

Approved: 2-17-94  
Date

## MINUTES OF THE HOUSE COMMITTEE ON EDUCATION.

The meeting was called to order by Chairperson Duane Goossen at 3:30 p.m. on February 7, 1994 in Room 519-S of the Capitol.

All members were present except: Phill Kline (excused)

Committee staff present: Ben Barrett, Legislative Research Department  
Dale Dennis, Deputy Commissioner, Department of Education  
Avis Swartzman, Revisor of Statutes  
Lois Thompson, Committee Secretary

Conferees appearing before the committee: Lee Droegemueller, Commissioner, Kansas State Board of Education  
John Poggio, Center for Educational Testing and Evaluation, University of Kansas

Others attending: See attached list

The agenda called for a discussion of world class academic standards and assessment of those standards with the State Department of Education.

Commissioner Lee Droegemueller addressed the development of world class academic standards. (Attachment 1) World class standards are being discussed worldwide. In 1989, we came to the conclusion we needed to rethink mathematic instructions and standards. It was not that Kansas students were doing poorly, but Kansas students were not doing high enough levels of math and the changing environment in which they were working called for a rethinking of mathematics. Out of this process came the decision that all students should have algebra and probably two years of algebra. He referred to the manual, Kansas Mathematics Curriculum Standards, Revised July 1993. Then along came Kansas Curricular Standards for Communications, Kansas Standards for Science and Kansas Standards for Social Studies. (Copies of these documents can be secured from the State Department of Education or a copy of each document is on file with the Secretary of the House Education Committee.) Kansas standards have been reviewed by national experts, probably the best available and together we are working and moving schools toward world class performance.

Dr. John Poggio, Center for Educational Testing and Evaluation, School of Education, The University of Kansas shared information about the reviewers of the standards and some of their suggestions. He addressed the testing and assessment process. (Attachment 2)

Findings from the "World Class" curriculum standards review (dated 9-30-93) were provided to the committee. (Attachment 3)

The floor was opened to questions by committee members.

The meeting adjourned at 4:55 p.m. The next meeting of the House Education Committee will be Tuesday, February 8, 1994 at 3:30 p.m. in Room 519-S.

## GUEST LIST

**Committee: Education**

**Date:** 2-7-94

[illegible]

# ***Kansas State Board of Education***

120 S.E. 10th Avenue, Topeka, Kansas 66612-1182

February 7, 1994

To: House Education Committee

From: State Board of Education Staff

Re: World Class Standards

Following is a summary of the work of the State Board of Education in developing world class academic standards in communications, mathematics, science, and social studies.

## **Kansas Curriculum Standards**

The State Board of Education began development of outcomes-focused curriculum standards in 1989, with its adoption of the Kansas Mathematics Improvement Program. The first version of the Kansas Mathematics Curriculum Standards, prepared by Kansas educators, was issued to school districts in the spring of 1990. At least four revisions of the standards have been completed and distributed since that time.

In the fall of 1990, the Board adopted its Communications Improvement Program. The resulting curriculum standards, again developed by Kansas educators, were distributed in 1991. The standards included the areas of reading, writing, speaking, listening, and interpersonal communication.

The 1992 School District Finance and Quality Performance Act required the State Board to develop standards and assessments at a minimum of three benchmark levels, grades kindergarten through 12, "in the skills domains of mathematics, science, communications, including reading, writing, speaking and listening, and social studies, including American history and geography." As a result, committees of Kansas educators continued to develop and further revise and refine the curriculum standards called for in that legislation. The resulting standards were mailed widely to educators in September, 1992, and subsequent revisions were made.

The revised communications, science, and social studies curriculum standards were mailed to all Kansas schools and districts, including accredited non-public schools, in May, 1993. The revised mathematics standards were delayed for distribution in order to allow for the inclusion of example problems, and they were mailed in July, 1993. All of the standards identify at least three "benchmark" grades at which expected student learning outcomes are specified.

Lee Droegemueller  
Commissioner  
(913) 296-3201

House Education  
Feb. 7, 1994  
Attachment 1

Memo to: House Education Committee

Page 2

February 7, 1994

## **Review of Curriculum Standards**

As required by the 1992 legislation, the State Board of Education conducted a review of the curriculum standards. The Board contracted with the University of Kansas Center for Educational Testing and Evaluation for this purpose. The reviewers were to determine the degree to which the standards were equal to or greater than those in the rest of the United States and other parts of the world. Specifically, the reviewers were asked to provide an objective, independent review and evaluation of the evolving Kansas curriculum standards. They were asked by Center staff to "examine the Standards documents and provide a general, overall initial reaction on the extent to which these Kansas Curriculum Standards capture the direction, intent and orientation reflected by the opinions of national experts in light of future work force needs."

