into doing it right. With an integrated curriculum, the kids are seeing the

> connections, they're seeing how math applies to real life. They're seeing how language relates to social studies and how that will be important in their real life.

Another district administrator echoed this sentiment:

> One of the big complaints students have, especially in junior high, is that it's so boring. Many times they're right, you know. I feel here are teachers, a curriculum, projects that they can relate to. I think the connections to the field trips, the job shadowing, the kinds of curriculum that teachers are developing are getting better and better.

Other interviewees recognized the STW curriculum as having benefited students by providing an increased depth and breadth of information and experience, when compared to the traditional curriculum. An independent evaluator explained how middle schoolers in one school system benefited:

> It's not just go on a field trip and get out of the classroom. Because they're doing units and it's interwoven through the other content areas, I think they're getting a deeper understanding of what they're supposed to be experiencing.

An eighth-grade teacher described how the STW curriculum allowed students to explore future alternatives on a firsthand basis, an opportunity not offered in a traditional middle school setting:

> [We] could have talked about it, but they wouldn't have had the experience that they had this year. I could have told them how it would be in the job market, how it would be if they went to college, but they actually had the experiences themselves and now can decide for themselves.

The STW curriculum was also seen to change classroom dynamics for the better. Interviewees commented that both students and teachers benefited from a more interactive and multidirectional curriculum approach. One city site administrator explained this as follows:

> I think with all the different themes we do, the integrated projects we do, the kids see the teachers working together; teachers are modeling for kids what they expect in the classroom and in the classroom; kids are working together.

Served Special Populations Needs

Another benefit commonly cited by interviewees was that the STW curriculum assisted educators in providing a more appropriate and comprehensive curriculum for

certain special populations, specifically educationally or economically "at-risk" students and minority students. A career counselor discussed several of the benefits "at-risk" students receive through participation in a STW middle school curriculum:

> I think there are some benefits for . . . at-risk kids. A lot of at-risk kids have relatively small spheres of experience and [the school-to-work activity] gives them an opportunity to get out into places that they've never been before, to see what other people are doing. It gives them an opportunity to feel special, I believe that it does. I think it probably contributes to their motivation, a little bit to getting their education. I think it raises their self-esteem to some degree. I think it gives them an opportunity to see models in the community that they don't typically see. From time to time, there are companies which kind of adopt some of our students and want to continue to work with them beyond what we have orchestrated for them.

Other interviewees commented on the curriculum's positive effect on minority students in their schools. The STW curriculum was viewed as a way to "pull minority populations together" and to provide minority students with "new ways to view their futures." One administrator of a predominantly minority school stated that "the kids learn about each other's background and how to be sensitive. The kids work together, the kids don't necessarily see color."

Prepared Students for the Future

Interviewees indicated in their responses that middle-level students benefited from a STW curriculum because it better prepared them for high school, postsecondary education, the working world, and adult living. Responses indicated that the STW curriculum prepared students for these future settings and situations by "opening their eyes" and "opening their minds" to all the options and occupations available and the "path" commonly taken to achieve certain desired outcomes. The STW curriculum was seen by some interviewees as a workforce preparation program but not in the sense of having middle-level students decide on a future career at this young age. Instead, the curriculum was meant to expose students to many different careers and "help and guide them in eventually choosing a career based on their values, based on their personalities, based on their abilities." In a few cases, middle schoolers discovered their career path after participating in an intensive career program. An eighth-grade teacher revealed, "It has made a change in them [students]. I know a lot of them know what they want to do. I think they are prepared to make a decision about their career choice."

Several interviewees from larger cities emphasized the need to prepare students at a younger age (middle school level) because eighth graders in their districts were required to select and apply to individual high schools based on their personal career interests and the schools' career themes. A city district administrator explained how middle school students were benefiting from their career pathway/STW model:

> . . . they [middle school students] enter high school with a better focus of what they are interested in studying. They are seeing that accountability and teamwork are critical to work in the high school instructional environment. Regardless of whether these students go on to college, to further training, or enter the workforce directly, middle school students enter the high school being prepared to succeed by working with "real world" application in their education.

Implementation Issues and Concerns

A review of interviewee responses concerning issues and concerns that have been voiced about implementing a STW curriculum at the middle school level revealed four categories of responses:

1. Participant "Buy-In"
2. Program Logistics
3. Resources
4. Program Quality and Outcomes

Participant "Buy-In"

Interview responses indicated that STW curriculum participants (teachers, parents, guidance counselors, community members, and business representatives) needed to be "sold" on the idea of STW for middle-level students. Students appeared to be the only stakeholder group that did not exhibit initial resistance to and apprehension about the curriculum.

Interviewee responses indicated that classroom teachers were overwhelmingly the most reluctant curriculum participants. According to the interview responses, many classroom teachers originally viewed the STW curriculum as a "fad" or "just one more

thing" but in due time came to recognize its value for their students. Those educators "selling" the curriculum needed to show reluctant teachers how it was an ongoing, integrated process and would change the way they taught. A STW program evaluator discussed how teacher concerns lessened as they became more familiar with the integration aspect of the curriculum:

> We were doing a sell, a hard sell, you know, to get teachers to buy-in. We did, but we were holding our breath for awhile. As they moved along with integration in the content areas, then concern diminished; but in the beginning, there were concerns.

Eventually teachers recognized that integration of the STW focus throughout the existing curriculum was not an additional "chore" but an integral part of the curriculum. A seventh-grade teacher discussed the acceptance process at his school:

> Well, two years ago when it [the school-to-work curriculum] was first introduced, it was like "How are we going to put it in there?" But then, we [the teachers] realized that it's part of, it's to be included from the beginning all the way through. If you feel like you've got to plug it in somewhere, you're not doing it right. It has to be part of the curriculum, not just a segment that you're going to teach for a couple of weeks.

