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ABSTRACT

This monograph describes a research program that will assess the cumulative effects of education policies on the teaching environment. It also focuses on how these policy outcomes affect the ability of schools to attract and retain highly qualified teachers and principals. The document presents the results of interviews conducted at two elementary schools that were intended to uncover how school-reform policies affected teachers. All of the nine teachers who were interviewed were in the process of incorporating standards, standardized testing, and/or accountability into their daily teaching regimens. The paper comments on the rapid pace of reforms, societal issues, resources for reform implementation, the quality of the teaching environment, and the implementation of future reforms. The interviews revealed that teachers tended to see negative outcomes from reforms, with such side effects as compressed teaching schedules and the neglect of certain subjects. The monograph then turns to schooling in England, Germany, and Japan in a comparative analysis of education policy in these countries. It provides the historical context of the school systems in all three countries, providing information on their governance and organization, how they assess students and provide them access to higher education, how they track students, how they educate students with disabilities, and how they train and develop teachers. (RJM)

The Changing Teaching Environment.

Lisa Hansel
Becky Skinner
Iris C. Rotberg, Editor

August 2001

Center for Curriculum, Standards, and Technology
INSTITUTE for EDUCATION POLICY STUDIES

The George Washington University

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The Changing Teaching Environment

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Foreword

The George Washington University is designing a research program to assess the cumulative effects of recent education policies on the teaching environment and, in turn, on the ability to attract and retain highly qualified teachers and principals. The research will be conducted by the Center for Curriculum, Standards, and Technology at the Graduate School of Education and Human Development. This monograph describes the issues that will be addressed by the research and presents two papers summarizing the findings of the first two projects implemented under the program.

Iris C. Rotberg presents an overview of the research in Chapter 1. Chapter 2, written by Becky Skinner, describes the results of a pilot study conducted in two elementary schools. Chapter 3, written by Lisa Hansel, discusses the policy issues from an international perspective.

The monograph is published as part of a series sponsored by the Institute for Education Policy Studies. We gratefully acknowledge the support of Joel Gomez, the director of the Institute, in the preparation of the volume. We also thank the teachers who generously gave their time to be interviewed for the study reported in Chapter 2. Nina de las Alas, Melinda Hargrave-Kanzow, Ayako Saido, and Alison Wolf provided invaluable information for Chapter 3. Cynthia Orticio, who provided editorial assistance, made significant contributions to the volume's presentation and style.

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CHAPTER 1

Overview

Iris C. Rotberg

The United States currently faces a shortage of qualified teachers and principals. While this shortage reflects several different factors, including salary levels, we know that the perceived quality of the school environment is a major determinant of the choice to enter and remain in the profession. That environment, in turn, is a product of both societal conditions and education policies.

Several highly publicized reports published in the 1980s recommended that U.S. schools raise academic standards. Over the past 15 years, policies have been implemented that are intended to meet that objective. There is considerable debate, although few definitive research findings, about the potential benefits and shortcomings of these policies. However, little attention is given to the fact that their success or failure may be related as much to how the policies affect the teaching environment as to the intrinsic merits of the policies themselves. If well-intentioned policies, in combination, lead to excessive or contradictory demands on teachers and principals, they may have adverse effects on job satisfaction and, in turn, on the ability to attract and retain highly qualified educators. As a result, policies intended to strengthen academic standards could have precisely the opposite effect from that intended.

I. RESEARCH ISSUES

A. Policy Trends

The following are major policy trends:

- School systems increasingly hold teachers and principals accountable for the standardized test scores of their students. A focus on test-based accountability, in turn, has significant implications for the school environment because it may affect educators' instructional practices, public image, salaries, and the resources available to their schools—as well as decisions by states and school districts about whether to take over and "reconstitute" schools.

- The rate of introducing educational "reforms" has increased. These reforms include new curriculum standards, assessments, and educational models as well as reduced school or class size, block scheduling, school-based management, and school choice. While we know that evaluations of these reforms show mixed results, we have little evidence about their combined effects on the school environment; the consistency between the reforms and teacher training, professional development, and testing practices; or the impact of frequent change in itself.
- Classroom teachers have been given increased responsibility for the academic achievement of students with special needs and for implementing accommodations to enable students to take standardized tests. Teachers who implement these services are affected in a variety of ways. There are requirements for new classroom management skills, an increased repertoire of teaching strategies, and additional reporting responsibilities. Little systematic information is available about the interaction of these responsibilities and teachers' other roles or about whether adequate resources and support services are available to implement the initiatives.

B. Administrative and Paperwork Responsibilities

Recent policies also have direct implications for educators' administrative and paperwork responsibilities. Teachers and principals have increased responsibilities for documenting student achievement, justifying student placement, and administering new types of assessments—for example, portfolios and essay exams—that require more time and paperwork than do conventional tests. We do not have information about the overall impact from the teacher's perspective.

C. Societal Context

These policy initiatives occur in a societal context that also has significant implications for the school environment. Many schools have high proportions of low-income children; educators are expected to address students' social and emotional problems; there are concerns about school safety; conventional wisdom is that schools (and teachers) have failed, with pressures in some jurisdictions to seek alternatives in the form of charter schools, privatization, and vouchers; and, in general, there is a tendency to assign responsibility to schools for the broader problems of society.

States and school districts also differ significantly in poverty rates, in the societal problems associated with them, including low student achievement, and in education funding levels. These differences, by themselves, have a significant impact on the teaching environment. But low-income and affluent school districts also appear to differ in the way education policies are implemented. For example, teachers and principals in schools with high proportions of low-income students may face greater pressures with respect to test-based accountability, the threat of school takeovers, or increased administrative burdens than do teachers in more affluent areas. At the same time, they have fewer resources with which to meet those demands.

D. A Potential Crisis

The serious national shortage of qualified teachers and principals is well documented. Moreover, recent news reports suggest that current policies play a major role in discouraging educators from remaining in the profession. For example, there are reports of teachers leaving the field, or requesting transfers to a grade that is not tested, because they feel that the tests have adverse effects on instructional methods and working conditions. *The New York Times* (Steinberg, 2000), reporting on shortages of principals, described it this way:

> As the academic year begins for the nation's 53 million students, a growing number of schools are rudderless, struggling to replace a graying corps of principals at a time when the pressure to raise test scores and other new demands have made an already difficult job an increasingly thankless one. . . . In Kentucky and Texas, where the pace at which principals are fleeing is as accelerated as it is in Vermont, job openings in some districts that drew more than a dozen applicants as recently as five years ago are now attracting as few as three, according to principals' associations there.

II. RESEARCH PROGRAM

The Graduate School of Education and Human Development at The George Washington University is designing a research program to assess the aggregate efforts of recent education policies on the teaching environment. The research is based on the assumption that the success or failure of our education policies cannot be separated from the impact they ultimately will have on the teaching environment and, in turn, on the ability to attract and retain qualified teachers and principals. The research assesses the combined effects of current policies and describes the implications of

the findings for formulating education policy. It focuses on policies related to test-based accountability, school reform, and services for students with special needs. However, unlike studies that have assessed the impact of a specific education policy, the emphasis of the current research is on the cumulative effects of policies that typically are independently designed and sequentially introduced. The research addresses the following key issues:

- The aggregate effects of recent education policies on the teaching environment.
- The impact of the policies on the ability to attract and retain qualified teachers and principals.
- The implications of the findings for formulating public policy.

The overall research program will include the following components:

- *Case studies* will be designed to provide in-depth information about the combined effects of current policies. They will be conducted in school districts selected for (1) demographic and regional diversity and (2) diversity in education policy. The studies will focus on the interactions between policies, the varying methods by which they are implemented, and how these differences affect the teaching environment.
- *Surveys* will be designed to provide nationally representative data on the key issues addressed by the case studies. While both experienced and new educators will be surveyed, the emphasis will be on those who have worked in schools for at least the past 10 years. Teachers and principals will be asked to describe their perceptions of changes in policies during that time period and their views about the positive and negative implications for the teaching environment.
- *International studies* will be designed to provide a comparative perspective on the policy issues addressed in the U.S. studies. Every country must formulate policy on such issues as student testing, teacher accountability, resource allocation, innovation, and special education. However, countries approach these issues in very different ways, and the differences can be expected to have a significant impact on the teaching environment. The research will (1) describe public policies in selected industrialized countries with respect to the issues addressed by the U.S. research and (2) assess the implications of these policies for teachers' working conditions, teaching methods, and attrition rates. Countries representing diverse perspectives on the key policies—for example, Britain, Germany, and Japan—will be considered for the first phase of the international research.

In summary, the research focuses on the aggregate effects of key education policies—test-based accountability, education reform, and special education—on the teaching environment and, in turn, on the ability to attract and retain qualified teachers and principals. It will provide information about the following broad topics:

- Changes in education policies and the societal context over the past 15 years and the impact of these changes on educators' working conditions, instructional methods, skill requirements, and the quality of education students receive.
- The extent to which key policies reinforce, or contradict, each other and how their interactions affect the teaching environment.
- The different ways in which key policies are implemented and how these differences affect the teaching environment.
- Differences in policy implementation in low-income and affluent schools; inner-city, rural, and suburban schools; and private schools.
- The extent to which schools receive additional resources to meet the increased demands of new policies.
- The extent to which educators believe they are given an opportunity to gain the knowledge and skills needed to implement new policies—through, for example, professional development programs or relevant curriculum materials.
- Changes in administrative and paperwork responsibilities as a result of current policies.
- Key education policies in selected industrialized countries and their implications for the teaching environment.
- The impact of education policy trends in the United States, and in other industrialized countries, on the ability to attract and retain qualified teachers and principals.

The success or failure of our education policies cannot be separated from the impact they ultimately will have on the quality of teaching. The project will assess the combined effects of current policies and describe the implications of the findings for formulating education policy.

Reference

Steinberg, J. (2000, September 3). Nation's schools struggling to find enough principals. *New York Times*, 1.

CHAPTER 2

Teachers and Reforms: Results from Interviews Conducted in Two Elementary Schools

Becky Skinner

The topic of how school reform policies affect teachers has received little attention from researchers, educators, and policymakers. This oversight could be considered significant, as student success in the classroom is inextricably linked to teachers' ability to implement reforms successfully, their comfort level and familiarity with the reforms, and their attitudes toward the reforms. The purpose of this project was to pilot a series of questions focused on these and related topics. While the pilot was limited to only two schools, the findings show that these issues merit further study.

BACKGROUND INFORMATION

The pilot study was conducted at two elementary schools in the same metropolitan area. The first was an urban school located in a low-income, predominantly African American neighborhood. The second school, a suburban school, was located in a low- to middle-income, predominantly African American and Hispanic neighborhood.

Nine teachers were interviewed, five from one school and four from the other. They were selected based on their years of teaching experience and their current teaching assignments. Teachers from the first school had between 21 and 36 years of teaching experience. The majority of this experience was gained in the same school system. The teachers represented a variety of grade levels, pre-kindergarten to fourth grade, and two resource areas, science and reading. Teachers from the second school had substantially less teaching experience, ranging from 3 years to 13 years. One teacher was interviewed from each of four grades—2, 3, 4, and 5.