The reviewers were as follows:

### **All standards**

Lynne V. Cheney, W. H. Brady, Jr., Distinguished Fellow, American Enterprise Institute for Public Policy Research, Washington, D. C., and former head of the National Endowment for the Humanities

Jim Doyle, Cargill Mills, Minneapolis, Minnesota

Dan R. Paxton, Senior Vice President, Human Resources, Pizza Hut, Wichita

### **Communications standards**

Janet Emig, Chair, National English Standards Board, which is developing national standards for this subject area

Alan C. Purves, University of Albany, State University of New York, as well as teacher, researcher, scholar and former president of the National Council of Teachers of English

Memo to: House Education Committee  
Page 3  
February 7, 1994

#### Mathematics standards

Cathy Seeley, former director of the Texas Education Agency Math Team and, at the time of the review, President of the Association of State Supervisors of Mathematics

Thomas A. Romberg, Director, National Center for Research in Mathematical Sciences Education, University of Wisconsin-Madison and one of the developers of the National Council of Teachers of Mathematics Standards

#### Science standards

Melanie Dean, Director, Program for Teacher Enhancement in Science and Technology, University of California, San Diego

Robert E. Yager, Science Education Center, The University of Iowa, and national leader in science education

#### Social studies standards

Charlotte C. Anderson, President, National Council for the Social Studies, Washington, D.C., during the efforts to develop a set of unifying national standards for the social studies

Donald Schneider, Professor, College of Education, Department of Social Science Education, The University of Georgia, Athens, and chair of the National Council of Social Studies Standards Task Force

In a September 30, 1993, synopsis of the findings from the review, Drs. Poggio and Glasnapp of the Center wrote: "Over the summer there has been a formal review of the Kansas Curriculum Standards in Communication, Mathematics, Science, and Social Studies. . . . highly qualified individuals working independently and representing business and industry and the professional disciplines participated. Many of the reviewers are involved directly with the formation of the national curriculum Standards. The object of the evaluation was whether the Kansas Standards can be judged 'World Class.' From the reactions and judgments received, the response is decidedly yes. Independent evaluations indicate that the state's evolving Standards are on target and progressing toward those perceived as 'World Class.' Observations and

Memo to: House Education Committee  
Page 4  
February 7, 1994

suggestions obtained will aid in strengthening the relevance and appropriateness, as well as enhance the utility, of the Kansas Curriculum Standards."

### **Follow-up to Review of Curriculum Standards**

Staff of the State Board of Education have received both the summary report of the standards review and the specific comments related to each curricular area. Staff are now working with their several advisory committees to review the suggestions and to prepare further revisions of the curricular standards. We also anticipate using national standards, as they are released, as a further guide in revising. All standards will be reviewed at least once every three years to determine if further revisions are necessary.

### **Establishing Performance Expectations**

The work in establishing performance expectations and improvement expectations related to the state assessments has developed in the same fashion as other Quality Performance Accreditation issues. That is, a number of groups have been involved, and there have been lengthy discussions and a number of proposals and counter proposals. The history and current status of the project are described below.

At present, the state mathematics assessment is the only state assessment which has had sufficient numbers of administrations to allow for development of world class performance levels and expected performance improvement. Work in establishing the performance levels began in the spring of 1993, when 52 mathematics educators met with staff of the University of Kansas Center for Educational Testing and Evaluation. The educators were trained in the process to be used in establishing performance standards and then made judgements about the difficulty of the tasks the students were asked to perform on the 1993 assessment. The educators were also asked to make recommendations about designating labels and descriptions related to levels or categories of performance.

Labels and descriptions of the performance levels were drafted and were reviewed by a similar group of educators. In late October, 1993, representatives of the mathematics group met to review their work and to make final recommendations. Those recommendations were reviewed in November with the Council of Superintendents, a forty-member group which meets monthly with staff of the State Board of Education. Several changes were recommended at that time. The State Board's Quality Performance Accreditation Advisory Council has also reviewed the recommended changes.

Memo to: House Education Committee

Page 5

February 7, 1994

As a result of the work with these groups, the State Board now intends to establish this spring the world class standard of performance not only for the state mathematics assessment, but also for other Quality Performance Accreditation indicators. Continuous improvement standards will also be established. The exact means for determining both the standards and the improvement standards is still under development. At this time, however, we anticipate asking each school participating in Quality Performance Accreditation to provide its judgement about what the world class standards should be. From this information, possible world class performance levels would be determined for each of the indicators. We further anticipate forming a "Blue Ribbon Committee," representing respected individuals from private business and industry, elected officials, and school personnel, to make final recommendations to the State Board of Education on the world class standards for the indicators.

