

DOCUMENT RESUME

ED 350 738

EC 301 544

TITLE Gifted & Talented Program Approval Standards.
 INSTITUTION Arkansas State Dept. of Education, Little Rock.
 Special Education Section.
 PUB DATE 86
 NOTE 39p.
 PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.)
 (120)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Ability Identification; *Accreditation
 (Institutions); Curriculum; Elementary Secondary
 Education; *Gifted; Program Evaluation; Program
 Implementation; School Community Relationship; School
 Funds; Staff Development; State Programs; *State
 Standards; Student Evaluation; *Talent

IDENTIFIERS *Arkansas

ABSTRACT

This document's purpose is to establish the minimum standards for approval of programs for education of gifted students in Arkansas. Guidelines are included to: (1) enable school districts to establish equitable criteria for identification of gifted and talented students; (2) establish programs which will lead to appropriate educational opportunities for these students; and (3) establish procedures to evaluate the effectiveness of the provisions of these educational opportunities. The guidelines cover: funding provisions, community involvement, staff development, personnel, identification, program options, curriculum, and evaluation. Appendices include a community resource survey instrument, incentives and guidelines for staff development activities, duties of coordinators of gifted programs, possible assessment instruments, criteria for evaluating curriculum materials, and state and national activities in which Arkansas students participate. (JDD)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
 This document has been reproduced as
received from the person or organization
originating it.
 Minor changes have been made to improve
reproduction quality.
• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

ED350738

Gifted & Talented

Program Approval Standards

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Martha D.
Boes

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

EC 301544

Arkansas Department of Education

BEST COPY AVAILABLE



GIFTED AND TALENTED
PROGRAM APPROVAL STANDARDS

Arkansas Department of Education

Tommy R. Venters, Director
General Education Division

Diane Sydoriak, Associate Director
Special Education

Martha Bass, Administrator
Programs for the Gifted and Talented

1986

TABLE OF CONTENTS

	Page
Introduction	1
Purpose of Document	2
Funding Provisions	3
Program Approval Standards	5
Community Involvement	9
Staff Development	10
Personnel	11
Identification	13
Program Options	16
Curriculum	19
Evaluation	21

Appendices

- A Community Resource Survey
- B-1 Incentives for Staff Development
- B-2 Do's and Don'ts for Effective Inservice/Staff Development
- C Duties of Coordinators of Gifted Programs
- D Possible Assessment Instruments
- E Criteria for Evaluating Curriculum Materials
- F State and National Activities Currently Used in Arkansas

INTRODUCTION

Responding to the concern for educational programming for gifted and talented students, the Arkansas General Assembly passed Act 106 of 1979. This legislation established the Office for the Education of Gifted and Talented Children, headed by an administrator to direct the state program. Funds were appropriated to provide financial assistance to school districts operating programs for gifted and talented students.

Guidelines were developed to provide information to assist districts in planning, implementing, and evaluating programs for gifted and talented students. This document, Education of Gifted and Talented Students: Guidelines for Local Education Agencies, was approved by the State Board of Education in 1981.

Since that time, a number of pieces of legislation enacted have had a profound effect on gifted education.

Act 445 of 1983, the Quality Education Act, established minimum standards for accreditation of public schools and authorized the State Board to name a committee to recommend regulations, criteria, and minimum standards. The Standards for Accreditation of Arkansas Public Schools, which were adopted by the State Board of Education February 22, 1984, included a provision that all districts must provide a program for gifted and talented students.

Act 34 of 1983, First Extraordinary Session, the School Finance Act, provided funding for districts which are developing or operating programs for gifted and talented students. The Department of Education was directed to set aside annually, beginning in 1984-85, funds for program development, not to exceed \$6 million. Districts which are operating approved programs are eligible to receive funds based on an "add on" weight of .25 for each student identified as gifted and talented (funding to be based on no more than five percent of the district's average daily membership).