Another issue raised concerning teacher "buy-in" was the concept that the STW curriculum was intended to be integrated into all subject areas and therefore was meant to be implemented by all teachers, academic and vocational. Traditionally, this career focus was strictly a vocational teacher's or counselor's domain and responsibility. Interviewees indicated that the academic teachers needed additional convincing that career concepts were applicable and valuable to their class content and goals. A district vocational director suggested that teacher "buy-in" would be an ongoing and difficult process in his school system. He stated:

> Inservice [education] in this area will continue for the next four years as this is a tough transition. All teachers will need to integrate team-working skills, technical writing and communication skills, and career awareness activities into curriculum.

Some sites had STW programs that encompassed only a portion of the students in a school. This arrangement led to another teacher "buy-in" issue. Teachers working within the STW programs were often specially chosen for their positions and were enthusiastic about the career integration notion. However, teachers working outside the program were often unfamiliar with the innovative methods used to stimulate learning and resented the

commotion it caused in the school environment. An academy principal provided an example of this conflict:

> Teachers who are outside the program—some like it, some don't. It's a different way of working. We have kids in the hall at certain periods when they are going back and forth between the various businesses. For the teachers who are more traditional, they're not comfortable with that.

While the majority of interviewees indicated that the parents of students in the STW curriculum were pleased with its conception and implementation, respondents did acknowledge some minor concerns on the part of individual parents. Some parents were concerned with the number of field trips and time spent outside the school building. Others were concerned about the possibility of the school-to-work/careers programs "tracking" their children into a particular career path at too early an age. A city school principal explained her experience with parent concerns:

> Every once in a while, when we ask for written feedback, we'll have somebody say "These are children. They don't need to know about the world of work." But that's a lone voice or something expressed by one or two.

This concern appeared to be more prevalent in schools that did not provide STW opportunities for all students.

Since guidance counselors often encourage or discourage student participation in STW programs and experiences based on their understanding and acceptance of such innovations, the interviewees indicated that the counselors needed to be "on board" for the curriculum to be truly successful. According to one district administrator, "All guidance counselors must accept the model and facilitate the selection of classes and educational plans accordingly."

Community members voiced some opposition to the teaching and learning methods used in the STW curriculum. Interview responses revealed that a majority of the community members were very supportive of the out-of-school student experiences and ingression into the community and business world. However, other community members were adamant about maintaining the "status quo" and retaining "the way it was." A community education director shared the discussion that emerged in his local community:

> We've got the age-old dialog in our community like I'm sure everywhere between people that think rote learning and memorization is the way to go and that's considered by some the basics. We've had discussions around that and some disagreements. There's another group, pretty strong group, and that actually emerged in our school improvement discussions as the strongest, where basic skills really meant something different. It meant creative problem-solving. It meant being able to apply skills to the real world and understand the real world. All those other things that had a little more to do with practical sense. The business community was really looking for more practical applied skills; that was the voice that we definitely heard in our community. I think maybe the older community really felt the old way of teaching was better. In essence, we still are fundamentally in a factory mode of education.

Interviewees revealed that there had been some "detractors" who felt that the STW curriculum was strictly a high school and beyond initiative. These community members believed the time and resources used to put students in the workplace would be better spent when the students were older. Several interviewees commented that they had anticipated a greater outcry against the STW initiative from certain groups of individuals in their community. A rural site administrator shared his thoughts:

> I thought I would hear people express more concerns about teaching kids to think critically about their world and question and really problem-solve and look at community issues. I thought there might be more that thought it was dangerous, where people are real sensitive and don't really want to present students with choices.

Interviewee responses indicated that members of the business community were very supportive of the concept behind STW for the middle-level student but very apprehensive about the student's educational and emotional maturity levels. Most of the business participants had never worked with middle school students and did not know what to reasonably expect. Business members were also very concerned about the worksite safety and liability issues surrounding a program for underage "workers." These issues are addressed further in the next section.

Program Logistics

Many of the concerns voiced by the curriculum participants centered around the logistics or practical day-to-day implementation of the curriculum. Interviewees' concerns focused on four subcategories: (1) time, (2) scheduling, (3) legalities, and (4) transportation.

The majority of interviewees commented on the "time-consuming" aspect of implementing a comprehensive STW curriculum. It was seen to be time consuming from both the administrative and teacher viewpoint. An inner-city site principal highlighted this concern:

> It's very labor intensive on the part of the adults because you are taking on so many other roles and functions. So teachers who are preparing for their academic arena also have to be preparing for the school-to-work arena. That's very intensive.

Activity and work-experience scheduling was a concern that appeared frequently in the interviews. As one academy principal suggested, "The whole scheduling arm of this—it's not impossible, but it's certainly an issue that needs one's attention because if it's going to be real, then it can't be Mickey Mouse." Some interviewees indicated that they were "hamstrung" by their schedules, particularly those working in schools functioning within the traditional eight-period school day. These sites indicated that the schedule limited their options and fostered departmentalism rather than interdisciplinary activities. A seventh- and eighth-grade math teacher described her frustration with the eight-period day. She said, "As a matter of fact, the programming and scheduling did not facilitate my implementation of this [STW] program, it opposed it. I mean, that sounds kind of harsh, but that's the reality."

Block scheduling was viewed by other interviewees as a "lifesaver." Although block scheduling was not seen as a reason for establishing a STW program, it was frequently cited as being "valuable," "beneficial," and "helpful." Interviewees claimed that block scheduling supported more integrative curricula; flexible programming; in-depth exploration; extensive community and workplace visits; and in-school speakers, films, and workshops. Block scheduling also gave schools more time for teacher-development activities such as inservice education and new materials review. A rural site STW program coordinator described one benefit of block scheduling:

> We found with an eight-period day we weren't able to achieve the type of hands-on activities that we felt students should participate in. So by implementing the school-to-work program, we found that we could offer students almost a two hour course. We can allow them to leave school early and go to a business and be there at two o'clock or be there at the beginning of the day. A lot of them are involved in agriculture, so they'll do morning milking, and they're able to come to school at ten o'clock. They are also able to work around the noon hour. We have two students, one works in the hotel industry and the other works for the local newspaper. They go

> down in the afternoon over their lunch period and can stretch it out to a three-hour work experience.