We anticipate that continuous improvement standards will be established through determining for each school relevant variables out of the control of the local board of education, district, and school. Among such possible items which have been discussed are population density of the district, composition of the student population, and class size in the school. The complete list of factors to be included is still to be determined. The resultant data will be analyzed and a school "profile" developed. From this information, school groupings would be made. Schools would be asked to verify information used for grouping similar schools together and would also be allowed to appeal their placement in a particular group.

We further anticipate that each school will be asked to provide judgements relative to the rate of growth, change or improvement that should be expected for each Quality Performance Accreditation indicator. It may be necessary to subject the emerging performance standards obtained in this fashion to further school reaction, review, and reaffirmation. The "Blue Ribbon Committee" would be asked to provide final recommended continuous improvement performance standards to the State Board of Education.

A system such as that described above addresses the valid concerns of educators that most schools begin from different points in regard to a number of factors and that expecting the same rate of improvement from all is probably inappropriate. For example, school personnel have often expressed the belief that it may be easier for schools starting with low levels of student performance to show large growth rates than for schools starting with fairly high performance to show similarly large growth rates. The Outcomes Accreditation Task Force, in its December, 1990, report to the State Board of Education, also recommended a similar format for reporting and monitoring school progress.

1-5

Memo to: House Education Committee

Page 6

February 7, 1994

It is important to note that performance on the state assessments is only one means of measuring student learning. Quality Performance Accreditation also requires local assessments, the results of which are also to be included in considering student and school progress. As noted above, only the mathematics state assessment is at a point of being ready for development of world class standards of performance. It should be possible to work with the reading and writing assessments this year, using the 1994 assessment results as the baseline data upon which to establish both world class performance standards and expected improvement. The science assessment is being conducted for the first time this year; it will not be possible to establish world class performance standards for the assessment until there have been at least two additional administrations of the assessment. The social studies, speaking, and listening assessments have not yet been developed. As funding for them becomes available and they are developed and administered, a similar process will be used for establishing world class standards and expected continuous improvement performance standards.

It should be noted that the world class level of performance and the continuous improvement performance standards are not expected to be "fixed" standards. In keeping with the concept of continuous improvement, it is expected that the levels designated as world class and for continuous improvement will rise over time.

## Enclosures

Attached for the information of the Committee are current copies of the curriculum standards for communications, mathematics, science, and social studies.



## **THE 1993-94 KANSAS ASSESSMENT PROGRAMS**

*JOHN POGGIO  
CENTER FOR EDUCATIONAL TESTING AND EVALUATION  
SCHOOL OF EDUCATION  
THE UNIVERSITY OF KANSAS  
(913) 864-3726*

### **STUDENTS BEING TESTED**

All Kansas students at the designated grades including special education (SPED) and Limited English Proficient (LEP) students are tested. SPED and LEP students are only excluded from state testing when the child's IEP specifically calls for the student not to be tested. Students in both public and private schools (accredited) are tested; non-accredited schools may participate in the assessment when they request. The Mathematics, Reading and Science examinations are to be administered from early-March through mid April. The Writing assessment is already in the schools and is being administered. Results are returned to school administrators at the start of the next school year.

### **DEVELOPMENT OF THE KANSAS ASSESSMENTS**

In each discipline the knowledge, skills and abilities tested are those defined by the applicable Kansas Curriculum Standards for the content area. The development of the assessments is coordinated by the Center for Educational Testing and Evaluation, School of Education, University of Kansas. Under supervision by the State Board of Education and the offices of the Commissioner, Deputy Commissioner and Associate Commissioner, CETE orchestrates development, production, field tryouts, distribution, scoring and reporting. And, coordination is the key. Hundreds and indeed thousands of Kansas educators are the true agents of construction and substance of these assessments. To varying degrees many Kansas educators across all levels (including higher education) and positions are involved annually in the yearly preparation of the instruments. Costs vary by program and earlier years of development of a subject field are more expensive than later years. For the range of services provided (development, production, distribution, scoring, analyses, scoring workshops, associated research and test evaluation studies, setting test performance standards, and reporting and return of results in both print and electronic form) typical costs are approximately \$1.50 per test administered. With the exception of the production of student answer sheets, the assessment budget is invested in-state.

Primary characteristics of each assessment program are presented below.