The following definition shall guide districts in providing services and opportunities for students identified as gifted and talented in Arkansas:

Gifted and talented children and youth are those of high potential or ability whose learning characteristics and educational needs require qualitatively differentiated educational experiences and/or services.

Possession of these talents and gifts, or the potential for their development, will be evidenced through an interaction of above average intellectual ability, task commitment and/or motivation, and creative ability.

PURPOSE OF THE DOCUMENT

The purpose of this document is to establish the minimum standards for approval of programs which will meet requirements of the Standards of Accreditation adopted by the State Board of Education February 22, 1984. These standards become effective June 1, 1987.

Included are guidelines which will enable school districts to:

- 1) Establish equitable criteria for identification of gifted and talented students;
- 2) Establish programs which will lead to appropriate educational opportunities for these students; and
- 3) Establish procedures to evaluate the effectiveness of the provisions of these educational opportunities.

School districts may choose to work cooperatively to develop and operate programs for their gifted students. Any mention of "district" in this document applies also to a group of districts working as a cooperative. This definition does not include Educational Service Cooperatives established under Act 349 of 1985.

Standards for approved programs are listed on the following pages. Further exposition of each standard will be found on the pages which follow. Evidence verifying compliance should be kept on file in the district so that it will be available for review by the Department of Education when the district is monitored.

Please note that these are minimum, not optimum, standards. Districts are encouraged to go beyond them in providing educational opportunities for their gifted and talented students. However, no school district may establish criteria which are less than the standards required in this document.

FUNDING PROVISIONS FOR GIFTED AND TALENTED EDUCATION

The School Finance Act, Act 34 of 1983, First Extraordinary Session, provides that: "Any district or cooperative which has completed the program development phase and has an approved program for gifted and operation funds by submitting application for such funds not later than April 10 of the school year preceding the school year for which such funding is sought." (Section 9 (d) "Districts...shall receive funds for the operation of such program based on an "add on" weight of .25 for each of its students identified as being gifted and/or talented in accordance with criteria approved by the State Board of Education. The number of gifted and talented students for which "add on" weights are granted through 1990-91 shall not exceed five percent (5%) of the district's ADM in the previous school year."

For students to be included in the count for funding, services must meet the following requirements:

1. Students must be identified as gifted and talented according to Arkansas Department of Education guidelines.
2. Instructional services must be provided during the regular school day.
3. Direct services must be provided by an approved teacher, defined as follows:
 - a. Six graduate hours in gifted education completed by June 1 of first year of teaching gifted/talented students.
 - b. Twelve graduate hours in gifted education completed by June 1 of second year of teaching gifted/talented students.
 - c. Eighteen graduate hours in gifted education completed by June 1 of third year of teaching gifted/talented students.

Any exceptions to the above teacher qualifications must meet the following requirements:

- a. There is written documentation that the program component was developed in consultation with the district's coordinator of gifted programs.
- b. There is a written plan of curriculum differentiation for the identified gifted students. This may be in the form of an individual management plan or another form developed by the local district and approved by the Department of Education.
- c. An approved teacher of the gifted maintains oversight of the students' activities.

- d. The subject matter teacher has successfully completed an Arkansas Department of Education approved staff development program.

4. A minimum of 150 minutes a week direct instruction must be provided.

Exceptions to the 150 minutes requirement may be granted upon request to the Department of Education in the following circumstances:

- a. If an approved teacher provides direct instruction to identified gifted students on a regular basis for at least 75 minutes per week, the remainder of the required 150 minutes may be met in the regular classroom, provided that there is a written management plan and that activities are developed and supervised by an approved teacher.
- b. Independent studies and mentorships, developed in consultation with an approved teacher, do not require 150 minutes per week contact time; however, the approved teacher must meet with the student for at least 30 minutes per week to assess progress.

PROGRAM APPROVAL STANDARDS

1.0 Community Involvement (see p.9)

- 1.1 A community awareness campaign is designed and implemented.
- 1.2 Parents and community members are informed at least annually of the program opportunities for gifted and talented students and have the opportunity to ask questions and make suggestions concerning them.
- 1.3 Parents and other community members are included on an advisory committee for gifted education.