Planning around school-wide testing schedules was also mentioned as an obstacle to implementing a work-experience program. A STW program evaluator highlighted this concern:

> There is a problem with the accountability testing in April. Having the kids out of the building for the build-up for that test in the Spring puts pressure on the teachers. So what we're trying to do next year is plan all the units for everybody for the fall, or most of them, so that there is no problem with interfering with testing. It's high stakes testing, really.

The legalities of implementing a STW curriculum that included worksite visits or on-the-job training (internships, apprenticeships) were commonly cited as concerns. The legal concerns most frequently mentioned in the interviews were business and school liability, student safety, and "things dealt with through child labor laws." A seventh-grade language arts teacher revealed the legal concerns at his school:

> I know there have been some concerns about safety on the job, that's with any situation like this. I know they have those concerns at the high school as well in their work programs—safety on the job and making sure students are being treated fairly at the jobsite.

Transporting students to jobsites, on field trips, and to area high schools in a safe and timely fashion was viewed as a significant curriculum implementation challenge by many of the respondents.

Resources

Resources were frequently cited by interviewees as the number one issue or concern in implementing a middle school STW curriculum. Interviewee responses concerning resources were divided into two sub-categories, financial resources and human resources.

Interviewees were particularly concerned with two financial situations: (1) maintaining the curriculum "as is" after grant funds dried up, and (2) locating funding for the expansion of a component of the STW curriculum (e.g., internships). Several interviewees commented on trying to maintain and build on a nonmandated program during a time of "reduced school spending" and "district budget cuts." Guidance counselors from

two different sites addressed the concerns about continued funding. One counselor stated, "We're not mandated, so we have to continue to demonstrate progress to the board. The budget gets tight, and they start looking at things that aren't mandated and start to eliminate them." The second counselor echoed this concern:

> This happens to be a time when resources at the superintendent's level seem to be quite diminished. So they are looking at ways to reduce administrative personnel and reduce budgets. So there's a great deal of talk about programs that are of additional cost to the system being pared down or not being funded.

A city school principal explained how finding additional funding sources was essential to running a successful STW program:

> Resources are the key. What we're trying to do could not be done by us alone on the traditional school budget. I think more people are cognizant and aware that we have to have additional resources and that it's going to take more than one or two people writing grants if we are to be fully successful in what we're trying to do. Resources are constantly an obstacle. . . . [I]n order to do project-based learning, which is critical to school-to-work, you can't simulate a career using textbooks in the classroom.

Interviewees noted that personnel needs were an area of concern. Finding qualified and willing business people to oversee and supervise students on the worksites and act as mentors and role models was reported to be "a challenging aspect of the school-to-work program." As reported by one principal, "[T]he most important thing in doing an internship is finding a workplace mentor that loves kids, that cares about kid's learning and having a good opportunity." In addition, convincing business partners and community members to continue supplying the local STW program with speakers, mentors, job coaches, and so on was viewed by some interviewees as a possible future concern. One city school principal described the need for business participation in the STW effort at her school:

> There's a real challenge to get the human resources, the community, the business community, government agencies. We're tremendously dependent on them in order to make what we're doing real. We don't have the expertise. So that is something that is a constant challenge and something that has to be an ongoing focus.

Interviewees from some sites were concerned that certain essential in-school personnel positions such as a STW coordinator position, would be eliminated when grant money disappeared and that the classroom teachers would be burdened with the responsibilities of

that position. A rural site administrator described the need for additional STW personnel in his school:

> I think a lot of things that would be really good to do can't be done in a larger classroom as effectively as we could if we could work in small groups on some relatively serious projects. You know, get them out doing hands-on work and visiting different places and doing some regional research.

Some interviewees were concerned with "leveraging resources" and "combining what [they] had to avoid the duplication of programs and services" as a way to limit personnel and material needs. A guidance counselor explained the efforts made to minimize program duplication at his school:

> [The] school-to-work [program] has maybe some redundancy in there in that we were stressing things that other programs were stressing. So we've had to be aware of what's going on in the total curriculum, with the total school environment, and that we had to coordinate our efforts and have a team approach to [the] school-to-work [program], career guidance, and curriculum development.

Program Quality and Outcomes

Many of the interviewees mentioned concerns about improving the STW classroom instruction and expanding the work-experience opportunities each year.

A seventh-grade academic teacher explained the importance of delivering positive experiences for the middle school student:

> Making sure we're always giving the kids a good experience, that they don't go out and get disenchanted because for some reason that particular job experience was not the greatest or did not live up to their expectations—that's what's important.

Other interviewees were concerned about the consistency of quality in student work produced in the STW program. An inner city school principal commented,

> Some of the tasks that the students are doing are not as sophisticated as what I would like to see them doing. So if they are in a business—some of the things they are making—we need to upgrade the things they are making and I think that's an issue. There's a quality control issue.

Another program quality concern voiced by interviewees consisted of expectations some parents, teachers, and administrators had that the STW curriculum would "solve the

world's problems," or at least solve the students' problems. One city site principal shared her concern about the unrealistic expectations surrounding the STW program at her school:

> Now, one issue I would say is that because it's [the school-to-work curriculum] designed to be so totally different is that we've gotten a number of students with increased risk. Not just based on academics but increased risk based on their social and emotional development. Parents say "Aha, my child has been disinterested in the past in school; this is going to do it; this is going to turn them on." So while the program is designed to meet the needs of a divergent group of kids and to reinvigorate them with their education, for it to be an excessive number of kids becomes problematic. We've had a number of behavioral issues that we have had to address.