### **MATHEMATICS ASSESSMENT FEATURES**

- Grades            4, 7 and 10
- Format            as in recent years: timed, multiple choice, multiple mark/correct and performance appraisal (that is, open ended performance questions)

*House Education  
Feb. 7, 1994  
Attachment 2*

-Forms one (1) test form will be administered in all Kansas USDs; two 50 minute testing sessions are needed for students at each grade to complete the assessment

-Scoring answer sheets for machine processing of the objective test questions; local teacher scoring of all performance assessment papers; a sample of these papers (10%) are to be returned for state scoring, verification and analysis.

It is estimated that it will require approximately four (4) hours for a local teacher to score the open-ended mathematics test questions for a group of 25 students.

-Reporting scores on estimation, knowledge base skills, non routine problem solving, reasoning, and communication skills are provided; two total scores, on the objective portions and on the performance assessment items, are also reported. The assessment will continue to include a mathematics attitude appraisal (measures of student attitude toward, their confidence in, and their sense of usefulness of mathematics).

Performance scores (percent correct, percentile rank comparing performance among students, buildings and districts, and proficiency standing) will be reported for each student, and then summarized by grade in each building and for the district. Results are also reported at the building and district level breaking down performance by such factors as gender, race, Chapter I status, socio-economic level, and "at-risk" classification. Growth/change indicators will be reported. Mathematics attitude scores are reported separately as non-comparative scale scores.

### **READING ASSESSMENT FEATURES**

-Grades 3, 7 and 10

-Format reading comprehension and attitudes (attitude toward reading and confidence as a reader) are assessed. Prior knowledge/topic familiarity is no longer to be assessed (eliminated to reduce the time allocated for assessment). Multiple-choice multiple-correct test items and open ended performance assessment questions are employed to yield reading comprehension scores. Lengthy, authentic text material is used. The selections used are identified and nominated by Kansas librarians, and then further screened and endorsed by classroom and higher education instructors.

-Forms one (1) test form will be used with all students at each grade, using two (2) text-types (e.g., narrative, expository, technical, literary, or persuasive, etc.). Two 50 minute testing sessions need to be scheduled to complete the assessment at a grade.

- Scoring machine scoring of objective test items. Open-ended (essay type questions) items are to be scored locally by the students' instructors.  
  
The time required for a local instructor to become familiar regarding the scoring process and then to score a set of 25 student open-end papers is estimated to be approximately four (4) hours.
- Reporting percent correct and percentile ranks by text type in relation to students in the state, and comparative building and districts summaries. Reading attitude scores are reported separately as non-comparative scale scores. A Proficiency Scale for reading skill is to be developed and used this year. As with mathematics, numerous analyses and reports summarizing student performance by different factors as gender, race, region, etc., will be provided for buildings and an entire district. Growth/change scores will be reported for building and district performance.

#### **WRITING ASSESSMENT FEATURES**

- Grades 5, 8 and 10 or at adjacent grade levels when requested by the district and approved by KSBE.
- Format designed to support, encourage local practice and provide staff development opportunities for writing instruction. Duration of the writing assessment is defined locally, but at least two, but ordinarily four, 50 minute sessions for writing are needed; for students, the state assessment program typically encompasses one week of assessment effort (planning, drafting, revision, editing, final preparation).
- Forms multiple prompts (that is, situations) provided by the state to which each student chooses the topic over which s/he decides to write.
- Scoring a student's paper is scored to evaluate the paper's: ideas and content, organization, voice, sentence fluency, word choice, and conventions (spelling, grammar, punctuation, etc.). One local teacher and one state trained evaluator score the paper when the state program is followed; two locally trained readers are used when the local program is followed (in this case, a sample of papers (10%) are returned for state scoring and evaluation).  
  
One instructor will require approximately four hours to become familiar with the scoring process, and then score a class of 25 student papers. All papers are returned to the state for scoring which is scheduled to occur in June (at Topeka and Hutchinson).
- Reporting student scores on each of the six scored traits are reported; building, district and state averages are reported. Information is gathered to permit comparison based on local procedures and approaches followed in carrying out the assessment. There is limited evaluation of student attitude toward writing. Reports are

returned examining performance by factors as mentioned previously. A Proficiency Scale to judge performance may be available and in use this year. Growth and change indicators over the years of the assessment will be reported. Student attitudes toward writing are monitored and reported.