All the interviews were conducted in person at the respective schools during spring 2000. Each interview lasted approximately 20 minutes to one hour. Most of the teachers were interviewed individually. At one school, however, due to a scheduling conflict, interviews with two teachers overlapped for a portion of the discussion.

All of the teachers interviewed for the pilot study were in the process of incorporating standards, standardized testing, and/or accountability into their daily teaching regimens. The teachers in one school were also in the process of implementing a comprehensive school reform model. Comprehensive school reform models provide schools with either specific curricula and instructional practices or general strategies in these areas. Their focus on comprehensive reform is designed to increase the probability that the entire education reform process will be coordinated and benefit all students. Teachers in the other school were not implementing a comprehensive school reform model but were preparing for a second round of class size reduction. In addition, the school had just adopted a reading program for first and second graders.

RAPID PACE OF REFORMS

Most teachers felt that the districts were introducing new reforms too rapidly. The pace of reform made it difficult for teachers and students to adjust to and feel comfortable with the reforms. In addition, teachers indicated that administrators were not giving reforms a chance to work, often introducing new reforms each time the district administration changed. Given the turnover in district leadership, reforms had a life expectancy of approximately three years. Most of the teachers commented on the need for a given reform to remain in place longer than three years in order for it to be fully implemented and evaluated.

Possible explanation for noncompliance. Given the short lifespan of any given reform, teachers in one school commented that their colleagues have taken a lackadaisical attitude toward reforms, especially reforms with which they do not agree. There is a feeling that there is no reason to commit time and energy to implementing something that will be replaced within a few years.

Need for pilot programs and longer time frames. Teachers in both schools suggested that pilot programs be used to test reforms prior to full implementation. Teachers need the opportunity to work with reforms, determine what does and does not work in the classroom, and suggest modifications to the reforms before full implementation. However, if administrators and policymakers failed to respond to teacher feedback, pilot programs would be meaningless. It was also suggested that once the decision has been made to implement a reform, two years are needed to implement the reform, an additional three years to fully commit to it, and two more years to evaluate its effectiveness. This is twice as long as the usual life expectancy of most reforms.

REPACKAGING OF OLD IDEAS

Almost all teachers agreed that the reforms being introduced in schools were not new ideas, but rather were old ideas and methodologies that had been repackaged. Teachers perceived that the researchers and policymakers responsible for developing reforms simply took the best parts of previous reforms and put them together in different ways. In some cases, this resulted in giving new names to already existing teaching activities or tools. Beliefs about repackaging also contributed to the perception that changes in education were made solely for the sake of change. The lack of stability of reforms may have also contributed to this view.

Implementation by experienced teachers. There was a substantial difference in how teachers approached the implementation of reforms based on their years of teaching experience. The more experienced teachers indicated that they were able to adapt reforms to their preferred teaching methods and content coverage. Many of these teachers said that they thought it was important to retain instructional strategies that had worked for them over time because no reform was going to work for every student.

Other teachers mentioned that they deliberately did not implement reforms as intended by policymakers. Teachers may have taken parts of a given reform and integrated them with their current teaching repertoire without fully embracing the reform. In some cases, the only time a reform was fully implemented in a classroom was when teachers were being observed.

Implementation by less-experienced teachers. None of the less-experienced teachers mentioned deviating extensively from reform implementation. Several teachers mentioned that they were constantly changing their teaching methodologies in order to stay current with the new reforms. These teachers also emphasized the need to learn better time management and classroom management skills in order to implement multiple reforms.

STANDARDIZED TESTING AND STANDARDS

Standardized testing and standards were pervasive in both elementary schools. While opinions about the value of standardized testing varied, teachers discussed associated issues including the alignment of standardized testing with other reforms, preparing for the exams, the use of the results, and accountability. Most teachers were

resigned to the fact that standards-based reforms were well ingrained in the school system and would be long lasting. However, several commented on the need for changes in the way in which the tests are administered and used.

Alignment of standardized tests with other reforms. In general, teachers expressed concerns about having to implement multiple reforms concurrently. Many of these concerns focused on the need to implement multiple standardized tests simultaneously, aligning standardized tests with standards, and aligning standardized tests with the curriculum. For example, teachers in one district were being asked to administer two standardized tests that examined different skills and content knowledge, placing an extra burden on teachers to prepare students for both tests. Other teachers indicated that even when tests and standards were well aligned with one another, they still found it necessary to provide supplementary materials to ensure that students were adequately prepared for testing and standards.

Teaching to the test. Most of the teachers mentioned that the emphasis placed on testing forced them to focus on specific subject material to the detriment of other subject areas. Teachers mentioned that this practice had become common among their colleagues. During time periods leading up to test administration, teachers indicated that the teaching of subjects not being tested was greatly diminished. For example, if students were being tested on reading and mathematics, science and social studies instruction was reduced or eliminated to focus on test preparation. Other teachers indicated that at times it was challenging to teach to the test while also teaching to standards.

Changing test schedules. Teachers in both schools commented on additional challenges that arose when standardized tests were either moved to an earlier testing period or announced mid-year. The district practice of modifying test schedules left teachers with less time to cover the material being tested and created particular difficulties when teachers did not know about planned tests at the beginning of the school year. In some cases, modifications added to the need to abandon content areas not being tested to prepare students for the accelerated or recently added testing schedule.

Uses of test results. Most teachers commented on the inappropriateness of using standardized tests as the primary indicator of student performance. They felt that additional measures of student achievement were needed. At the same time, teachers commented that the overreliance on standardized test scores raised concerns about comparisons between their student populations and students in more affluent parts of the school district, region, or nation. Several teachers found it unfair that

their students were being compared with students who came from higher socioeconomic backgrounds, had more stable family structures, or were native English speakers.

Advantages and disadvantages of standards. A few teachers commented on the positive effects of standards on the learning environment. Most of them felt that having standards gave them specific information about material they were expected to cover. They indicated that standards were a means by which expectations of teachers, students, and parents could be aligned, resulting in harder-working students and improved performance. While none of the teachers suggested eliminating standards, some felt that the material they had to cover to meet the standards was not always age appropriate for their students. Other teachers mentioned the difficulty of aligning standards with other reforms, such as the adoption of a comprehensive school reform model.

Holding teachers accountable. Many of the teachers discussed the pressure of being held accountable for student performance, but they were not sure how accountability was being reflected, if at all, in their performance evaluations. Several teachers argued that they should not be held accountable for student performance on standardized testing. They believed that they should be held accountable only for introducing concepts, since they could not control other factors affecting student test scores, including family background and students' previous academic experiences. Several teachers also commented that the pressure for accountability stemmed from the public and threats from Congress to withhold funding from low-performing schools.

SOCIETAL ISSUES

There were mixed opinions about whether societal problems affected reforms. All the teachers commented on the societal problems with which students were contending. However, there was not universal agreement that these factors affected the successful implementation of reforms. Teachers discussed the challenges of educating students who came from unstable family structures, who lived in poverty, and whose first language was not English. In some cases, these discussions were linked to standards and standardized testing. For example, teachers felt that students who spoke English as a second language often did not have enough time to prepare adequately to participate in standardized testing. Teachers also suggested that students with little support at home to reinforce what they learned in school had a more difficult time retaining information, necessitating the reteaching of material. Based

on these discussions, it could be inferred that societal factors, such as unstable family structures and poverty, indirectly affected the implementation of reforms through their effect on the everyday learning environment.

RESOURCES FOR REFORM IMPLEMENTATION

Almost all the teachers indicated that they lacked the resources to implement reforms adequately. Most frequently, they cited a lack of time, training, and physical and human resources.

Time. All the teachers mentioned that the reforms took time away from other educational activities. As a result, in some cases, they were not teaching certain subjects or were minimizing student exposure to subjects that were not being tested. In other cases, they were able to cover more material than they had previously but lacked the time to go in-depth on specific topics. Due to time constraints, teachers also found it necessary to eliminate activities that made learning a more "hands-on" experience for students, relying more heavily on drills instead. While this allowed teachers to expose students to more material, it also prevented them from providing detailed information about topics and stifled their creativity in presenting material.

Other teachers provided specific examples of how the time constraints related to reform implementation directly affected student learning. For example, a teacher indicated that because she had so much material to cover, she no longer had time to determine whether students understood the material. Teachers in one school also discussed time constraints as they related to the comprehensive school reform model. They said that many students were unable to make progress on a given task during the strict time scheduling required by the model.

Professional development. Teachers' perceptions of the adequacy of professional development varied within schools and by reforms. Teachers in both schools were able to identify instances of sufficient and insufficient training, while disagreeing over whether training for a particular reform had been adequate. For example, teachers disagreed over whether they had been given enough training to implement standards. However, teachers in one school agreed that the professional development activities associated with the implementation of the comprehensive school reform model had been completely inadequate. Inadequate training was particularly a problem when reforms required skills that some teachers lacked, such as the ability to integrate technology with academics. Teachers argued that if training was inadequate, they should not be held accountable for student performance.

Several teachers also mentioned that the training provided often did not deal with issues that were of greatest concern to teachers, such as developing classroom management skills, handling resource issues, and teaching students on multiple learning levels. However, most teachers agreed that they were generally able to apply a portion of what they learned through professional development to the classroom if the training was relevant and presented new concepts.

One additional criticism was levied against the way professional development is sometimes delivered. In both schools, teachers indicated that some of their training came through train-the-trainer models. They found this process to be ineffective. The teachers who attended the initial training barely received enough information to understand the reforms, let alone explain them to other teachers and train them in the implementation process.

While many of these comments highlight the need for better professional development associated with reform implementation, at least one teacher felt that teachers must accept some responsibility for preparing for changes. She said that teachers should be taking classes, doing research, and learning which reforms are and are not working.

Need for information. As part of professional development, teachers expected to be well informed about proposed and current reforms. Teachers in both schools highlighted instances in which reform implementation was hindered due to a lack of information. For example, teachers in one school complained that they had been asked to implement new standards over the past three years but had not received final versions of the standards they were being held accountable for implementing. One teacher added that she did not even see a draft of the standards she was supposed to be using until three years into the implementation process. Teachers in the other school mentioned that they knew major curriculum changes were going to be made in the fall, but the administration had not shared any details with them about the changes. As a result, they could not plan for the curriculum revisions during their summer break.

Physical and human resources. In many cases, implementing reforms had unintended consequences on resources available to support other aspects of the education process. For example, one school implemented a new reading program for first and second graders. In order to support this reform, teachers in higher grades lost their teaching assistants and reading specialist, which increased their teaching burden. Class size reduction in one school also led to a reduction in resources in order to afford the additional teaching staff. This school was scheduled for another round of

class-size reductions. Teachers were already anticipating that the newly implemented reading program for the first and second graders or an instructional assistant would have to be eliminated to support class-size reductions. They were also anticipating problems related to staffing and space constraints.

Other teachers focused on the lack of physical resources available to implement reforms. For example, one district's standards included a large technical integration component. Questions were raised about how teachers could be held accountable for implementing this portion of the standards if the school failed to provide them with the necessary resources, such as computers. At the same time, several teachers in both schools added that some reforms were accompanied by new materials and opportunities to reflect on their teaching strategies.