2.0 Staff Development (see p. 10)

- 2.1 There is a written plan for staff development based on local educational needs.
- 2.2 Opportunities to increase knowledge of the education of gifted and talented students are provided for school board members, school and district administrators, teachers and support staff on a continuing and regular basis.

3.0 Personnel (see pp. 11-12)

- 3.1 Persons who plan and implement a program for gifted students and/or teach identified gifted students in homogeneous groups hold current Arkansas teaching certificate and attain 18 graduate hours in gifted and talented education.
- 3.2 A process for selection of teachers of the gifted is clearly defined and established.
- 3.3 Job descriptions are developed for coordinators and teachers of the gifted.
- 3.4 Regularly scheduled time is provided for teachers of the gifted to perform duties other than direct services to identified students. (The equivalent of five periods per week is recommended.)

4.0 Identification (see pp. 13-15)

- 4.1 The process for identifying students has several stages.
 - 4.1.1 Nominations are sought from a wide variety of sources to ensure that all potentially gifted and talented students have an opportunity to be considered.

- 4.1.2 Data are collected (on the nominated students) to aid in making decisions for selection of students who are in need of special educational services.
- 4.1.3 Placement is made in an appropriate program option.
- 4.2 Identification procedures are clearly stated, uniformly implemented, and communicated to the entire school staff.
- 4.3 A committee chaired by a trained specialist in gifted education and including administrators, teachers, and/or counselors collects and analyzes data, maintains appropriate records, and makes professional decisions on placement of students.
- 4.4 The identification process yields information obtained through a variety of procedures and from many independent sources.
 - 4.4.1 Procedures for obtaining information about students include at least two objective assessment methods such as group and individual tests of ability, achievement, and creativity.
 - 4.4.2 Procedures for obtaining information about students include at least two subjective assessment methods such as checklists, rating scales, biographical data, product evaluations, auditions, interviews, and grades.
 - 4.4.3 Information about students is obtained from multiple sources which may include teachers, counselors, parents, community members, peers, and students themselves.
- 4.5 Student placement decisions are based on multiple criteria. No single criterion or cut-off score is used to exclude a student from placement.
- 4.6 Instruments and procedures used in the identification process are non-discriminatory with respect to race, cultural or economic background, religion, national origin, sex, or handicapping condition.
- 4.7 Instructionally useful information about individual students obtained during the identification process is communicated to the appropriate members of the instructional staff regardless of final placement.
- 4.8 Written identification and placement procedures include parental involvement.
 - 4.8.1 Parents grant permission for individual testing.
 - 4.8.2 Parents are informed of the criteria for placement in a program for the gifted.

4.8.3 Parents give written permission for child's participation in gifted program.

4.8.4 Parents may appeal a placement with which they disagree.

4.9 Identification of gifted/talented students is an ongoing process extending from school entry through grade twelve.

4.9.1 Opportunities are provided for students to be considered for placement in gifted/talented programs throughout their school experience.

4.9.2 A review of students' placement in the gifted/talented program is made at least annually.

4.9.3 Written policies for exit from a program are developed and implemented.

4.9.4 Records of placement decisions and data on all nominated students are kept on file for a minimum of five years or for as long as needed for educational decisions.

5.0 Program Options (see pp. 16-18)

5.1 Program is systematically developed, with long-range goals that are coordinated to guide the development of gifted students from the time they are identified through graduation from high school.

5.2 A table of organization is developed which clearly delineates roles, responsibilities, and coordination procedures.

5.3 Students' placement in program options is based on their abilities, needs and interests, and resources of the district.

5.4 Administrative arrangements are used which promote interaction among gifted students and both their intellectual and chronological peers.