### **SCIENCE ASSESSMENT FEATURES**

- Grades        grades 2, 5, 8, and 11 proposed for testing; 1993-94 will provided for testing at grades 5, 8 and 11 only.
- Content        focus on evaluating students' process skills (e.g., observation, recording, analysis, interpretation, conclusions and inferences, etc.) within content knowledge areas (earth, physical and life science)
- Forms         multiple forms of all assessments will be in use during the 1993-94 year. This is a procedure whereby the field becomes informed of the range and depth of the expected outcomes.
- Format        in addition to an objective format questioning section on each examination (one class period), each grade will include a performance assessment section to evaluate student skills.

Small group cooperative problem-solving tasks will be employed at grade 5 (4 additional 50-minute class periods); at grade 8 individual student projects will be required (4 additional 50-minute class periods); and, at grade 11 a restricted response testing approach (comparable to math open-ended testing) is being employed (1 additional 50-minute period) this year.

- Scoring        Scoring of the performance assessment is to be done by local instructors with a sample of papers (10%) returned to the state for scoring, analysis and verification. Objective test questions are answered on response forms and then are machine scored.

Depending on the grade level, it could take instructors approximately 4 to 5 hours to score 25 student papers/projects.

- Reporting      comparative reporting of student, building and district performance can be expected using percent correct and percentile rank scores. Results are also expected to be reported at the building and district level breaking down performance by such factors as gender, race, Chapter I status, socio-economic level, and "at-risk" classification. Attitudes toward study, usefulness and importance of science is appraised and reported.

**A FEW OF THE MORE FREQUENTLY RAISED ISSUES AND CONCERNS  
REGARDING STATE ASSESSMENT**

- time of testing
- too much student time invested in testing
- performance assessment often seen as an assessment burden with limited instructional benefit
- quicker return of results to districts
- establishing performance standards that blend and support QPA as well as effective schooling practices
- communication: lack of information, misinformation, unfounded fears, and limited understanding of the programs
- insufficient staff development support
- long term prospects for continuation/credibility
- misuse of the tests

# The University of Kansas

Center for Educational  
Testing and Evaluation

**Memo to:** Lee Droegemueller, Commissioner  
Dale Dennis, Deputy Commissioner

**From:** John Poggio and Doug Glasnapp  
**Date:** September 30, 1993

**RE:** Findings from the "World Class" curriculum standards review

*Synopsis: Over the summer there has been a formal review of the Kansas Curriculum Standards in Communications, Mathematics, Science, and Social Studies. A dozen highly qualified individuals working independently and representing business and industry and the professional disciplines participated. Many of the reviewers are involved directly with the formation of the national curriculum Standards. The object of the evaluation was whether the Kansas Standards can be judged "World Class." From the reactions and judgments received, the response is decidedly yes. Independent evaluations indicate that the state's evolving Standards are on target and progressing toward those perceived as "World Class." Observations and suggestions obtained will aid in strengthening the relevance and appropriateness, as well as enhance the utility, of the Kansas Curriculum Standards.*

In response to the directive of the 1992 Kansas School Finance Act and at your request, we have coordinated over the past four months an independent expert review of the state's Curriculum Standards in Communications (includes Reading, Writing, Speaking, and Listening), Mathematics, Science, and Social Studies (includes American History and Geography). We have been able to complete the project following the approach we had discussed and finalized with your office. The principle mission of the review and evaluation activity was to determine the extent to which the Kansas Curriculum Standards for each discipline could be identified appropriately as "World Class." In the sections that follow presented are the methods we used to obtain evaluation information and our findings. After studying this report, please do not hesitate to contact us for additional information or clarification as may be needed.

HOUSE Education  
Feb. 7, 1994  
Attachment 3

**BACKGROUND**

State and federal attention to K - 12 curriculum Standards has held center stage for the past five years and deservedly so. Kansas and many other states (e.g., Oregon, California, Kentucky, Maryland, Connecticut, Minnesota, etc.) concurrent with national initiatives as the National Education Goals Panel, the National Council of Teachers of Mathematics, and the Mathematical and Sciences Education Board have provided not only rhetoric, but genuine efforts to construct frameworks, blueprints and curricular specifications that target newly defined and desired learner outcomes. The outlines and plans being developed are intended to strengthen and help assure America's competitive presence in a worldwide marketplace where the requirements of the workplace are being shape by rapidly advancing technological and communication capacity. Business and industry leaders describe tomorrow's workplace as characterized by adaptable employees capable of problem solving in an environment marked by the ability to change. To achieve successfully this competitiveness for all our citizens means that new skills must be understood, realized, and delivered by educators, and then learned by students in America's schools. For many, this is what is embraced and expected by the concept of "World Class" standards.