QUALITY OF THE TEACHING ENVIRONMENT

Several teachers indicated that overall, reforms have had a negative effect on the teaching environment but that a given reform may be well received and popular with teachers. Teachers cited examples of increased competitiveness and lower teacher morale that they attributed to the reforms. For example, while teachers felt that accountability could have positive effects on the quality of teaching, they also found that it had led some teachers to withhold information that might have been useful to their colleagues in order to help their students achieve relatively higher test scores. Teachers in one school noted that the reforms, especially the comprehensive school reform model, had detrimental effects on teacher morale. They indicated that the model was extremely unpopular among the teaching staff, and their low morale was being magnified because the students did not like the model. Teachers noted that student satisfaction is one of the factors influencing reform implementation.

Workload. Almost all the teachers said that reforms have increased their workload in terms of both classroom instruction and administrative work. Teachers indicated that they have to spend more time preparing for class than they had previously. Some teachers indicated that recent reforms had required the creation of new lesson plans, especially because textbooks were no longer aligned with the material they needed to cover. Concerns were also expressed about the additional time needed to align standards with the curriculum and to ensure that students were prepared to pass standardized tests.

Additional assessments. Teachers in one school mentioned new quarterly assessments that they were required to complete for each student. While they felt that these assessments provide valuable feedback about student performance, completing them took time away from lesson planning and grading.

Filling in the gaps. One very specific concern was raised by a resource teacher. She indicated that the emphasis on standardized testing and standards meant that teachers were no longer providing science instruction or were unprepared to provide the required material. Therefore, reforms had changed her role from that of a resource teacher to that of the students' primary source of science instruction, increasing her workload tremendously.

PROVIDING A HIGH-QUALITY EDUCATION

While several teachers indicated that reforms had negative effects on the teaching environment, over half the teachers interviewed believed that students were still receiving a high-quality education. This apparent contradiction might be explained in the words of one teacher who said that the specific reform is irrelevant—with every reform, there will be success and failures; delivery is key. As teachers admitted to modifying the reforms frequently, it may be that they perceive their modifications as the mechanism by which they continue to provide students with a high-quality education. Questions about the quality of education received by the students may also have been interpreted as a reflection of the teachers' ability to provide a high-quality education, biasing their responses in a positive direction.

Improvements in the quality of education. Four teachers provided specific examples of the ways in which reforms had improved the quality of education. Teachers said that they felt that they were exposing their students to more material than they had in the past. They did, however, add the caveat that they would like to provide more depth on some topics, rather than moving so quickly to the next unit to ensure that students were prepared for standardized tests. Other teachers felt that the reforms were helping students become better writers at an earlier age. One teacher added that student performance had improved because more was expected of students, and students were focused on meeting these goals. Other teachers were not sure that reforms could be linked with student performance. They felt that student performance was erratic; some years, test scores went up, while others they did not.

Negative effects on the quality of education. Several teachers focused on the negative effects of reforms on the quality of education. There were concerns that students had negative attitudes toward standardized testing, which had detrimental effects on their performance. Concerns were also expressed that education was "too rushed," reducing students' ability to absorb and retain information. Teachers also indicated that they had seen students become increasingly frustrated as they tried to meet standards and testing requirements. Several teachers pointed out that the demands being placed on students by the reforms were, in turn, creating a more stressful environment for the teachers.

IMPLEMENTATION OF FUTURE REFORMS

All the teachers had suggestions for improvements that could be made at the district and school levels to help ensure the successful implementation of future reforms. Each teacher emphasized the need for teachers to have input in the reform selection process. They also indicated that teachers should have opportunities to provide feedback about reforms that will be taken into account by policymakers and administrators. Teachers also discussed the importance of administrative and collegial support for reform implementation.

Teacher involvement in reforms. Almost all the teachers suggested that teachers should be involved earlier in the implementation process. A few teachers reasoned that policymakers are not in the classroom with students, so it is difficult for them to develop policies that are in the students' best interests. Teachers wanted to receive advance notice of upcoming reforms and the necessary materials and training to prepare for the changes prior to implementation. They did not want to have to implement reforms while simultaneously learning about the reforms. Teachers also wanted to have reforms modeled for them so that they would have a clear understanding of expectations and suggested strategies for achieving outcomes.

Teachers indicated that allowing them to have input in the reform selection and design process and providing advance information and training about reforms would help build teacher support for the reforms, in part because the reforms would be perceived as "teacher friendly." Several teachers indicated that when teachers are motivated to support a reform, the implementation process is more likely to be successful. In addition, several teachers felt that involving teachers in the reform decision-making process will generate new ideas. Overall, however, only three teachers had been given at least one opportunity to comment on a reform during their careers.

Administrator involvement. Most of the teachers expressed the need for administrator involvement and support in the implementation of reforms. Teachers pointed out that when administrators failed to embrace reforms completely or asked teachers to do something that contradicted the reform policies, reform implementation was impeded. At the same time, teachers did not want administrators to "push" reforms on them. They felt that administrators should convey their expectations about how reforms should be implemented and then respect teachers' ability to carry them out. Teachers also were concerned that administrators had unrealistic expectations about student performance, based on a limited number of classroom visits. In addition, one teacher pointed out that administrators and policymakers needed to spend more time considering how a reform at one grade level would affect students at another grade level and what additional policies should be established to account for this.

Support from colleagues. Teachers mentioned that having collegial support was important to the successful implementation of reforms. Peer support creates an environment in which ideas can be exchanged. Teachers serving as mentors for other teachers also mentioned that reforms can be particularly overwhelming for new teachers. New teachers need guidance from more experienced colleagues to implement reforms while handling the other challenges associated with being a first- or second-year teacher.

REFORMS AND THE DECISION TO TEACH

The majority of teachers felt that the influx of reforms overall as well as specific reforms had a negative effect on the ability of schools to recruit and retain teachers. Teachers in both schools cited instances in which a specific reform had led to staff turnover or had detrimental effects on teacher recruitment. For example, the implementation of a new reading reform at one school caused several veteran teachers to resign because they did not want to make the necessary changes. At the other school, the implementation of the comprehensive school reform model led to staff departures, while impeding the school's ability to recruit new teachers. The teachers also discussed other factors related to the decision to teach and their personal decisions regarding the future of their teaching careers.

Other factors contributing to the decision to teach. Some of the teachers interviewed believed that reforms had little effect on decisions to teach, and even teachers who thought that the reforms were a contributing factor to teacher turnover and

recruitment problems did not necessarily believe reforms were the main issue. For example, several teachers noted that salary often played a larger role than reforms in influencing an individual's decision to enter or leave the profession. Long hours, lack of respect, and lack of parental and financial support were also mentioned as contributing factors. Other teachers suggested that the stress associated with working with children, especially children bringing "baggage" to school, leads to teacher burnout. The media's negative portrayal of education, especially related to reforms and societal issues, was an additional factor cited that might negatively affect teachers' decisions to enter or remain in the classroom.

Personal decisions to remain teachers. While four of the teachers indicated that reforms had contributed to their decision to leave teaching, reforms were not the sole reason that teachers planned to retire or move on to other careers. Three of the most senior teachers indicated that they planned to retire because they were tired of the barrage of reforms and the accountability associated with the reforms, as well as the multitude of problems students bring to the classroom. The fourth teacher was planning to change careers because she found the constant introduction of new reforms too overwhelming, and she did not feel that she was paid adequately to implement them. Thus, reform overload, societal issues, salary, and reaching the end of a long teaching career were all factors in teachers' decisions to leave teaching.

The remaining teachers described reforms as "a fact of life." Many felt that they could handle any reform, particularly given the short lifespan of most reforms. They said that staying open-minded and flexible were the keys to remaining in the teaching profession. Change was described as "inevitable"—teachers need to be ready to make adjustments.

CONCLUSION

All teachers included in the pilot study had experience implementing and coping with reforms. Although most teachers interviewed had both positive and negative feedback about the role of reforms in elementary schools, their comments tended to stress the negative aspects. Perhaps the most significant insights related to the emphasis placed on standardized testing. This reform in particular has forced teachers to compress their teaching schedules and, at times, neglect subject areas in which testing had not been mandated. Teachers also expressed a great deal of interest in being involved in the reform decision-making process, arguing that they had the best understanding of what will and will not work for their students. Overall, teach-

ers acknowledged the fact that they would continue to have to implement multiple reforms simultaneously and often for short periods of time. Their greatest concern with respect to this issue was that districts and schools did not give reforms enough time to work. In terms of their decisions to remain in the teaching profession, some of the teachers had accepted the inevitability of reforms, while others were planning their retirement or career change.

APPENDIX: TEACHER INTERVIEW

During the past 15 to 20 years, a number of changes have been made in educational policies—for example, policies with respect to test-based accountability, the introduction of new "reforms" (e.g., comprehensive school reform models, school choice, class size reduction), and policies with respect to students with disabilities, language minority students, and low-income students. I would like to spend some time discussing your personal experiences regarding these changes, but first, I have a few background questions for you.

Background Information

- How long have you been a teacher?
- How long have you worked in this school district?
- How long have you worked at this school?
- Where else have you taught (inner city, suburban, rural)?
- What grade(s) have you taught?
- What grade do you currently teach? How long have you been teaching this grade at this school?

Policy Changes

- What major reforms (e.g., standardized testing, standards, comprehensive school reform models, school choice, class size reduction) have you experienced in your professional career? In your current school and school district?
- How rapidly have reforms been introduced (e.g., several every year, a new one every month)? How common is it for multiple reforms to be introduced at the same time? How stable are reforms—that is, how long do they continue in the school? Do you feel that you have enough time to implement a given reform fully? Please explain.
- To what extent are you able to implement multiple reforms at the same time? In what ways, if any, do you modify reforms to accommodate your students or the need to implement multiple reforms?
- In your view, how well are these policies aligned? How well do they fit with existing policies and practices?
- Have you ever been asked to implement a policy that you did not feel

would work for your students? How did you handle the situation? Are there repercussions for not implementing a reform exactly as prescribed?

- What has been the overall impact of these policies on the school environment? In what ways do the policies affect working conditions for teachers? Instructional methods and content? The amount of material you cover? Workload? The need for teachers to receive training or learn new skills? The quality of education students receive? Student performance? Interactions with parents? Please comment both on specific policies and on the cumulative effects of policies.
- It is difficult to assess the impact of policy changes on the school environment without also considering changes in societal conditions. What societal conditions (and changes, if relevant) do you believe have had an impact on the school(s) in which you have taught (e.g., poverty, single-parent families, school violence)? How have these changes affected the school environment? How do these factors interact with reforms?
- In your experience, what factors have contributed to the successful/unsuccessful implementation of new policies? What role have district and school administrators played in policy implementation? Have you had opportunities to comment on the usefulness of a proposed policy before you were asked to implement it? To what extent are you informed about proposed reforms—for example, as they are debated at the federal, state, district, or school level?
- To what extent have educators been given the opportunity to gain the knowledge and skills needed to implement the new policies (for example, through professional development programs or relevant curriculum materials)? Please explain. In what ways have you been able to apply what you learned in professional development (or other training/materials) to the classroom?
- Have you received additional resources to meet the requirements of new reforms? What has been the amount and type of resources? How have these resources (or lack thereof) facilitated/impeded implementation of the new policies?
- What would make it easier for you to implement reforms in the future? In your view, what would be the ideal policy implementation situation from the announcement of the policy to the evaluation of the policy?
- In your view, have recent policy trends affected the ability to recruit and retain teachers? If so, in what ways? What role do societal changes play? In what ways, if any, do these policies and/or societal changes affect your future professional choices (for example, reaffirming a commitment to teaching or considering alternatives to teaching)?