The measurement of growth and progress by analyzing changes in individual student test scores is a common practice in many school systems. A few of the interviewees were concerned because the progress students had made in the STW program was not necessarily evident to teachers outside of the STW program or in standardized test scores. Academic teachers from two different city schools shared their concerns about student evaluation:

> Other teachers don't see the progress of the kids through actual test scores, and they may not perform better in other classes. So teachers outside the program, don't run to me and say, "Oh, thank you; it's a miracle."

> I knew this was not going to raise the standardized test scores; it simply is not. It is a great activity to hook kids into learning and doing research and all the subjects are integrated into this program. But now, the thrust is we must raise reading and math scores. That seems to be the measure for how good a school is. So, anyway, my point is, that this program takes time away from teaching to the test specifically. The evidence was that test scores did not raise from this program.

Resolution of the Issues and Concerns

Overall, interviewees indicated that their issues and concerns about implementing and maintaining a quality STW curriculum for middle school students were "challenging" but "workable over time." According to one principal, "There's always going to be a challenge. There's always going to be a personality. It's just like the real world: there's always going to be something to overcome, but that's just part of it." Interviewees also suggested that the "trials and tribulations" they had to work through were typical for any new or innovative program introduced to a school or school system. Some concerns, such as transportation availability, were viewed as "ongoing" and "expected." One community

education director explained the process followed to resolve issues and concerns in his school:

> My sense is that it's just going to take some time. I think there's just a lot more conversation and understanding and group planning that we have to do to really take it to the next level. I think that will come. I don't think it's insurmountable, but we are going to have to rethink the basic ways we think about school and see how good we are at doing that.

VIEWS FROM THE ASSOCIATIONS

Association Literature

Information concerning the five selected associations and their mission/position statements was gathered via the Internet and written information (brochures, and so on) provided by association representatives. This information was compiled to provide an overview of the associations' written positions. Information gathered was organized into three different areas, including associations' (1) career development roles, (2) participation in STW initiatives, and (3) support of school-to-work/careers efforts at the middle school level. Associations that participated in the study included the American School Counselor Association (ASCA) (1990a, 1990b, 1991), American Vocational Association (AVA) (1997a-1997e), International Technology Education Association (ITEA) (1997a, 1997b), National Association of Secondary School Principals (NASSP) (1996), and National Middle School Association (NMSA) (1995, 1997a, 1997b).

Career Development

Examination of the informational materials revealed that the five associations focused on two areas of career development: (1) national workforce preparation and (2) individual career preparation. The educational association material collected indicated a need for educators to recognize the "technological, social, and political changes" taking place in the world and understand how these changes must impact the teaching and learning that takes place every day in our nation's schools. Not only will schools and their students be impacted, but workplaces and workers as well. The five associations indicated that they would "support promising and successful educational practices" that advanced the workforce education cause; and vowed to provide "educational leadership in developing a competitive workforce." Comprehensive career education was viewed as a viable solution

to the educational and economic challenges that our nation faces. For the United States to remain a competitive player in the global marketplace and experience future growth, associations believed educators must develop fully the "academic and occupational skills of all segments of the population." All students must acquire the "employability skills" that will give them the edge to succeed in the workforce. For example, educators must advance the "technological capabilities" and "leadership skills" of students at all educational levels. An AVA (1997a) brochure, *School-to-Work Partners*, stated, "The competencies employers usually seek include computer literacy, analytical thinking and problem solving skills, communication skills, flexibility, adaptability, and initiative." An ASCA (1991) brochure, *Building Career Counseling Programs*, stated that the successful job applicant must be able to "work as a team member, communicate, solve problems, use technologies, adapt to change, and be drug-free."

The creation of "productive learning environments" for all students was also a topic focused on in the association literature. The associations agreed that career development activities and experiences must be designed to help individuals learn "efficiently and effectively" and develop their "educational, social, career, and personal strengths." Increasingly, the job market seeks applicants who can communicate effectively, think critically, and adapt swiftly. These associations planned to advance student career and workforce understanding and participation by providing appropriate developmental tasks and challenges.

School-to-Work Initiatives

STW efforts were mentioned specifically by some associations and were indirectly referred to by others. Some associations strongly supported the STW curriculum emphasis, while others remained wary and watchful. The STW curriculum initiative was viewed by AVA as a "new approach to learning in America's schools that links students, schools, and workplaces." Through relevant and meaningful STW activities, classroom instruction, and varied work experiences, students were expected to achieve a "graduated understanding of the world of work." It was deemed "imperative that business and education leaders work together to make STW transition a permanent component of the nation's educational framework."

Associations were uniformly committed to collaborating with education and business leaders to ensure that students were equipped with the skills and knowledge needed for success in today's high performance workplace. Career development activities helped students to investigate appropriate job opportunities consistent with their interests, skills, and abilities and encouraged students to examine the future trends and needs of the workforce. The associations consistently viewed career development activities and experiences as a way "to provide students with the opportunity to pursue further education, seek additional occupational skill development, or move directly into careers." In addition, career development or STW paths were not viewed as "a fixed choice" but rather as facilitators of change. Three of the five associations (AVA, ASCA, and NASSP) felt that students should maintain the right to choose a career path, change career directions, and have the "solid academic and technical skills to make the transition work." Learning environments supporting this transition and the move from school to the working world were typically those that "integrated academic competencies with occupational development" and provided "challenging content in partnership with appropriate learning strategies." School-to-work/careers education was not viewed by the associations as a singular event or isolated course, rather they stressed that it be integrated throughout the student's school experience and expand beyond the school and into the community.

Middle School School-to-Work/Career Efforts

Most of the association literature we reviewed focused on the career development needs of secondary school students. For the most part, the career development and career planning needs of middle-level students were mentioned in passing or not at all. For instance, the NASSP literature did commit to the "continuous improvement of middle-level and high schools for the 21st century," yet failed to specifically mention middle school students in their association goals and objectives.