Kansas has not been late in coming to this realization or planning. Beginning in 1988 the Kansas State Board of Education under the vigilance of the Commissioner of Education directed that curriculum standards in mathematics for Kansas schools be defined and shaped by emerging national trends in the professions and tailored to meet the needs of the private sector. A call for Curriculum Standards for Communications instruction followed shortly thereafter, and over the past eighteen months, curriculum Standards for Science and Social Studies instruction have come under development. Today, Kansas educators have access to these recently developed and descriptive curriculum blueprints that detail expectations for K - 12 instruction, curriculum and student learning.

## **THE PROCESS OF DEVELOPMENT OF THE KANSAS CURRICULUM STANDARDS**

The construction and formulation of the Kansas Curriculum Standards in each of the disciplines has followed the same general process - visionary Kansas educators first draft specifications while being cognizant of and guided by emerging national Standards in their discipline. Following the initial development efforts, working committees then sought input and constructive critiques from vested in-state professionals, from both K -12 and higher education arenas as well as representatives from the Kansas private sector. Using their reactions as a basis for revision of the Standards under development, there followed widespread state distribution to invite further reactions and input. Though perhaps seeing this as the final step, in fact, it is best understood as the final step of the first act, which is to acknowledge that the process of development and specification is intended to be ongoing and always formative.

More than symbolic, the process of development of the Kansas Curriculum Standards has required considerable time and effort of very talented and committed individuals who are themselves committed to high quality educational opportunities for all Kansas students. Preparation of preliminary versions of a discipline's Standards, while initiated among a handful of skillful individuals, are very early on spread across a broader and deeper constituent base. The opportunity for many persons to contribute and react is a hallmark of the Kansas process. The quality of the Standards is a function of the vision and leadership of each discipline's steering committee. The speed and determination with which such Herculean efforts have been undertaken and completed must be credited to the state's Education leaders.

By May, 1993 each Standards area, Communications, Mathematics, Science, and Social Studies, had carried out at least one complete development cycle: drafting by a steering committee, revision based on extensive and intensive Advisory committee participation, solicitation of broad field and discipline reactions, input, suggestions and guidance from business and industry, intermediate revisions then distribution to the at-



large Kansas education community for review and suggestion prior to their current formation.

### **THE "WORLD CLASS" REVIEW ACTIVITY**

As a quality assurance step it was decided to carry out an external, independent evaluation of the state's Curriculum Standards for each of the discipline fields. The method agreed to for this evaluation was straight forward: contact national experts and vested private sector groups and ask for their candid assessment of the Standards as currently under development. Through their participation, persons were ask to study carefully and then evaluate the appropriateness of a claim that a discipline's Standards were indeed "World Class." Honoraria were offered participants as it was judged that a period of approximately three working days would be required to complete the requested evaluation review activity. It was discussed and agreed that three independent reviews for each of the four discipline areas, two professionals in the discipline and one person representing the private sector, were to be obtained. Nominees were first contacted by phone and enlisted in the activity. A detailed letter then was sent to those agreeing to participate. Sample copies of the letters of invitation (including instructions) sent to professionals and the private sector participants are included for reference.

The individuals identified and asked to participate in the independent appraisal process were professionals who are serving presently on committees that are developing (or revising) national Standards in disciplines that align with the Kansas Curriculum Standards. In each discipline, a prioritized list of national evaluators was prepared by the State Department of Education. Working from the top of each list, CETE then proceeded to contact nominees and solicit their participation. In Mathematics, Communications, and Social Studies two professionals among the top three persons identified agreed and did participate in the evaluation. In these discipline, persons who declined participation had

schedule conflicts that made participation not possible in within the time frame available.

In the science area, we needed to resolve some issues in obtaining evaluation reviewers for the Kansas Science Curriculum Standards. As the national Science Standards are only now about to come forward, there was expressed a concern by a few national leaders that reaction to the Kansas Standards prior to release of the National Standards might potentially create a conflict of interest for some reviewers whom we might wish to use as evaluators. Though having to inform our prospective evaluators of the issue that had surfaced (that an individual's evaluation of the Kansas Standards could be construed an early release and announcement regarding National expectations), nonetheless we were able to obtain desired and eminently qualified science professionals as independent evaluators for the Kansas Standards.