CHAPTER 3

Schooling in England, Germany, and Japan: Diverse Approaches to Education Policy

Lisa Hansel

Over the past thirty years, education reform has become a dominant public policy issue in the United States. From town council to presidential elections and from backyard barbecues to national news programs, it seems that everyone is discussing what to do about our "failing" schools.

Although educators have always been interested in improving schooling, the current negative view of education is, to a great extent, a leftover from the Cold War. The perceived national education crisis began in 1961 when the former Soviet Union beat the United States into space. What is surprising about this bit of U.S. history is not that such a remarkable achievement ignited some concern, but that despite the past thirty years of technological and economic dominance, we still believe we have a science and mathematics crisis.

Of course, the negative view of U.S. schools is not entirely unfounded. Many schools, particularly those serving students from low-income families, have serious problems with their educational programs. Low expectations, low achievement levels, and high dropout rates are widespread. In addition, these schools typically receive fewer resources than do schools in affluent suburban areas, which are more likely to offer excellent educational programs.

Today the concern about all of America's schools, not just the lowest-performing ones, is largely fueled by international comparisons of student mathematics and science test scores. Students from the United States rank in the bottom half in these comparisons, a finding often interpreted as proof that our education system is failing. This conclusion ignores the fact that the studies contain serious methodological flaws and therefore tell us little about either the strengths or weaknesses of the education system (Rotberg, 1998). It also ignores the wide range of other measures that should be used to assess the international status of U.S. science and mathematics education.

A more productive international comparison is to explore the actual educational practices of other countries. Such a comparison not only provides background to better understand the international test results, it also enables educators around the world to learn from the experiences of other countries. The wealth of information on different educational practices in other countries is underused: Many people who believe that there is an educational crisis do not realize that other countries are also interested in school reform. Not only are other nations engaged in their own educational reform movements, they even look to the United States for educational innovations. Just as the United States sees Japan, for example, as a model of teaching mathematics, Japan looks to the United States as a model of teaching creative problem solving.

This paper surveys the diverse approaches used to address key educational issues in three nations, England, Germany, and Japan. While there are significant economic and social differences, there is enough common ground to make such exploration worthwhile to school reformers in the United States. For example:

- England is doing much of what has been proposed in the United States in terms of choice and assessment.
- Germany has a well-respected school system with the same Prussian roots as the U.S. system but with very different current practices.
- Japan provides another approach to school choice, standards, and assessment, and produces the high test scores the United States strives to achieve.

The issues addressed in this paper were selected to give an introduction to schooling in each nation and provide information about how other nations are dealing with key educational issues. The following topics provide the focus of this paper:

- Historical context
- Governance and organization
- Student assessment and access to higher education
- Tracking and choice
- Education of students with disabilities
- Teacher training and professional development

The paper covers only the equivalent of U.S. public schools and the policies affecting them. In the United States, the perceived need for education reform is directed entirely at the public schools. Far from being in need of reform, private schools are held up as models for the public schools to emulate. As in the United States, the vast majority of students in England, Germany, and Japan attend publicly funded schools,

which are quite similar on several measures. The table at the end of the chapter contains basic data for the United States, England, Germany, and Japan on such indicators as enrollment, instructional time, school completion, and teacher salaries.

HISTORICAL CONTEXT

Before describing the current school systems in England, Germany, and Japan, it is instructive to review their histories. The key characteristics and social underpinnings of the systems while they were being established reveal values that remain influential today. This brief look back explores some of the dominant influences on schools in each nation.

England

England's aristocracy, the small percentage of the population with wealth and land, played a significant role in the development of England's educational system. The industrial revolution in England clashed with the values of the elite. "By 1939 the prevalent form of organization in the British economy was uncompetitive private enterprise in partnership with the state" (Wiener, 1981, p. 109). Economic growth was seen as disruptive, and the apogee of English industrialism was believed to be a dark time in which people were excessively greedy.

The dominance of aristocratic values over industrial values could not have occurred without the help of the selective schools and elite universities. "In the Victorian public school the low status given a career in trade and industry did serve a purpose—the empire needed a large, confident, and fairly conventional class of administrators, whereas the economy seemed to be taking care of itself. This situation reversed itself a century later. As the empire disappeared and the economy lagged, the need to reform the curriculum and to destroy 'its unworldly bias' arose—and was missed" (Wiener, 1981, pp. 134-135). England's public schools—especially the nine ancient ones that became the model for secondary and higher education—had no interest in their students' immediate gain or in supplying information that would lead to careers. They were committed to traditional subjects and focused on abstract mental training. They refused to teach science and made clear their disdain for vocational preparation. "Their disparagement of specialized and practical studies reinforced the traditional content of the professional ideal—the imitation of the leisured landed gentleman—at the expense of the modern role of the professional as expert" (Wiener, 1981, p. 19). Just as successful businessmen could enter the upper

stratum if they adopted the values of the gentry, boys from commercial and industrial families could enter "public" (private) schools if they turned their backs to their class. In effect, this left England with an industrial economic structure, but no industrial or commercial leaders. Wiener (1981) wrote:

> The children of businessmen were admitted to full membership in the upper class, at the price of discarding the distinctive, production-oriented culture shaped during the century of relative isolation. . . . The adoption of a culture of enjoyment by new landowners and aspiring landowners meant the dissipation of a set of values that had projected their fathers as a class to the economic heights, and the nation to world predominance. (p. 13)

As the entrepreneurial values dissipated, so too did the industrial spirit. The "public" schools, placed in the most rural and gentrified settings possible, taught the ideals of honor and public leadership. They encouraged boys to pursue careers in the military, civil service, and higher professions. Industry, particularly production, was considered vulgar. Although only the wealthy could go to public schools, after the turn of the century everyone in Britain was affected by their ideals as a state system of secondary education was constructed using them as the model.

Germany

Germany has long valued having an educated populace (Mitter, 1992). In the seventeenth and eighteenth centuries, German princes enacted school statutes for compulsory elementary education in an attempt to teach everyone to read. Wilhelm von Humboldt was particularly influential as the founder of the Prussian and German grammar schools (which were used as the model for establishing schools in the United States).

The structure of the current school system was in place at the beginning of the twentieth century. In the eighteenth century, as schooling became more widespread, two tracks were established. The children of the elite went to gymnasium preparatory schools, while the other children who attended school went to state-run schools that taught basic skills before beginning apprenticeship training. Eventually, the preparatory schools were eliminated, and all children went to school together for the first four grades. At the beginning of the twentieth century, Germany's current dual system of secondary school and vocational training, which begins in the fifth grade, was established primarily to enrich youths' apprenticeship training by furthering their formal education (Mitter, 1992).

After Germany was partitioned in 1945, quite distinctive education systems emerged in the West and East republics. The two republics were not established until 1949, and in the intervening years the American, British, and Soviet officials made varying demands on the German officials in their zones. The Americans and British in the western region were focused on "the resuscitation of respect for the dignity of people and the promotion of equity of opportunity and fairness in education" (Mitter, 1992, p. 184). They pushed for comprehensive schools for all grades, but the Germans resisted and reinstated schooling as it had been in the Weimar Republic with the three types of secondary schools that still exist today. The Soviets in the eastern region established eight years (grades 1-8) of uniform, secular schooling with a central education administration. Fortunately, a "common core could be made out in all four occupation zones. It consisted of the elimination of the National Socialist ideology, which had been focused on racism, nationalism, anti-Semitism, and militarism, and had particularly dominated the syllabi of history, German literature, biology, and physical education" (Mitter, 1992, p. 184).

Japan

Historically, the main feature of the Japanese education system has been its longstanding relationship with the central government. The system was designed by the state and remains a powerful instrument of state policy. As an island with few natural resources, Japan is unusually dependent on human resources. This has inspired a "collective commitment to academic success . . . and engendered an admirable work ethic" (Usdan, 1998). The fundamental factors in the relationship between the state and education are Japanese intellectual history, the extent to which society values tradition and conformity, and the bureaucracy's overwhelming desire for economic growth (Teruhisa, 1988).

The ideology of a centralized education system became popular in the 1880s as the Meiji intellectuals in power argued that compulsory education was not something for the people, but was instead the people's duty to the state. As explained by Mori Arinori, the first minister of education, "The aim of education . . . [was] to cultivate persons who . . . [could] be of service to the State and nation" (Teruhisa, 1988, p. 47). Not by coincidence, this is the same period in which the framework of the modern Japanese government's bureaucracy was constructed. As the state was transformed into an exclusive and hierarchical bureaucracy, the ruling elite felt the need to cultivate a politically conformist population so as to reduce the uncertainty of leadership succession and promote stability. Thus, it is not surprising that the Imperial Rescript on Education was established to employ education as a tool to prevent

the inevitable modernization of the civil code from destroying the leaders' social control. Recited daily by students and teachers alike, it reinforced the value placed on conformity.

Education reforms were implemented at the end of World War II. However, despite the stress that the new Constitution and Fundamental Law of Education put on the structure of the national system, the reforms were short lived. The ideology of education from above survived the attempt at reform, and economic policies quickly became the guiding principle.

In the mid 1950s, legislation was passed that weakened the reforms instituted by the United States and the Fundamental Law of Education. "The new legislation . . . reconceived the State as the sole defender and protector of educational fairness and impartiality with regard to education. . . . This opening made it possible to utilize the mechanisms of educational administration to resurrect the ideologies of nationalism and the structure of an 'administratively managed State'" (Teruhisa, 1988, p. 149). The contemporary relationship between the state and the education system is largely the same as that of the 1890s. The only significant difference is that schooling is now geared to meet the needs of business and the government. The schools are "obliged to function as places for the discovery and selection of a range of abilities strictly dictated by, and focused around the logic of, the promotion of economically useful talent" (Teruhisa, 1988, p. 218).

GOVERNANCE AND ORGANIZATION

The school systems of England, Germany, and Japan provide opportunities to explore a mix of centralized and decentralized methods of governance. In contrast with the United States, which is largely decentralized, there is an effort to make schooling more uniform in these countries. While Germany is decentralized, for example, there is concern about minimizing the effects of moving on students' education. German lander (states) try to collaborate on major education policy decisions even though they do not have to do so. This section describes the basic organization of the school systems in each of these countries.

England

Since the Education Reform Act of 1988, the education system in England has been characterized as both centralized and decentralized. The system is controlled by the Department for Education and Employment (DfEE), but local schools have been given significant management authority. Compared with the United States, how-

ever, the local education authorities (LEAs) play a small role. Responsibility for policymaking and supplying qualified teachers lies with DfEE, and since 1988 there has been a uniform national curriculum. Responsibility for management and administrative tasks lies with the LEAs and individual schools, but over the past several years the trend has been toward more control by schools (CBE, 2001c).