6.0 Curriculum (see pp. 19-20)

6.1 Curriculum for the gifted extends or replaces the regular curriculum.

6.2 Curriculum is differentiated in content, process, and/or product.

6.2.1 Content is differentiated in breadth or depth, in tempo or pace, and/or in kind.

6.2.2 Processes for gifted students stress creativity and higher level thinking skills.

6.2.3 Students investigate problems in depth and develop products which are communicated to appropriate audiences.

6.3 Curriculum has scope and sequence to assure continuity.

6.4 Guidelines for evaluation of materials and resources for the gifted are established and used in selecting those appropriate for differentiated learning.

7.0 Evaluation (see pp. 21-22)

7.1 The evaluation process provides accurate, timely, and relevant information to decision-makers for improving program options offered gifted students.

7.2 A plan for evaluation is developed at the time the program is planned, specifying data to be collected and personnel responsible for analysis of the data.

7.3 All components of the gifted/talented program are evaluated: identification, staff development, program options, curriculum, community involvement, and evaluation.

7.4 Data for evaluation are obtained from a variety of instruments, procedures, and information sources.

7.5 Evaluation findings are compiled, analyzed, and communicated to appropriate audiences.

7.6 Student progress is assessed, with attention to mastery of content, higher level thinking skills, creativity, and affective growth.

7.7 Advanced content courses are noted on student transcripts.

1.0 Community Involvement

A working partnership between school personnel and other members of the community will benefit a gifted and talented program. The district should encourage open communication with parents and community members, making them aware of the characteristics and needs of the gifted, the program goals of the district, and student activities. The Advisory Committee for Gifted and Talented Education must include parents, as well as professional educators.

Community members can play an important role in the education of gifted students by serving as speakers or mentors. Groups in the community whose cooperation may be sought include colleges and universities, museums, theater groups, civic clubs, libraries, industries, and businesses.

Each district should develop an inventory of community resources that can be used to meet the needs of gifted and talented students. A sample community resource survey may be found in Appendix A.

<u>Standard</u>	<u>Evidence Verifying Compliance</u>
1.1 A community awareness campaign is designed and implemented.	One or more of the following: Newspaper clippings Copies of letters to parents Meeting agendas Brochure/handbook describing gifted program Newsletters Column in local or school publication Radio/TV spots
1.2 Parents and community members are informed at least annually of the program opportunities for gifted and talented students and have the opportunity to ask questions and make suggestions concerning them.	Meeting agendas
1.3 Parents and other community members are included on an advisory committee for gifted education.	List of members, minutes of meetings

2.0 Staff Development

To design a successful staff development program, the district should allocate sufficient time and money. Plans for ongoing training in gifted and talented education should be incorporated into the district's total staff development plan.

Planning for staff development should be based on the data obtained from periodic needs assessments conducted by the district. All personnel must be made aware of the results of the assessments and the district's plan for serving gifted and talented students. Other areas of training which are appropriate for the entire school staff are: (1) characteristics and needs of the gifted; (2) identification procedures; (3) teaching strategies; (4) creativity; (5) affective needs of the gifted; and (6) selection, use, and evaluation of appropriate teaching materials.

In addition to the topics listed above, personnel directly involved in providing services to gifted/talented students need specialized training in the following areas: (1) program prototypes and components; (2) differentiation of curricula; (3) program coordination/supervision; (4) student evaluation and performance; (5) utilization of community resources; and (6) program evaluation.

Less formal staff development may be encouraged by adding books and journals on gifted education to the school's professional library; placing reprints of pertinent articles in teachers' boxes; presenting short, specific classroom demonstrations and teaching techniques at regular building-level faculty meetings; and sharing gifted students' projects with all staff.

Suggestions for planning inservice/staff development are contained in Appendix B.