Obtaining the desired participation from the private sector proved to be considerably more difficult and time consuming than anticipated. The original and agreed to plan was to obtain reviews of the Kansas Standards by CEOs of leading corporations who had been vocal in calling for school reform. Not only was it next to impossible to have an opportunity to discuss the project with such individuals (as they in continuous demand and on the go, and their schedules are not easily accessible), but even when contact was made we were referred to an office in the corporation that is available to provide such study and analysis. When professionals in the discipline were contacted and asked to participate, they were prompt and reliable in meeting the time schedule set for return of reviews; on the other hand, participation by the private sector was characterized by delays and the need for repeated calls requesting that the evaluation be completed and returned. Because of the problems encountered, participation by the private sector is more limited than originally envisioned and planned. Nonetheless each Standards discipline received study and evaluation by at least two private sector reviewers.

**EXTERNAL REVIEWERS**

In all, twelve persons agreed and committed to participate in the review of the Kansas Curriculum Standards. Responses were received from eleven of the invitees. From our consideration of what these individuals provided in reaction to the Kansas Standards, it can be concluded that these participants have provided a credible, trustworthy and independent review and appraisal. We are confident that their study and written evaluations offer the expertise from which to go forward with development of state Curriculum Standards. Participants who returned evaluation materials are identified below.

- **Charlotte C. Anderson, Ph.D.**, Chair, National Social Studies Standards Development Commission, Evanston, Illinois
- **Lynne Cheney, Ph.D.**, Distinguished Fellow, American Enterprise Institute for Public Policy Research, Washington, D.C.
- **Melanie Dean, Ph.D.**, Editor and Chair, California Model Science Standards for California Schools; Member, Science Frameworks, National Research Council, Sacramento, California
- **James Doyle**, Director, Worldwide Business Education, Cargill Mills, Minneapolis, Minnesota
- **Janet Emig, Ph.D.**, Chair, The Standards Project for English Language Arts, English Standards Board, Sanibel, Florida
- **Dan R. Paxton**, Senior Vice President, Human Resources, Pizza Hut, Inc., Wichita, Kansas
- **Alan C. Purves, Ph.D.**, Professor, Teacher and Distinguished Scholar and Researcher of English, Editor, Encyclopedia of English Studies and Language Arts, New York
- **Thomas A. Romberg, Ph.D.**, Member and past Director, National Council of Teachers of Mathematics Curriculum Standards Project, Madison, Wisconsin

- **Donald Schneider**, Ph.D., Member, National Council for Social Studies Task Force on National Curriculum Standards for Social Studies, Athens, Georgia
- **Catherine Seeley**, Ph.D., Member, National Council of Teachers of Mathematics Curriculum Standards Project, Austin, Texas
- **Robert Yager**, Ph.D., Member, National Committee on Science Education Standards and Assessment, Iowa City, Iowa

### **STUDY FINDINGS**

Each reviewer was asked to consider and respond to a series of questions that were intended to guide her/his evaluation of the Kansas Curriculum Standards. Those questions are provided below. The written evaluations from each participant are included with this report. In addition, reviewers were asked, and indeed encouraged, to show recommended suggestions for revisions, modifications and changes directly in the Standards document(s) itself. As returned, these "worked over" documents are also enclosed. As most reviewers did provide written editorial suggestions within their copy of a document, making available copies to the appropriate Curriculum Standards development committees for their discussion and attention in subsequent drafts would seem most desirable and beneficial to the work of the state Advisory committees. The guiding evaluation questions and issues that the private sector and the discipline professionals were to consider in their evaluation follow.

Evaluation questions asked of business and industry reviewers:

#### **I. Overall Evaluation: Completeness and Appropriateness**

Based on your review, to what extent has the State captured the spirit, direction and focus of current thinking for Standards that can be said to be "World Class"? Do the Kansas documents fit such a claim and do so in an acceptable manner? Are the skills identified those you believe essential for students to master given what you believe will be the demands of tomorrow's work place?

**2. Thoroughness and Depth**

Are there critical omissions within a content area in terms of emphasis, concepts, ideas, operations, content or level of complexity that must be added to make the Kansas Standards "World Class?" As necessary, identify.

Evaluation questions asked of the discipline specific reviewers:

**1. Overall Evaluation: Completeness and Appropriateness**

Based on your overall review, to what extent has the State captured the spirit, direction and focus of current thinking for Standards that can be said to be "World Class"? Does the Kansas document fit such a claim and do so in an acceptable manner? Are the skills identified those you believe essential for students to master given what you believe will be the demands of tomorrow's work place? Is the document understandable, professional and presentable?

**2. Thoroughness and Depth**

Are there critical omissions in terms of emphasis, concepts, ideas, operations, content or level of complexity that must be added to make the Kansas Standards "World Class?" As necessary, identify.