Compulsory schooling includes six years of primary and five years of secondary education, requiring children between the ages of 5 and 16 to attend. Most secondary schools are comprehensive (for students of all ability levels), but there are still some grammar schools for those in the top 20% of ability. As of 1997, about 90% of fourteen year olds attended comprehensive secondary schools (Stevenson & Lee, 1997). After completing secondary education, about 65% of students continue with academic or vocational training. Of those who continue, about 42% aspire to higher education or professional training and must study for rigorous entrance exams. Between the ages of 16 and 18 they spend two years preparing for these exams in "sixth forms," which are operated by secondary schools or sixth-form colleges. The remaining 58% (of those who continue) pursue vocational studies by enrolling in "further education colleges," which have strong ties to business and industry (CBE, 2001c).

As of September 1, 1999, there were four categories of publicly funded schools in England: community, foundation, voluntary controlled, and voluntary aided.

- Community schools are much like regular public schools in the United States. They are controlled by LEAs, and the schools' staff are employed by LEAs.
- Foundation schools are governed, and their staff employed, by the foundation through which they were established, and the schools' property is usually owned by a charitable organization.
- Voluntary-controlled schools are governed, and their staff employed, by LEAs, but their property is usually owned by a charitable organization.
- Voluntary-aided schools are similar to voluntary-controlled ones, but their founding organizations contribute to the costs, and they are not controlled by LEAs.

Within these four categories, there are also specialist and special schools. Specialist schools are similar to magnet schools in the United States; they develop a particular focus but still cover the whole curriculum. Special schools are for youth with special education needs.

Germany

Since the Reunification Treaty of 1991, the education system in Germany has been characterized as fairly decentralized but well coordinated. Responsibility for education lies with the lander, but the lander collaborate a great deal through the Conference of Ministers of Education so that their school-leaving certificates will be recognized throughout Germany. Thus, Germany officially does not have a national system, but the organization and curriculum are still fairly uniform (CBE, 2001a).

Although there is some variation among lander, the education system typically is divided into elementary school (grades 1 through 4), lower secondary school (grades 5 through 10), and upper secondary school (grades 11 through 13).

While elementary students are not tracked, at the end of the fourth grade teachers recommend student assignment to one of three kinds of school: hauptschule, realschule, or gymnasium. School selection is determined by teachers, parents, and students, but most families accept the teachers' recommendations. The decision is not final; it is possible to transfer during secondary school.

The hauptschule offers a vocational education for the students considered least academically inclined. Full-time schooling generally ends after the ninth grade. While the best hauptschule students may transfer to the realschule for the tenth year, most hauptschule students then enroll in vocational programs in which they usually study part time (in berufsschule) and receive on-the-job training part time. This combination of school and work, called the dual system, is a result of Germany's tradition of apprenticeship. Some vocational programs are starting to offer full-time study. Either way, schooling is compulsory until students are 18.

The realschule curriculum is more demanding and ends after the tenth grade. Students then have the option of technical training or, if they are good students, study in the gymnasium.

The gymnasium, which prepares students for university studies, is the most academic of the three tracks. It ends with the 13th grade. It is split into lower and upper stages, with the transition coming at the end of the 10th grade. There are also comprehensive secondary schools (called the gematschule), but they award completion certificates according to the three-tiered system (CBE, 2001a).

Regardless of the level or type, schooling in Germany is devoted solely to instruction. The teacher is responsible for instructing, and the student is responsible for

learning (Klage, n.d.). There are no extracurricular activities or sports, and the school day consists of a set of classes—no study halls or other periods without instruction. As a result, the school day is somewhat shorter than in other countries, and even in the early grades at least an hour or two of homework is assigned. Homework is seen as an essential part of learning, a time for students to digest and come to understand the day's lessons.

Japan

The Japanese education system is centralized and highly regulated. The Ministry of Education, Culture, Sports, Science, and Technology (MEXT) is responsible for setting curriculum standards (the "course of study"), approving textbooks, and developing and conducting examinations. Responsibility for school management and administration is divided among prefectures, municipalities, and individual schools.

Compulsory education consists of six years of elementary and three years of junior high school, keeping youth between 6 and 15 years in school. Although the three-year high school is not compulsory, 96% of students enroll (CBE, 2001b), and 90% complete upper secondary school (Teichler, 1997). This provides youth the equivalent of the 10th through 12th grades of schooling in the United States. Public upper secondary schools are heavily subsidized by the government, but parents do have to pay various fees. The vast majority of students—74% in 1994—go to academic upper secondary schools, but there are also alternative high schools that specialize in commercial, industrial, nursing, and home economic areas (Stevenson & Lee, 1997). As of April 1999, schools have the option of offering a combined lower and upper secondary program.

Over the past few years, critics of education in Japan and MEXT have become increasingly concerned about supporting students' individuality and fostering creativity. "There is perceived to be too much pressure placed on youngsters from the time they enter nursery school, through the 'juku' cram schools, and ultimately the 'exam hell' which so largely predetermines their later success" (Usdan, 1998). As a result, MEXT has revised the course of study to allow schools to provide distinctive educational programs in "worry-free" environments (MEXT, 1997). The revised course of study will be implemented in elementary and lower secondary schools in 2002 and in upper secondary schools the year after. It reduces the number of hours of instruction and switches from a six- to a five-day school week in 2003. As of fiscal year 1998, secondary schools have the authority to give students credit for volunteer activities and internships in an effort to more positively evaluate "students' hands-on learning activities and their conscious efforts to find and improve themselves" (MEXT, 1997).

> In an incessantly changing world to come, the result of entrance examination now does not give as much significance to the life of 18-year-old student as it did before. How he/she learns and what he/she acquires means a lot to him/her in the rest of life. Industries and schools now regard "zest for living" as an important element and already started appreciating it. Therefore, each school is expected to change parents' value through student's career guidance meetings. (Central Council for Education, 1998)

> A student's academic ability should not be measured by the quantity of knowledge acquired; it should rather be assessed by whether or not he/she has acquired the "zest for living" such as ability to learn and think independently. The evaluation system for each subject also needs to be improved in consideration of the grade and specific features of each subject. (Curriculum Council, 1998)

According to MEXT (1997), the plan for education reform is part of a larger strategy for widespread change in Japan and is inseparable from the simultaneous changes in the government, economic structure, and social welfare system. It remains to be seen whether these policy directives will have a significant impact on the current system of examinations.

STUDENT ASSESSMENT AND ACCESS TO HIGHER EDUCATION

The evaluation of students in these countries provides an interesting contrast to the debates about assessment going on in the United States. While England administers national tests that may provide information for states developing testing programs, Germany and Japan demonstrate the two extremes—from very limited national testing to "exam hell."

England

In 1988, England established both a national curriculum and a national assessment system. The curriculum covers core subjects (English, mathematics, and science) and foundation subjects such as technology, history, art, and physical education. An expanded and more flexible curriculum that encourages more workplace learning was scheduled to be introduced in September 2000, and citizenship will be added in 2002 (Blunkett, 1999). The national assessment system covers only the core subjects. However, over the past several years, the exams for students hoping to go on

to higher education have been broadened. At the ages of 7, 11, and 14, students are assessed in English and mathematics; 11 and 14 year olds are assessed in science as well. In the mid-1990s, the decision was made to return the exams to the schools after they had been graded, and a board to deal with grade appeals was established (Tell, 1998).

Along with the exams, "teacher assessments" are conducted. These are the assessments of students' work by teachers. Reports with the results of the exams and the teacher assessments are sent to students' homes. At the end of secondary school (usually at the age of 16), students take one of three General Certificate of Secondary Education (GCSE) exams. The content of these exams is regulated by the Qualifications and Curriculum Authority that was established by Parliament in 1997 to oversee the national curriculum (Tell, 1998). There are also general and specific vocational examinations that provide certifications if passed (CBE, 2001c).

If students intend to go on to higher education, they must achieve a C or higher on five or more GCSE exams. They are then eligible to enroll in further education either within sixth forms in secondary schools or a sixth-form college to study for the General Certificate of Education Advanced Level (GCE A level) (DfEE, 2000b). Only about one-third of students do well enough on the GCSE exams to proceed to the advanced level, and only about 80% of those who qualify actually enroll in the sixth form. Those who do not qualify may retake the GCSE exams, enroll in vocational courses, or begin working (Stevenson & Lee, 1997). Those who do qualify spend another two years, generally when they are 16 to 18 years old, intensively studying just three or four subjects. Usually they then take three (out of a possible 30) GCE A-level exams. Passing at least two of these exams is necessary to be accepted to a university. In 1992, about 21% of students taking A-level exams passed two or more, but only 55% of those students enrolled in a three- or four-year university (Stevenson & Lee, 1997).

A controversial characteristic of the national assessment system is that the percentage of 11 year olds in each school reaching the target level is published in the newspapers every year (Tell, 1998). The percentage of students passing the GCSE is published as well (The Guardian, 1998). These scores are used to rank schools by each subject tested. Nicholas Tate, head of the Qualifications and Curriculum Authority, explains the benefits of publishing the scores as follows:

> The first advantage is that schools are able to compare how they're doing with the rest of the country. And that's very useful information—not just for schools, but for individual children and parents.

> Schools that aren't doing well are given an added incentive to raise their scores. The second advantage is that the publication of the results forces schools to keep on their toes. And, because we don't have narrow tests, schools must improve across a broad range, at least on the tested subjects.
>
> Of course, the public naming and shaming are painful—schools suffer, teachers suffer, the reputations of schools suffer as well—but on the whole, it seems like a sensible crisis response to a crisis situation.
>
> To try to take into account the challenges that different schools face, schools are benchmarked by two criteria—the percentages of students receiving free school meals and learning English as a second language. According to Tate, this enables schools to "see what is realistic to achieve" in relation to similar schools. (Tell, 1998, pp. 66-67)

The Qualifications and Curriculum Authority is also developing a plan to assess gain scores on the assessments between ages 7 and 11.

After the national curriculum and assessments were adopted, the Primary Assessment Curriculum and Experience (PACE) project was created to examine its impact on primary school teachers and students (Pollard, Broadfoot, Croll, Osborn, & Abbott, 1994). PACE is a three-phase, longitudinal study of 54 children from nine primary schools spread across England. Classroom studies based on observations and teacher and student interviews have been conducted annually. To obtain a larger teacher sample size, cross-sectional data from matched samples of teachers have also been collected. Between 1990 and 1992, two samples of 144 teachers from 48 schools were given a questionnaire.

The study found that teachers feared "that the Education Reform Act would deskill teachers and that they would be reduced from being professionals exercising judgment to become classroom technicians" (Pollard et al., 1994, p. 5). Since the implementation of the Reform Act, teachers have found their jobs more stressful; they have been less able to be spontaneous in working with their students. Although they have been developing more collaborative relationships with other teachers, their sense of fulfillment has declined.

Further, teachers in inner cities felt that the curriculum would not meet their students' needs. Other teachers expressed concern that the curriculum was too constraining for them to be able to respond to individual students' needs. Teachers val-

ued using mixed methods of instruction and giving students some autonomy. However, from 1990 to 1992 teachers increased the amount of traditional teaching and direct instruction they did because of the demands of the curriculum to teach basic skills—mainly math and English (Pollard et al., 1994). "National Curriculum Assessment procedures were regarded as unrealistic and time-consuming. There were fears that they would adversely affect relationships" (Pollard et al., 1994, p. 8). The Standard Assessment Tasks observed distorted and constrained classroom activities. A large amount of resources were devoted to the assessments; teachers were stressed and some students' performance suffered because of anxiety. Overall, teachers did not believe that the assessments merited the time they consumed.