The ASCA highlighted the importance of educational and occupational exploration and career planning for seventh and eighth graders. They indicated support for the following exploration and planning competencies outlined in the National Career Development Guidelines: (1) knowledge of the benefits of educational achievement to career opportunities; (2) understanding of the relationship between work and learning; (3) skills to locate, understand, and use career information; (4) knowledge of skills necessary to seek and obtain jobs; (5) understanding of how work relates to the needs and functions

of the economy and society; (6) skills to make decisions; (7) knowledge of the interrelationship of life roles; (8) knowledge of different occupations and changing male/female roles; (9) understanding the process of career planning; (10) demonstrating effective skills in working with others; (11) showing an appreciation for the similarities and differences among people; (12) describing individual skills and aptitudes required to fulfill life roles; (13) identifying strategies for managing personal finances; and (14) demonstrating skills needed to obtain and keep a job. However, activities beyond the level of exploration and awareness were not considered appropriate for this age and maturity level.

Middle school students were viewed by both the NMSA and ITEA as "curious but not ready for planning" and unable to demonstrate "responsible decision-making." High schoolers, on the other hand, were seen as developmentally ready to "understand how individual personality, abilities, and interests relate to career goals; understand how education relates to college majors, further training and /or entry into the job market; and demonstrate transferable skills that can apply to a variety of occupations and changing work requirements."

The information made available by the participating associations supported career development activities K-12, and STW opportunities for secondary students. However, the literature also reflected the disagreement among professionals as to the appropriateness of STW opportunities and intensive career exposure for middle-level students.

Representatives' Comments

Telephone interviews were conducted with representatives of the five selected associations. Association representatives were asked to respond to questions concerning (1) the benefits of middle school STW opportunities, (2) the issues and concerns surrounding the provision of STW opportunities for middle-level students, and (3) their association's formal statement or position on STW initiatives at the middle school level. Categories of responses are presented with the most frequent response appearing first on the list.

School-to-Work Curriculum Benefits

An examination of interviewee responses concerning the benefits middle school students derived from participating in a STW curriculum revealed the following five categories of responses:

1. Exploring New Ideas and Career Options
2. Building a Vision of Their Future
3. Applying Classroom Learning to Real-Life Situations
4. Developing Strong Work Habits
5. Connecting with the Community

Exploring New Ideas and Career Options

Each of the five associations representatives commented on the STW curriculum providing opportunities for middle school students to be exposed to and explore the world of work in their local communities. A "chance for basic exploration to learn new things" and "exposure to different challenges and different opportunities" were common phrases found in the interview transcripts. The NMSA representative referred to the middle school philosophy as the foundation for focusing on exploratory activities that create or enhance career awareness:

> I think that middle school is a really critical time for exploratory—for career opportunities. Not necessarily gearing them into a certain career but letting them explore different careers and different opportunities that are out there. Really, middle school philosophy is based around the opportunity to explore and to learn and basically we feel that the reason that that's an opportune time is because once they get into high school they tend to be more career-tracked or more college bound and they don't have as much opportunity to do exploration.

An ITEA representative focused on the exposure aspect of STW activities and it's helping middle schoolers to determine broad career field interests, for example, technological career interests. The representative elaborated,

> We would have middle school students looking at identifying occupational fields and educational programs that are in technological career fields. We'd also be interested in studying and analyzing materials and processes and problems and developments that contribute to these related career fields. We

would also want them to experience the organization and management of systems that deal with business and industry.

Building a Vision of Their Future

Again, each of the association representatives commented on how STW opportunities helped to encourage and motivate middle-level students to focus on their future goals and dreams. Students were given the "opportunity to know that they're in charge of their own future." Students benefited when the STW activities helped them to recognize the importance of their education and skill development and set goals to accomplish future plans. An AVA representative offered her opinion:

> I think if you can help young people really see how what they're doing now can relate to the life they're going to live in the future and what kind of future they're going to have, then they can begin to see that it's really going to make a difference if they get more education. They need to see the options that are available to them early on so that, for instance, if kids realized earlier that this is really important to take higher level math and science courses, I think they'd be a little less likely to do the sloughing off that they do.

This representative also commented on the STW curriculum preparing middle-level students to make high school coursework decisions that may impact on their future:

> If they [middle schoolers] don't make those [coursework] decisions before ninth grade, then they've already eliminated several things, and I think that is something young people just don't realize. I just met with school leaders and the military and talked with them. They were discussing the issue of how can they impact on young people earlier, and I said clearly they need to find out how they can get information into the middle schools so that again young people can see themselves in some kind of a future. I think there are a lot of kids today that just don't see themselves in a future.

Applying Classroom Learning to Real-Life Situations

Three of the five association representatives (NMSA, ITEA, and ASCA) indicated that middle school students benefited from activities and experiences that helped them connect school, work, and the community. The STW curriculum was viewed as a relevant and meaningful way to answer the students' question, "Why do I come to school?" The answer to this question was best found through "practical, hands-on, real-life applications." A NMSA representative commented, "We wanted to teach them real-life experiences; no longer do we try to instill with adolescents that everything is textbook oriented. It's real life, it's community, it's getting involved with those working in your community."

Developing Strong Work Habits

Both the AVA and ASCA representatives indicated that students benefited from STW activities that focused on building strong work habits that would then transfer to other life activities. In the process of developing these work habits, students would also gain confidence in their personal abilities and begin to take responsibility for their own learning and behavior. These experiences of success would ultimately lead to stronger self-concepts and the ability to "help themselves." An AVA representative commented,

> I think we can certainly talk about motivation and self-esteem. I think the main reason why young people get into trouble is because they don't feel good about themselves and if we want to help them get through that very difficult time in their life, the more that we can provide them with information that helps them see a brighter future, the better. So I think there's no down side on this one. I think we're getting people's attention at an earlier age and really helping them help themselves.