**3. Structure, Detail and Accuracy**

Are there edits, revisions or modifications in the specific outcome statements that should be made to give certain direction for instruction and understanding of the intended focus of the outcome? As you read a statement if something comes to mind that would help to communicate intent, or focus the statement more toward an important "World Class" outcome, record your suggestions and edits on the document itself.

**4. Clarity, Usefulness and Taxonomic/Behavioral Specificity**

Are the standards (as defined by the goal and outcome statements) written at a level of specificity, allowing for sufficient communication of intent, but not altogether inhibiting the breadth and integration desired for instruction and assessment? Is there sufficient fidelity and direction to ensure the requirements of tomorrow's necessary skills (whether in the work place or in subsequent schooling) are being taught? Record your suggestions and edits in the document itself as you go through it and as you judge needed, comment on the usefulness of the Kansas standards.

The general tenor of the vast majority of the reviewers comments is very positive and certainly supportive of the Kansas development effort and the resultant Standards. For the most part, reviewers' reactions and evaluation indicate that a solid, credible foundation for development is in place. Whether the Standards are "World Class" appears to be affirmed, but suggestions for change are offered. Some reviewers had a difficult time responding directly to this specific inquiry since, in their opinion, what is meant by "World Class" is not itself well defined or understood.

One reviewer was critical of much of the entire effort. In a brief letter this evaluator decried process-based Standards, which is an accurate characterization of the focus of much of the state's curriculum Standards, as failing to attend to the content of a discipline. This reviewer then goes on to associate a process approach to defining Standards as a reform initiative that endorses outcomes based education which, as an approach, does not at all curry favor with the reviewer. Regardless of instructional philosophy and given this reviewer's evaluation, consideration of the need to provide greater subject matter content specificity, which is commented on by other reviewers as a necessary means to strengthen Standards' utility for classroom teachers, would seem to be in order by the Advisory committees.

Deficiency were noted in reviewer comments to suggest that areas of a discipline had been overlooked or not sufficiently detailed in the range of outcomes provided. Such criticism was observed typically with reference to those Standards that have been under development only over the past year and a half. Attending to these specific criticisms and the particular suggestions and observations in each reviewer's evaluation needs to be given attention and consideration by specialists in the discipline area who are charged with development of the Kansas Standards.

From our interpretation of the lengthy and detailed independent evaluation reports received, the following findings, conclusions and recommendations appeared with consistency across many reviewers.

- in each subject field the Standards must give deliberate attention to outcomes that recognize and deal with the cultural diversity of the student populations being served;
- to aid teachers' utilization of the Standards, the Standards must provide for greater subject matter specificity, attentiveness to relevance of content, and translation of concepts to instructional practice;
- in the Standards areas recently under development (Communications, Social Studies, and Science), reviewers identified specific gaps and omissions in the range of outcomes detailed and were able to provide suggestions that extend the breadth and depth of the curriculum outcomes;
- as a stylistic matter, utilize a consistent organizational structure and provide an informative orientation early on in the Standards document to facilitate reader understanding, interpretation and implementation;
- insure the presence of curriculum outcomes that address and are reflective of discipline connections across the Standards areas; and,
- disposition, that is attitude, of learners toward a discipline needs to be included as an outcome of the curriculum Standards in all areas.

Our interpretation from the reviewers evaluation and specific comments is that very useful informative and guidance has been obtained through this process. It is particularly encouraging that private sector evaluations were for the most part very positive in providing strong endorsement for the Kansas Standards. The beneficiaries of these independent reviews will certainly be the Standards development committees in the discipline fields. It is especially noteworthy that the Mathematics Standards, the area that has been under development three times as long as the other disciplines, received stronger marks and appears to be more in-line with the direction called for and suggested by reviewers in the other disciplines. From the reviews, our conclusion is that the Kansas Standards embody curriculum focus in the desired direction and that some of the areas (e.g., Mathematics) are further along in their progression toward Standards viewed as "World Class." The other curriculum areas, Communications,

Science, and Social Studies, must now be certain to allow time and engage in activities to continue to develop their Standards based on experience, input from the field, and emerging disciplines trends.

Through our coordination of this project, a perspective that we have been able to acquire is to recognize that curriculum outcomes and goals should be encouraged to come forward from a synthesis across the individual discipline Standards. That is, Curriculum Integration Standards, a recent procedural activity of the Kansas State Board, could well become the overarching and orchestrating force toward producing unified Standards that help to guide instruction and learning in Kansas.

Thank you for the opportunity to work with you on this facet of the Kansas Curriculum Development programs. If we can provide any additional information or clarification, please do not hesitate to contact us.