In the 1992-93 school year, there was a mass boycott of the national tests because educators and many parents believed the tests were educationally unsound and would be used to rank schools. As explained by Pollard et al. (1994):

> Government attention in the early 1990s focused on standardised testing in the hope of providing attainment information for parents and for published school league tables. This strategy assumed that it was both possible and desirable to treat assessments as providing reliable categoric evidence. English teachers had a rather different view, and emphasized the ways in which teacher assessment could feed, formatively, into teaching-learning processes. Many embraced this as part of their professional repertoire. Assessment information was treated as provisional evidence, reflecting the continuous learning process. The gap in understanding between teachers and government on this specific issue was considerable, but it stands as an indicator of a far wider range of differences in perception. (p. 11)

Because of the large number of schools boycotting the national tests, the government could not provide meaningful test results. Unfortunately, the law prevented teachers from boycotting for their true concerns. Instead, they had to boycott officially on the grounds of an excessive workload. Thus, the result of the boycott was a narrowing of the national curriculum that gave teachers more flexibility along with tests that are narrower and even more educationally questionable (Miner & Whitty, 1997).

In 1998, 65% of 11 year olds reached the target of national curriculum level 4 in English tests, and 59% reached it in mathematics tests. DfEE's goal is for 80% to reach the target in English and 75% to reach it in math by 2002 (DfEE, 2000c). These target percentages seem quite low to Americans who are accustomed to calls

for "educating all students to high standards." Yet, perhaps the targets are high for these tests. One observer explained, "When I was in England, the innovations in mathematics testing were test papers that prohibited the use of calculators and 'mental-math tests' where students had less than a minute to answer questions read to them on a tape" (Firestone, 1997).

Germany

Unlike the United States, England, and Japan, there are no national or regional assessments of German students. While German students in the haupschule typically do not have exit exams, about half of the lander have exit exams for realschule students.

The primary student evaluation in Germany is the Abitur, the exam for entrance into universities and polytechnic colleges. The last two years of the gymnasium are devoted to studying for this exam; the Abitur qualification is based 36% on the exam score and 64% on the student's grades during those two years (Stevenson & Lee, 1997). Although the passing rate has reached 95% in recent years, this does not mean that 95% of students who enter the gymnasium pass the Abitur. "Researchers estimate that 31 percent of the Gymnasium cohort which graduated in 1990 'failed' to reach the Abitur, because they were tracked to a lower school form or left Gymnasium with a lower school-leaving certificate" (Stevenson & Lee, 1997, p. 38). Over the past decade, alternative ways to access higher education have arisen, such as full-time vocational study and passing the Abitur after private study. As a result, the percentage of students gaining access through the gymnasium program has dropped from 90 to 65 (CBE, 2001a).

Over the past 10 to 20 years, the number of students attending the gymnasium and passing the Abitur has increased much faster than the number of spaces available in German universities. Less-popular disciplines are open to anyone who passes the Abitur, but disciplines that are in high demand have extensive waiting lists and require high scores on the Abitur. In some cases, additional criteria such as tests and interviews are required (Stevenson & Lee, 1997).

Japan

There are three major evaluations of students in Japan, one for admission to high school and the other two for admission to higher education. All three are characterized as "memorization tests" that reward rote memorization of facts. Teachers claim that the tests do not assess students' ability to apply information and solve problems

(Stevenson & Lee, 1997). The high school entrance exam is usually given by the prefecture or municipality, although some high schools administer their own exams. About 96% of students pass these exams and are admitted to a high school. All students taking the exams for entrance into national higher education institutions must be at least 18 and have completed high school (or its equivalent). The first exam is administered by the National Center for University Entrance Examinations. Different universities have different minimum scores on this exam that must be achieved in order to take the second entrance exam, this one being institution specific. Scores on these exams are the main determinants of admission (CBE, 2001b).

Although England, Germany, and Japan are similar in that they have widespread university entrance exams at the end of high school (compared to the United States where there is a much more diverse application process), the university entrance exam in Japan is becoming a major social problem. Students feel so much pressure to be admitted to the "right" university that high anxiety and cramming extend all the way back to the high school (and earlier) entrance exams. Many students spend time after school every day in juku (private tutoring schools) or yobiko (cram schools). According to a MEXT survey in 1993, 23.6% of elementary and 59.5% of lower secondary students attended juku (MEXT, 1994). The pressures driving students into juku are associated with the hiring practices of Japanese employers. The prestigious employers hire students from the prestigious universities which, in turn, admit students primarily on the basis of their entrance exam scores (Ministry of Foreign Affairs, Japan, 1998). Thus, parents and students take the high school entrance exams very seriously.

The high school's reputation is also considered by universities. Some university admissions are accounted for by a recommendation system in which students from highly reputed high schools are accepted based on principals' recommendations. The recommended students are still tested and interviewed, but the procedure is considered more of a formality (Stevenson & Lee, 1997).

Although MEXT expresses a desire to reduce the pressure on students, its own policies may be a significant factor in increasing pressure over the past few decades. "Part of the reason for the severe competition is that the number of students admitted to college has remained essentially the same over the years, even though the number of applicants has increased dramatically. Universities are not allowed to increase their enrollment without permission from the Ministry of Education" (Stevenson & Lee, 1997, p. 4). As the economies of all industrialized nations have changed over the past few decades, higher education has become a minimum requirement for a good, well-paying job. In Japan, more and more students are apply-

ing to higher education institutions—but available spaces, particularly in elite universities, have not increased to meet demand.

In a major social change for Japan, "since the late 1980s, the proportion of women entering higher education has overtaken that of men. . . . However, they tend to enroll at less prestigious institutions" (Teichler, 1997, p. 287). In 1994, 1.1% of men and 0.1% of women enrolled in colleges of technology, 2.0% of men and 24.9% of women enrolled in junior colleges, and 38.9% of men and 21.0% of women enrolled in universities. However, the percentages of female academic staff at colleges of technology, junior colleges, and universities were just 2.6, 39.2, and 10.3 respectively (Teichler, 1997). Thus, the students and staff at colleges of technology and universities are predominantly male, while those of junior colleges are overwhelmingly female. "Almost one quarter of women studying bachelor's programs are enrolled in women's universities, and women comprise less than 20 percent of students at the most prestigious and most research-oriented universities" (Teichler, 1997, p. 289).

TRACKING AND CHOICE

There is an interesting relationship between tracking and choice in these three countries. Unlike the United States, where tracking generally occurs within schools, students in England, Germany, and Japan choose between more and less rigorous schools. This decision is based on a mix of parental choice, teacher recommendations, and test results.

England

Intertwined with the national curriculum and assessments in England's reform agenda is increased school choice. All parents have the right to choose schools for their children and may appeal to committees when they do not get their first choice (DfEE, 2000b, chap. 2). To facilitate this choice each year, the government publishes the school averages from the national tests of 11 and 16 year olds in "league tables" in newspapers (Firestone, 1997). In addition, schools are required to publish their selection and over-subscription procedures (DfEE, 2000b, chap. 2).

Although there is no formal policy for tracking, the combination of choice and the league tables results in self-tracking. That is, the better educated and more involved parents are more likely to obtain the information needed to select high-scoring schools, while less-educated parents and recent immigrants often have less knowledge about the choices and the schools' selection procedures. Contrary to what one might ex-

pect, the consistently low-performing schools—or "sink schools"—still have students.

Within schools, students must choose between an array of more and less academic classes. Those who intend to take the A-level exams and go on to a university essentially track themselves through course selection.

Germany

There is extensive tracking and choice in Germany after the fourth grade, when students enter one of three types of secondary school. In 1964, about 64% of students enrolled in the hauptschule, 27% enrolled in the realschule, and 9% enrolled in the gymnasium. Over the past few decades, this has changed dramatically. In 1990, about 33% enrolled in the hauptschule, 28% in the realschule, and 31% in the gymnasium (CBE, 2001a). This change has been explained as follows:

> Between the selective Gymnasium and the nonselective Hauptschule, the Realschule has not only established itself but also, during the last thirty years, has expanded as an alternative selective institution. It is different from the traditional Hauptschule in offering an additional year (age fifteen-sixteen) and a wider range of subjects (e.g., English as a compulsory and French as an optional foreign language). Therefore, at the end of its course the way is open to full-time vocational training (in advanced technical schools) and also to the dual system as well as to the upper stage of the Gymnasium. For the latter purpose, special classes have been organized in many Gymnasium.
>
> The Hauptschule is in constant danger of declining into a school for "leftovers," that is, one that is intended for boys and girls of low achievement and also for the majority of children of migrant workers. (Mitter, 1992, p. 193)

Along with these changes, there has been an increase in the number of students leaving the gymnasium at the end of lower secondary school to enter technical training or the dual system (Mitter, 1992, p. 194).

In the fall of 1994, in order to give some context to the Third International Mathematics and Science Study, the U.S. Department of Education (1999) undertook a case study of schooling in Germany. Administrators, teachers, students, and parents were interviewed in three lander about their thoughts on individual differences in ability and the fairness of the German school system. Seventy-seven interviews were

conducted (18 in academic high schools, 14 in vocational high schools, 20 in middle schools, and 25 in elementary schools). Thirty-five observations were conducted, and a variety of documents were reviewed. Although the data collection was too limited for the results to be representative of all of Germany, the researchers believe the results to be typical of tracking in Germany.

The researchers found that the most important factor in students' placement in middle schools was their grades in the last year of elementary school (fourth grade). Although some states establish minimum grade point averages for entry into the gymnasium, students below the minimum could often take an entrance exam and enter for a probationary period. Teachers reported that students' personalities also were factors in the recommendations they made for middle school. In particular, teachers looked for self-confidence and the ability to work independently.

Parents reported relying heavily on teacher recommendations about where to send their children, a choice they find quite difficult. Many parents thought the tracking decision was made too early and that it would be better to decide at the end of sixth grade. This complaint was heard more in lander that did not have comprehensive secondary schools. In addition, most parents said that they did not expect their children to have an opinion on which middle school to attend. Indeed, most fourth-grade students did not even know that their grades were important. They tended to be concerned about things like the larger classes in secondary schools and having to say good-bye to some classmates.

Across types of schools, teachers most often attributed individual differences in ability to innate intelligence and family support. Effort by the student was also frequently mentioned. Therefore, these were seen as the fundamental factors in assignment to middle and high school tracks. Yet, another basic consideration existed for hauptschule students—not speaking German. Teachers "pointed out that they had the highest percentage of foreign students and that the reason many of them were in the Hauptschule was that they did not have strong German language skills and were therefore unable to perform well in school" (U.S. Department of Education, 1999, p. 94).

Parents also said innate intelligence and effort were important, but some put more emphasis on parental and teacher support than teachers did. Parents of elementary school children focused more on teachers, and parents of gymnasium students focused more on parental encouragement.

Teachers and parents thought the tracking system was fair and that students had adequate opportunities to transfer among schools. Ultimately, they believed that it was not merely which degree a student received but how the student performed that was important. No one wanted too much pressure placed on the students.