Connecting with the Community

The NMSA representative commented on the two-way benefit derived by the participants in STW activities and experiences:

> I think there are two benefits. There's obviously the benefit for the adolescent in which they get to make a connection with their community members. It's the reverse for the community itself. They're making a connection with adolescents in their communities. We know stereotypically adolescence is probably the most frowned upon age as far as communities are concerned, business owners are concerned. They [adolescents] tend to be sometimes frowned upon a bit. But I see the school-to-work efforts to connect communities with adolescents as a benefit for both groups.

School-to-Work Curriculum Issues and Concerns

An inspection of interviewee responses concerning the issues and concerns surrounding the implementation of STW opportunities for middle-level students revealed five categories of responses:

1. Introducing School-to-Work Opportunities Too Early
2. Introducing School-to-Work Opportunities Too Late
3. Defining School-to-Work/Careers

4. Dealing with an Image Problem

5. Coping with Conservative Groups

Introducing School-to-Work Opportunities Too Early

Three of the five association representatives (NMSA, ITEA, and NASSP) believed that introducing and implementing STW efforts at the middle school level was too soon. Interviewees suggested that middle school students were not developmentally ready for the challenges and decisions inherent in this type of approach. These association representatives viewed STW education as an effort to "force students to make career choices too early." The NMSA representative commented,

> I think the bottom line, and I think our concern would be, we have no desire to endorse something that's going to make a child decide their lifelong career choices in eighth grade or in seventh grade. They're still so young at that age that they still have opportunities, plus maturity-wise they have tons of growth in that area. You're talking between seventh and ninth grade; they're not the same person; their maturity level will change. So, I guess for us, our concern would be that we're not tracking them into something that maybe they have a passion for right now but we know that realistically that's going to change within three to five years.

The ITEA representative shared a similar opinion:

> I guess that's not the place where I would emphasize it [school-to-work education] and certainly not the place our association has looked to emphasize it. When you're talking about very in-depth, job sharing, apprenticeships, and out-of-school experiences at the middle school level, I think you're hitting a little too soon. I don't know that I could cite any research that could say that kids are doing a really good job of making career decisions at that level. They generally really don't know when they get out of high school. Now, I am and our association is a proponent of a broader background and exploring careers at that point.

Another concern voiced by the association representatives was the possibility of preparing middle school students for careers or jobs that will become obsolete by the time they graduate form high school or that haven't yet been created. The ITEA representative shared his concern:

> If I've got a concern, I think it has to do with people who think that that is a time in a person's life where they should have students pursuing a very in-depth, job sharing, apprenticeship, out-of-school experience. It just doesn't line up with how occupations are going at this point. We don't even know what the occupations will be by the time they graduate from high school if

> we start in the middle school. It's just changing on us in leaps and bounds. We have to watch what we're doing there. To us, to go with strong school-to-work at the middle school level is not there yet. I don't think we'll push that for awhile.

Introducing School-to-Work Opportunities Too Late

Association representatives from AVA and ASCA belonged to the "opposing camp" when discussing the appropriate time to implement STW education programs. These two associations believed that implementing STW efforts at the high school was too late to make an impact. In fact, both representatives suggested introducing this approach at the elementary level. The ASCA representative commented, "I think that people are finally catching on that STW education is not nine through twelve. And that it really needs to start at the elementary and not the middle school." They also indicated that their associations have received several requests for STW curriculum materials and inservice programs from middle and elementary level educators in the field. The AVA representative reported,

> I am hearing about middle school needs more as I go places. People are saying. 'Why don't you do more for the middle school?' I think that's definitely the next thing that has to happen. Because truly you can't start this process in ninth grade. They've really have got to start it early. I think people are recognizing if they're waiting until the kids are in high school, that they have waited too long. And they're not having the level of success that they'd like to have. If they really want to be successful, they're going to have to start earlier.

This association representative also responded to the concern that middle school students were being asked to make decisions about careers before it was warranted:

> In response to the issue of forcing young people to make decisions too soon, we can counter that very quickly and say it is helping young people realize how important it is that they think about what they want to be so they are able to then get into those classes. You see, what's going to happen more and more is—and kids are finding this out—they can't even get into the college they want to go to because they didn't take the right courses. So they've got to do that and they've got to do it early on or they're spending more and more time on remediation. And colleges are getting tired of spending all this money on remediation.

Defining School-to-Work/Careers

Persons on both sides of the "timing" issue agreed that, perhaps, the real issue may be the variability and inconsistency in definitions and interpretations of "school-to-work."

The NMSA association representative indicated that this "confusion" has been an issue they have grappled with. He commented,

> I would assume that most school districts would probably have a different interpretation of school-to-work, and I think when you get into interpretation, then you get into what would be something we'd endorse and something we wouldn't. It all depends on interpretation, we deal with that on a daily basis with middle school philosophy. It's interpreted many different ways.

The ASCA interviewee suggested envisioning STW education, careers, and work in a broader fashion. She believed a broader view of these concepts would allow educators to accept the idea of a comprehensive K-12 approach to career development and begin to realize that they have already addressed this area, to some extent, in their curriculum. She stated,

> If we look at career as life, rather than getting a job, it's never too early. A lot of teachers don't understand that when they tell kids they need to be to school on time or if an assignment is due or you have to get along with people, that's part of work. We need to broaden that view of what work is or what career is. And I think once we broaden that view, educators will understand that their needs to be a career piece K through 12. And not only that, but I think they would be surprised to know that they're probably doing a lot of that right now. No one has ever framed it like that before for them.

Dealing with an Image Problem

The NMSA representative commented that STW education may have an "image problem." STW initiatives were viewed by many educators and parents as a "tracking situation" that leads to a career directly after high school. STW "paths" were seen as the less inviting alternative to participation in a college-bound preparatory "path." The representative elaborated,

> If you were looking at school-to-work in an upper middle class neighborhood, maybe it would be frowned upon because people would anticipate that their child is going direct to college. That's what they all think. They all have that instilled into them.