Japan

During the compulsory grades in Japan, all students are educated together regardless of ability, but in high school students are tracked. Much like in Germany, there are academic, vocational, and combined high schools. In 1992, 72.5% of high school students were in academic programs and 27.5% were in vocational programs (CBE, 2001b). There are really two kinds of tracking in Japan. The first relates to the rank of the high school and the second to the rank of the program within the school. When applying, students must designate which program they would like to enter (LeTendre, 1996).

Although there is choice in the sense that students and parents decide to which schools to apply, the system largely is one of students being chosen by schools and directed towards certain careers on the basis of test scores. A school's status is based on the prestige of the universities to which its students are admitted. Ultimately, this competition to attend specific universities is driven by the hiring practices of government and the top Japanese companies and the cultural norm of staying with one employer (Ellington, 1992). Even the future of students who are not university bound is largely dependent upon test scores. Career guidance is provided by lower and upper secondary schools, but students are encouraged to apply to various positions based on their test scores, not on their interests, a problem noted by MEXT: "One criticism of the existing system is the failure to provide adequate career guidance based on the abilities, aptitudes, interests, concerns, and career paths of individual students" (MEXT, 1994).

Tracking occurs during shinro shido, or placement counseling, as students move from middle to high school, and is run by teachers in all public schools. It consists of advising and testing students as well as offering a network for referrals. "Although entrance into high school is ostensibly governed by the entrance examination, the actual selection and placement of students usually occur much earlier during placement counseling. . . . Teachers use this process to affect student's decisions, change aspirations, and raise motivation" (LeTendre, 1996). Placement counseling is driven by students' scores on their practice tests before the entrance examination.

Having served as an assistant teacher in a Japanese middle school for three years, Gerald LeTendre (1996) conducted an evaluation of placement counseling from 1988 to 1992. In 1988, he surveyed all of the third-year middle school students (1,198) in Kotani, and in 1989 did a follow-up survey with 617 students. While LeTendre does not provide all of the response rates, he does note that of the 617 students who received both surveys, 532 completed at least one. The surveys assessed students' backgrounds, choices of high schools, and attitudes towards their choices. In 1991 and 1992, LeTendre shadowed 15 teachers in the two largest middle schools in Kotani, conducted 45 interviews with teachers, administrators, and local officials, and observed teachers' meetings, classes, and guidance sessions.

LeTendre also attempted to assess how typical Kotani middle schools were by attending regional conferences on guidance, gathering placement counseling summaries from 60 other middle schools, and visiting middle schools in other prefectures. In addition, in 1995 he visited schools in northern Japan. Overall he found that in terms of basic goals, values, activities, and attitudes, Kotani middle schools are typical. Although what follows is technically representative only of Kotani, the results are arguably applicable to all Japanese middle schools.

Because placement counseling can be used both to inform students about their options and encourage them to study more and behave better, homeroom teachers have taken on a large role. Forty-eight of the 60 schools that LeTendre examined required students to collect information about their parents' occupations early in the placement counseling process. The message of many of the placement activities "is that students who follow in their parents' careers are making good and sound choices about their future. There is little of the American rhetoric of being better off than your parents" (LeTendre, 1996). Interestingly, LeTendre found that most students and parents do not view the activities in the first and second years of middle school in which students are asked to think about their futures as part of placement counseling. They believe that placement counseling is narrowly focused on passing the high school entrance exam. Throughout all of this counseling, teachers are instructed by the prefecture not to contradict parents' wishes.

During the third year, students take many practice tests and fill out surveys indicating where they intend to apply. The results of both are compiled, and some students are encouraged to reconsider where they are likely to be accepted. Students who are very motivated but have low scores may be accepted to high schools based on the recommendations of their teachers—this exempts them from the entrance exam. The prefecture particularly favors this route for students who show promise in sports or arts. Some private, industrial, and international schools or programs admit 35%

to 50% of their students this way, giving teachers much more power to ensure that every student has a place (LeTendre, 1996). In addition, teachers at different schools contact each other just before applications are due to make sure that no school receives too many applications and that the applicants to any one school all have roughly the same scores. High schools, in turn, try to admit all applicants. Thus, outcomes for most students are known before the entrance exam is even taken.

Despite all this effort, only a few of the teachers LeTendre spoke with thought they played a large role in students' decisions. Students generally agreed with this. In the first and second surveys that LeTendre conducted, between 61% and 68% of students said they would pick the school they wanted to attend even if their parents or homeroom teacher were against it. LeTendre found a correlation of .76 between grades and the high schools students entered, indicating consistency between Japan's practices and its goal of achieving meritocracy in schooling. This does not negate the fact that social background effects persist, as they do in other countries; student grades in Japan are correlated with fathers' educational attainment.

EDUCATION OF STUDENTS WITH DISABILITIES

Although it may be surprising to American educators, these three nations do not have legislation similar to the Individuals with Disabilities Education Act. Students with disabilities are often educated in special schools designed to address particular needs.

England

In England, approximately 1.4% of students are educated in special schools, of whom about two thirds are "moderately or severely educationally subnormal," 10% have emotional disabilities, and the remainder have physical disabilities (Halls, 1995, p. 1027). According to national policy statements, England has had a drive for inclusion since 1981 (Halls, 1995). In 1993, a new "Code of Practice" was adopted that was intended to clarify schools' and local educational authorities' responsibilities for meeting students' special educational needs (Firlik, 1996), and in 1999, the percentage of special education students placed in regular schools, but not necessarily in regular classrooms, rose from 54 to 60 (Blunkett, 1999). As in other countries, the national curriculum is not designed for students with disabilities (Firlik, 1996), and it is unlikely, therefore, that the actual education of students with disabilities has changed.

Germany

Like England, Germany has special schools for disabled students called sonderschule. About 4% of the total school population is enrolled in a sonderschule, and about half of those have learning disabilities. Despite an inclusion movement that began in Germany in the 1970s, as of 1989 only about 3% of students with disabilities were in the regular schools (Ellger-Ruttgardt, 1995). In fact, most public schools are not even built or equipped to accommodate physically disabled youth. Teachers reported that they do try to keep students with disabilities in regular classes at least through elementary school. Those who remained in the elementary school tended to have learning or behavioral disabilities or dyslexia. Teachers and parents expressed approval of the inclusion movement, considering it a way to teach tolerance to the general student body and give them experience in interacting socially with persons with disabilities (U.S. Department of Education, 1999).

Children are sent to a sonderschule after recommendation by parents or school officials, an instructional assessment, and possibly medical and psychological tests. There are "schools for the slow learner, behaviorally disordered, mentally disabled, physically disabled, speech disabled, hearing disabled, and sight disabled" (U.S. Department of Education, 1999, p. 127), but what is available varies somewhat by lander. Children with multiple handicaps are placed in the school that can best meet their needs, and educational services are also provided for children in hospitals and, if necessary, at home (Ellger-Ruttgardt, 1995). The key identifiers for students with learning disabilities are extreme school failure, such as being two or more years behind their chronological age group in terms of academic achievement, and having an IQ between 55 and 85. Education for children with IQs below 55 is provided in a variety of settings, with some lander choosing to provide services outside of the regular school system (Ellger-Ruttgardt, 1995). The sonderschule for learning disabled children succeeds in sending about 1 in 8 back to the regular school system, typically hauptschule, but few are later able to get apprenticeships. The sensory-impaired children have opportunities to complete any level of secondary school in their sonderschulen (U.S. Department of Education, 1999).

Japan

In Japan, students with disabilities may be educated in special schools devoted to a particular disability, such as blindness, or, in cases of mild disability, in special classes or resource rooms of mainstream schools. Special schools and classes are divided into seven categories ranging from physical disabilities to emotional disturbance. Resource rooms are for students to use between attending regular and special classes

(MEXT, 2001). "In 1993, there were 964 special schools from kindergarten to upper-secondary education levels with an enrollment of about 90,000 pupils.... There were 22,000 special classes with 70,000 pupils" (Kanaya, 1995, p. 485).

TEACHER TRAINING AND PROFESSIONAL DEVELOPMENT

In the United States, efforts to create and sustain teacher quality involve major debates about initial teacher training, professional development, and evaluation. Interestingly, in England, Germany, and Japan, the concern about teacher quality is focused on initial teacher training. All three nations have implemented intensive mentoring programs for beginning teachers and do considerably less for experienced teachers. Indeed, it seems that the most extensive professional development for experienced teachers is being a mentor.

England

During the 1990s, teachers, university faculty, and school administrators in England, much like those in the United States, expressed dissatisfaction with teacher education. In 1992, DfEE introduced a mentoring initiative in which experienced teachers could receive training and then take on new teachers to ensure that they teach effectively. Jones, Reid, and Bevins (1997) recently addressed what makes a good mentor by conducting in-depth interviews with twenty mentors representing a wide range of subjects and types of schools. "Mentors who provided regular time, immediate feedback and a sense of availability were seen as most effective" (p. 255). Mentors strove to provide practical help, such as providing guidance, observing new teachers' instruction and classroom management, and introducing new teachers to whole school issues (p. 255). A survey of ninety mentors by Wright and Bottery (1997) also found that mentors place heavy emphasis on teaching practical skills like preparing clear lessons and encouraging new teachers to take advice.

A survey by Whitehead, Menter, and Stainton (1996) indicated that a majority of primary and secondary school teacher training coordinators think that involvement in the training of new teachers leads to increased reflection on and improvement of the experienced teacher's practice. After researching effective mentors, Yeomans (1994) concluded that both partners would benefit more from mentoring if there were clear, written guidelines regarding what the partners could expect from each other (in Smith, 1997).

One concern shared by Jones, Reid, and Bevins and Wright and Bottery was the lack of emphasis on the broader philosophical and social issues of teaching and schooling. Apparently, many university teacher education faculty fear that too much emphasis on practical skills will lead to a deprofessionalization of teaching. Jones, Reid, and Bevins (1997) write, "Newly qualified teachers . . . need training not only in their role as classroom managers, but also in their wider professional commitments. This includes an appreciation of the academic basis of their profession and the relevance of a politico-accountability profile if a lifelong contribution to the profession is to be secured" (p. 253).

Teacher professional development and evaluation in England are in the midst of sweeping changes. In the past, teachers received training only when they were promoted to head teachers. Evaluation was primarily done internally, with the only possible outcomes being remaining in teaching or being promoted to head teacher. Officially, the Office for Standards in Education (OFSTED) inspects all state schools every six years (weak schools are inspected more often), but there are no direct consequences for individual teachers. An extremely bad school may be subject to extensive intervention, yet for the most part teacher job security is very high. Change is being brought about by the central government. On July 19, 1999, David Blunkett (1999) proposed a £2,000 pay increase, as well as access to further increases, for teachers who pass a rigorous new assessment called the performance threshold. The threshold is the centerpiece of Blunkett's proposed system of performance management and includes assessment of pupil progress (which takes into account the challenges that students bring to the classroom). After much debate, the proposals were enacted in the spring of 2000 and went into effect in September 2000 (DfEE, 2000a). Under the new performance threshold program, teachers are assessed according to seven standards:

- Having a thorough and up-to-date knowledge of the teaching of their subject(s) and taking account of wider curriculum developments that are relevant to their work;
- Consistently and effectively planning lessons and sequences of lessons to meet pupils' individual learning needs;
- Consistently and effectively using a range of appropriate strategies for teaching and classroom management;
- Consistently and effectively using information about prior attainment to set well-grounded expectations for pupils and monitoring progress to give clear and constructive feedback;
- Showing that, as a result of their teaching, their pupils achieve well relative to their prior levels of achievement and are making progress as good as or better than that of similar pupils nationally;

- Taking responsibility for their professional development and using the outcomes to improve their teaching and pupils' learning; and
- Making an active contribution to the policies and aspirations of the school. (Lewis, 2000, p. 4)

Germany

In accordance with the German apprenticeship tradition, teachers spend a full two years in schools as student teachers after they finish their university degrees. Student teachers are assigned experienced teachers as mentors and spend a great deal of time on professional development through state-sponsored seminars. New teachers may apply for full-time teaching positions only after these two years have been completed.