Coping with Conservative Groups

Representatives from two associations voiced concerns about the ability of conservative groups to discourage local school systems from implementing a career-focused or STW curriculum. An interviewee expressed her concern:

> I hate to even say this, but there are real right wing people out there that don't even want kids to be taught how to make decisions. And that's real frightening to me. So when we talk about school-to-work, a lot of these people scare me because they don't know the basics of what we're trying to accomplish.

One representative echoed these concerns:

> It's really the far right. And you know that more of those people are getting on school boards, which is very smart on their part. I used to serve on a school board and I'll tell you, it's a very, very important position; people don't realize it, they kind of poo-poo it as kind of the lowest of all the positions; but I'll tell you what, those are the people that touch the two things that are most important to everybody, and that is their property and their children.

These association representatives also shared their frustrations with conservative groups and influential individuals at the state level:

> Our state had a real hard time recently; parents and conservative group members just went in and kept saying, "They're trying to track our children. They're trying to force them into making decisions. They're trying to take away their choices and making them do things before they're ready." And really, it's just the opposite. It does expand the choices; that's the whole point. It makes it so much more possible that these young people are going to get to do something. It's really amazing, and people that listen to that are certainly short-sighted.

> As long as they have a governor who is so anti-everything, they're in trouble. He doesn't allow them—up until recently they couldn't even get school-to-work money. Does he realize he's paying for it? He may not want to get the money back, but everyone else is getting it. Now you explain that one to me. We're making all the other states have more money and more productive children. Figure that one out.

Association Statements on Middle-Level School-to-Work Opportunities

Association representatives were asked to share their formal positions or position statements on STW education at the middle school level. Not one association could produce such a document. Three of the associations representatives (AVA, ASCA, and NASSP) did have mission statements supporting or alluding to STW education, but middle-level students were not mentioned. The AVA representative did acknowledge the need for more comprehensive documentation. She said, "We have resolutions, but I don't think we have anything that deals with school-to-work. We have a need for a new resolution. We need to

pass a resolution that supports school-to-work." The other four associations do not intend, at this time, to focus their STW efforts at the middle school level or their middle school efforts on STW education.

DISCUSSION

In this study, we sought to identify two different groups' views regarding middle school education: (1) middle school educators and (2) representatives of selected associations that have either implicit or explicit involvement with middle schools. Our interviews focused primarily on STW (school-to-work) opportunities that were provided in the middle school. In this section, comments provided by middle school educators relating to STW curriculum implementation, focus, benefits, and issues and concerns are discussed. Then, a discussion of selected association representatives' views on STW curricula in the middle school is provided. Finally, several needs in this important area are presented.

Middle School Educators

Why a School-to-Work Curriculum?

Middle school educators we interviewed were pleased to describe why they chose to implement STW curricula in their schools. Some of their reasons were not entirely unexpected since, based on our literature searches and involvement with other STW projects, we anticipated that middle school educators would include enhancing curriculum relevancy, better serving the needs of at-risk students, and enhancing student development among their reasons for implementing STW curricula. The remaining groupings of reasons (developing career awareness and exposure, supporting systemic change and school reform, building community linkages, and improving the transition to high school and beyond) were less obvious in the literature but appear to be of no less importance. All seven of the implementation reasons were to some extent a function of school context. That is, schools' reasons for implementation were based on the particular school and community setting, student population, school district and/or state involvement in educational reform, and so forth. The reasons educators gave for STW implementation were to a varying degree compatible with suggestions provided in several recent reports advocating change in

the middle schools. For example, among its recommendations, *Turning Points* (Carnegie Council on Adolescent Development, 1989) supports the implementation of personalized and cooperative learning for students and making meaningful connections between middle schools and their communities. These statements parallel several of the categories of responses that were drawn from the interview text. Other implementation categories we identified are either generally or specifically supported in the middle school literature (e.g., see Dougherty, 1997; Mac Iver, 1990; Marshak, 1995). Unfortunately, even though a number of people we interviewed commented that their middle school STW programs were implemented at least in part to meet the needs of at-risk students, there is little discussion in the literature to support this focus. A plausible reason for such a mismatch is that the people we interviewed were at the cutting edge of educational reform but their exemplary efforts had not as yet been recognized in the professional literature. Another possible reason might be that middle school educators do not want to note in formal communication that some students begin to develop their at-risk characteristics while enrolled in middle schools.

Conceptual and Organizational/Operational Reasons for Implementation

About half of the middle school educators interviewed offered conceptual reasons for implementing their STW curricula. Some referenced *Turning Points* and/or general middle school concepts as a foundation for curriculum development efforts. One principal implied a mismatch between *Turning Points* and the STW curriculum, inferring that *Turning Points* de-emphasized academics in favor of affective behavior development. Several educators saw the STW curriculum as an excellent fit with the middle school philosophy of assisting students to transition from child to young adult. Comments made by several other educators supported the need to prepare students for the future as well as the present. Interviewees' comments about the value of the STW curriculum ranged from "relevant to real life" to "produces lifelong learners" and "embedding basic skills into a thought-provoking curriculum." The statement made by a middle school principal that "it is never to early to address future needs" seemed to capture the essence of why it is important for the middle school to focus on preparing students for their futures.

Interviewees mentioned a small number of organizational and operational reasons for implementing STW curricula in the middle school. Interdisciplinary teaming, which was discussed most frequently by middle school educators as an organizational reason for implementing STW curricula, is quite visible in the literature (Carnegie Council on

Adolescent Development, 1989, 1995; Keefe et al., 1994; National Middle School Association, 1995). However, it is not very clear who should be members of these teams. Should teams include all the educators in a middle school or just a subset of these educators?

Curriculum Focus

Collectively, middle school educators we interviewed indicated that their curricula focused on five different but interrelated areas: (1) career exploration and awareness, (2) self-awareness, (3) contextual learning, (4) service learning, and (5) integrated themes. It was in this area where STW curricula appeared to differ most from curricula advocated in the general middle school literature. However, the actual difference is quite subtle. Whereas the literature focused more directly on development of academic knowledge and skills within a framework of adolescent youngsters' current development needs, educators we interviewed sought to assist their students in developing for the future as well as meeting their present needs. For example, interviewees mentioned that career exploration and awareness experiences could assist students in evaluating their current interests and abilities and expanding their future career horizons. Several educators noted that contextual learning should be used to connect basic learning with authentic applications in real life community and workplace settings.

Educators also discussed how the focus of their curricula were determined. Implicit in the literature is a view that educators are the source of content knowledge and organization for middle school curriculum development. In contrast, several educators we interviewed indicated that at their schools a broad net was cast to capture content that should be included in their curricula. Through approaches such as faculty brainstorming, student input, district-wide needs assessments, advisory committees, and community conversations, educators were able to bring a real-world focus and view into their curricula. Curriculum development processes discussed by interviewees were much more comprehensive and dynamic than what we noted in the literature on middle school education.

Student Benefits

Interviewees described a broad range of benefits that the STW curricula had provided to their students. These educators' comments underscored the contributions of

STW experiences to middle school student development. Middle school educators noted that the middle school STW curriculum enhanced their students' personal development in areas such as individual growth, self-understanding, confidence, self-esteem, and motivation and responsibility to learn. Interviewees linked these outcomes directly to the STW curriculum process. Examples of the curriculum process include ways it appeals to students at their developmental level and how it focuses on issues that are relevant to middle school students. Teachers we interviewed were very sensitive to student outcomes and how they related to the process used to structure the curriculum.

Implementation

For the most part, implementation issues and concerns expressed by the middle school educators we interviewed paralleled those associated with general change and reform in the schools. However, the process of implementing a STW curriculum should be viewed as much more holistic than what is viewed as traditional individual teacher-centered change. Several interviewees noted that "buy-in" was sought from virtually everyone from the schools, the community, and the workplace who might make contributions or provide meaningful input to the curriculum. These potential contributors were viewed as partners in rather than merely providers to the STW curriculum effort. This contrasts to some extent with recommendations for curriculum change described in several recent middle school publications (Carnegie Council on Adolescent Development, 1989, 1995; National Middle School Association, 1995). For example, even though in *Turning Points* it is recommended that teams of teachers work with the same students, the notion of all teachers in the middle school working as teams is not addressed. In contrast, interviewees seem to view the STW curriculum as being every educator's responsibility since it is meant to be implemented by all teachers in the middle school.

Associations

Literature gathered from selected associations revealed a range of views on STW efforts. Some associations made mention of STW efforts, and others did not. Most of the association literature focused on career development needs of secondary school students but not specifically middle school students. Discussions with association representatives confirmed the wide range of views found in the literature. However, the persons we interviewed provided more expansive views of STW efforts in the middle school than was

identified in the association literature. For example, representatives collectively spoke much more directly and positively about the merits of STW activities in the middle school than what was formally documented. STW curriculum issues and concerns expressed by association representatives appeared to highlight philosophical differences among the various associations and their members. The differences in views expressed by association representatives provide a meaningful starting point for resolving these differences so more uniform STW opportunities can be provided to middle school students. Questions drawn from this area of discussion that need to be answered include

- Are the middle school years the best to time to introduce STW opportunities?
- Is there a best time to introduce STW opportunities in the middle school?
- How should STW opportunities be defined as they relate to middle schools?
- How can potential STW image problems be dealt with?
- Are STW opportunities a quick fix or a long-term investment in improvement?
- How can educators cope with external groups that do not support the inclusion of STW opportunities in the middle schools?

Possible Future Directions

Based on these results and discussion, several suggestions are offered for consideration by those interested in directions that may lead to peaceful coexistence between STW curricula and the middle school agenda. As a starting point, consider the direction STW opportunities in some middle schools appear to be taking. As described by middle school educators in exemplary middle schools where STW curricula are being provided to students,

- these students can prepare for their futures in addition to satisfying their current needs.
- teaching and learning focus on both the educational process and its outcomes.

- every educator in the school can team with each other as well as with community and workplace representatives to provide students with authentic learning experiences.
- the context for teaching is proactive and dynamic rather than reactive and static.
- the curriculum can be developmentally responsive to students and concurrently provide them with a wide range of opportunities such as career exploration and awareness, contextual learning, service learning, and integrated learning themes.

Thus, there appears to be a clear connection between what the middle school literature says middle schools should do and what a number of STW-oriented middle schools are doing. Even though STW opportunities in the middle school may not be a mainstream focus for middle school professionals, these opportunities have the potential to meet students' developmental needs in new and exciting ways. It is therefore important to better understand and document exemplary STW opportunities that are occurring in many middle schools across the United States so their successes can be shared with other middle school educators.

It likewise appears that middle schools where STW opportunities are being provided to students may indeed be exemplars of best practice as envisioned in the middle school literature. Broadly based teacher teaming, extensive linking with the community, providing students with opportunities for contextual learning, enabling students to explore the real world, and providing students with meaningful development experiences are all suggested in the middle school literature and can all be accomplished within a STW opportunities framework. Descriptions about STW opportunities that can be provided to middle school students and their potential value must be communicated to the middle school educator community. Middle school educators should have access to this information before they begin to implement major curriculum changes. In fact, the STW curriculum may be exactly what a number of middle schools need.

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Corlears Junior High School 56
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Estill County Middle School
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Fax: (606) 723-4894

Flambeau Schools
N5377 Maple Street
Tony, WI 54563
(715) 532-7760
Fax: (715) 532-5405

Green Island Schools
Heatley Junior-Senior High School
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Green Island, NY 12183-1293
(518) 273-1422
Fax: (518) 270-0818

Kenneth D. King Middle School
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Harrodsburg, KY 40330
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Fax: (606) 734-0811

LaSalle Middle School
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Niagara Falls, NY 14304
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Fax: (716) 283-1157

Laurin Middle School
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Vancouver, WA 98662
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Fax: (360) 687-7732

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Sanford, NC 27331-1010
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