The contextual research conducted along with the Third International Mathematics and Science Study found that teachers in Germany, like their peers in the United States and England, thought their university training was too theoretical and not at all helpful in the classroom. In contrast, "the overwhelming majority of information agreed that student teaching was extremely helpful in preparing them for their profession" (U.S. Department of Education, 1999, p. 203).

Teachers must volunteer to become mentors, and student teachers can request a new mentor. However, teachers tend to be reluctant to volunteer because they usually do not receive extra pay or a reduced teaching load. "The mentor's role is to assist student teachers with teaching-related questions, while providing student teachers with opportunities to observe and teach their classes" (U.S. Department of Education, 1999, p. 205). Many mentors reported that they did not have enough time to adequately communicate with their student teachers. One experienced mentor suggested setting time aside frequently to talk about and reflect upon lessons that have been taught.

In addition to being observed by their in-school mentors, student teachers were observed by their seminar instructors. "Teachers . . . said they felt like they were 'putting on a show' during their student teaching experience on those occasions when a seminar instructor observed their lessons. In many cases, teachers confessed that they attempted to conduct the lessons according to the instructor's preferences in order to receive a favorable evaluation" (U.S. Department of Education, 1999, p. 204). Even with a very structured student teaching program in which responsibilities are slowly added (going from mostly observation to several hours per week of teaching), all teachers reported that student teaching was very stressful. Although

causes for this stress were not detailed, it is most likely due to the fact that student teacher performance is the main determinant of being offered a full-time position. Despite these concerns, teachers agreed that their time as student teachers was the most useful part of all the training they received.

A variety of continuing education courses are offered to teachers in Germany, but participation is not mandated or tracked in some lander. In the lander where it is required, teachers have considerable freedom in selecting courses. Teachers are generally given a week off to participate in professional development during each school year. Many teachers said that independent reading and study were an important means of staying current. Generally, less-experienced teachers attend more continuing education courses, while their more experienced peers rely more on reading professional journals (U.S. Department of Education, 1999).

Once they become civil servants, German teachers are typically evaluated every four to six years by inspectors from the regional school office. These evaluations consist of classroom observations and examination of lesson plans and students' graded assignments. The inspector then writes a detailed report that the teacher has an opportunity to comment on and must sign. These reports are used in making decisions about salaries and promotions. However, unless a teacher has harmed a student, the worst thing that would happen to even the lowest-performing teacher would be a transfer to another school (U.S. Department of Education, 1999).

Japan

Like Germany, Japan has a carefully planned, rigorous professional development program for new teachers that went into effect in 1989. This one-year program is considered the first stage of career-long in-service training (Shiina & Mitsuo, 1993). During their first year, teachers are assigned about 10 hours of teaching per week and must attend extensive training sessions outside of the school. In addition, new teachers are assigned mentors. But unlike Germany, Japan has built in time for new teachers and mentors to meet, and the system is designed to encourage teachers to share information (Kinney, 1997-98). It is the principal's duty to ensure that all teachers feel some responsibility for the performance of new teachers (Nohara, 1997). Mentors spend most of their training time observing classes, demonstrating classes, and consulting with their new teachers.

According to David Nohara (1997), there have been no formal summative evaluations of this program. What follows are results from surveys that Nohara has conducted; since Nohara refers to his work as a case study, one can assume that his findings are not representative.

Overall, program participants, more experienced teachers, and administrators believe the program gives new teachers valuable skills and alerts them to areas they need to strengthen. Teacher education in universities tends to be highly theoretical and requires just two to four weeks of student teaching. Not surprisingly, teachers say this program provides them with much more practical information and skills. New teachers report that they wished the program were longer since they still had many questions at the end of their first year.

When the program first began, many principals were worried about the new teachers and mentors giving so much time to training (and thus being out of the classroom). However, principals are now generally supportive because they believe new teachers are acquiring classroom skills and school-related knowledge much faster than before the program. Many teachers who began teaching before the program was developed were skeptical because they thought the necessary classroom skills could be obtained only through experience, not mentoring. Nohara does not say whether or not these teachers have changed their minds, yet he notes that many education officials consider this view valid. But the officials add that the program is meant to get new teachers to think about a broad range of issues, including their performance.

Everyone acknowledged that the personality and ability of the mentor played a major role in the success of this program. Empathizing and communicating with new teachers, as well as comforting and motivating them, were believed to be critical.

Regular professional development in Japan consists of intensive in-service training provided by the prefectures after 5, 10, and 20 years. Teachers also receive specialized training when they are promoted to curriculum coordinators, vice-principals, and principals. Professional development through part-time graduate study is relatively rare, although there are three national teacher education universities that offer master's and doctoral degrees (Hawley & Hawley, 1997). There are also opportunities for teachers to learn from each other in the school setting by observing and discussing each other's lectures. However, the frequency of these more informal professional development activities varies by school (Kinney, 1997-98). These informal observations also seem to be the main teacher evaluation mechanism. Just as with new teachers, if any teacher is not doing well the others will try to suggest improvements and demonstrate better practices. as with new teachers, if any teacher is not doing well the others will try to suggest improvements and demonstrate better practices.

CONCLUSION

This paper gives an introduction to schooling practices in England, Germany, and Japan. It focuses on key educational issues, ones that all nations must face. England, Germany, Japan, and the United States go about schooling differently, demonstrating that even the most critical educational issues can be addressed in a variety of ways. Rather than experimenting with different forms of schooling in isolation, we can learn from each other's experiences.

We also can learn from the interpretations of these experiences by commentators within each country. The paper concludes with a brief look at what people in England, Germany, and Japan have to say about their school systems.

England

Much of the education reform that has been implemented in England reflects reform proposals often heard in the United States—school choice, national curriculum, national assessments, high school completion exams, and increased practical training for new teachers. British educators see both positive and negative outcomes from the implementation of these reforms:

- Choice has given students and their parents more options. Some students have transferred to better schools; some students remain in schools that simply continue to decline as the best students leave.
- The national curriculum has brought more focus to the classroom, and most schools are teaching essential information. However, teachers complain of having to do too much written planning and feeling demoralized because they feel there is no longer room for professional judgment (Newnham, 2000).
- National assessments draw attention to the importance of school improvement, allow teachers to gauge students' learning, and provide concrete information to inform school choices. These assessments, combined with the league tables, also contribute to competitiveness and do not assess progress teachers make in helping develop individual children intellectually and socially.
- High school completion exams make education certificates more meaningful but do not address the problems of students who do not pass, typically those from the lowest-income families.

- Mentoring new teachers can be helpful, yet the benefits are idiosyncratic, depending on the relationship between the two teachers. Valuable mentoring relationships are also quite time consuming.
- The United States and other countries can draw on the experiences of England in forming expectations about the outcomes of these types of reform proposals. While producing some advantages, the British experience shows that none of these reforms is the "silver bullet" that many school reformers seek.

Germany

There appears to be less discussion of school reform in Germany than in the United States, England, or Japan. Germans seem quite content with the overall system, although there have been concerns and changes over the years in areas such as teacher status, the cost of the dual system, and university attendance. In addition, since the reunification there have been many changes for schools in former East Germany as they have adopted the practices of schools in the West. Nonetheless, the basic philosophy of German schools holds: It is the teacher's responsibility to teach and the student's to learn. "Children spend the pre-primary school years learning to socialize, the early primary years learning to learn, and the later years absorbing, mastering and applying the information which they have absorbed" (Klage, n.d., p. 77). German schools are intended to be places of learning, not places to participate in extracurricular activities or sports.

Japan

The Japanese school system is often presented as a model to be emulated because of the consistently high scores Japanese students receive on international assessments. While the Japanese school system may very well be a great model for high test scores, it is also the source of much stress for students and their parents. According to MEXT's *Program for Educational Reform* (1998), the school system should be improved by

- Enhancing emotional education by adding counseling services, improving moral education, and training teachers to deal with children's distress.
- Helping children develop as individuals by giving them more choices in secondary school classes, making the entrance requirements for universities more flexible, and relaxing the regulations governing public elementary and lower secondary schools.

- Promoting individual schools' autonomy so that they can reflect the opinions of local parents and residents.

The Japanese believe the conformity that their educational system has taught in the past is no longer the key to success. With the recent shift from an industrial economy to an information-based economy, Japan feels pressure to foster more individuality, diversity, and creativity among its students.

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Table. Basic Education Indicators for the United Kingdom, Germany, Japan, and the United States
(U.S. Department of Education, 1996)

Indicator	United Kingdom	Germany	Japan	United States
Enrollment in primary to higher education, public or private, per 100 persons in population aged 5 to 29: 1991	52.7	49.2	57.1	57.7[a]
Enrollment in public and private preprimary schools of 4 years olds: 1991	60.7%	70.6%[b]	57.8%	57.1%[a]
Enrollment in public and private secondary schools of 15 year olds: 1991	100.0%	94.5%[b]	98.4%	98.4%[a]
Enrollment in public and private secondary schools of 17 year olds: 1991	43.1%[c]	92.4%[b]	88.8%	83.7%[a]
Number of first-time entrants into full-time public or private higher education per 100 persons at age 18: 1991	27.2	42.6[d]	53.1	45.8[a]
Number of public and private preprimary through secondary schools: United Kingdom and United States, 1992; Germany, 1991; Japan, 1989	32,557	36,629	56,684	107,857
Average number of students per school: years same as above	278	276	395	398
Average hours of instruction per day in lower secondary schools: 1990-91 school year	5.0[e]	4.6[b]	4.0	5.6
Days of instruction per year in lower secondary schools: 1990-91 school year	192[e]	219[b]	220	178
Percentage of population aged 25 to 64 that has completed secondary school: 1991	66%	82%	No Data	81%[a]
Public expenditure per student on education as a percentage of total public expenditure: 1991	No Data	6.7%[b]	9.7%	12.2%
Annual, mid-career, secondary school teacher salary in U.S. dollars: 1992 salary/ years of teaching at mid-career	$32,709/ 10[e]	$39,555/ 15[b]	$32,277/ 15	$34,027/ 16

a. Data for the United States are from 1990.
b. Data for Germany are from the former Federal Republic (West Germany).
c. Required secondary school ends at 16 (on average) in the United Kingdom.
d. Data for Germany are from 18 and 19 year olds.
e. Data for the United Kingdom are from England.

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