<u>Standard</u>	<u>Evidence Verifying Compliance</u>
2.1 There is a written plan for staff development based on local educational needs.	Copy of plan
2.2 Opportunities to increase knowledge of the education of gifted and talented students are provided for school board members, school and district administrators, teachers and support staff on a continuing and regular basis.	Meeting attendance rosters and programs

3.0 Personnel

Persons who are associated with the gifted and talented program need special qualifications in the areas of training, experience, and personal qualities. Selection of personnel is critical to the quality of the program. A process to ensure the selection of appropriate teachers of the gifted must be established and clearly articulated. One person should be selected to serve as district coordinator of the gifted program. The percentage of time assigned to duties associated with the program will necessarily vary depending on the size of the district. In small districts it is likely that the same person will be the teacher of gifted students and coordinator of the program. Training requirements for a coordinator are the same as those for an approved teacher of the gifted.

The minimum standards for an approved teacher of the gifted are: for first year personnel, in addition to holding an Arkansas teaching certificate, a minimum of six graduate hours in the field of gifted and talented education is required; second year, 12 graduate hours; and third year, 18 graduate hours. Specific courses have not been stipulated; however, the following areas should be included:

- a. Identification and programming for the gifted;
- b. Methods and materials for the gifted;
- c. Curriculum development for the gifted;
- d. Counseling and guidance of the gifted;
- e. Testing and evaluation;
- f. Creativity;
- g. Supervised practicum;
- h. Independent study; and/or
- i. Seminar or special topics course in gifted education.

When certification for teachers of the gifted is established, any teacher holding this certification will be an approved teacher of gifted and talented students.

Job descriptions should be developed for coordinators and teachers of the gifted. Some duties that are essential for effective program coordination are planning of the overall structure of the district gifted program in consultation with teachers, administrators, and parents, preparing funding proposals, and recommending purchase of supplies and materials. A more comprehensive job description can be found in Appendix C.

In addition to time spent in direct services to gifted students, teachers and coordinators in gifted programs have a variety of duties that will promote integration of the gifted program with the regular education program.

Time must be provided for:

- a. Working with regular classroom teachers;
- b. Locating resources;
- c. Arranging mentorships and other out-of-school learning experiences;
- d. Supervising independent studies and mentorships;
- e. Involvement in the identification process;
- f. Conducting community awareness activities;
- g. Conducting staff development activities;

- h. Program documentation; and/or
- i. Development of appropriate curriculum.

A minimum of five periods a week, or the equivalent, is recommended.

<u>Standard</u>	<u>Evidence Verifying Compliance</u>
3.1 Persons who plan and implement a program for gifted students and/or teach identified gifted students in homogeneous groups hold current Arkansas teaching certificates and attain eighteen graduate hours in the field of gifted and talented education.	Certificate, transcript
3.2 A process for selection of teachers of the gifted is clearly defined and established.	Copy of policy and procedures
3.3 Job descriptions are developed for coordinators and teachers of the gifted.	Written job description
3.4 Regularly scheduled time is provided for teachers of the gifted to perform duties other than direct services to identified students.	Schedule

4.0 Identification

The purpose of careful and comprehensive identification procedures is to find and serve as many students as possible who need special programs to develop their exceptional abilities. It is important to identify students with potential for outstanding achievement, as well as those who have demonstrated outstanding achievement. The emphasis in identification procedures should be on student need for specialized services rather than on mere categorizing or labeling.

A comprehensive identification plan should be based on the best available research and recommendations of experts in the field. It must take into account the local student population and should ensure inclusion of all potentially gifted and talented students from all cultural and economic backgrounds. The list of nominated students must be representative of the entire student population in terms of race, sex, and economic status.

Each district's written identification procedures must include the following:

1. A process to explain the nomination procedure and seek nominations from parents, school personnel, students, and community members.
2. An identification committee of at least five members, made up of professional educators, chaired by a trained specialist in gifted education.
3. Provision for review of school records of nominated students and the gathering and compilation of additional data where needed.
4. Parental consent in writing if additional individual testing is required.
5. Assurance of confidentiality of records.
6. A policy for placement decisions based on multi-criteria, including both objective and subjective data, with the stipulation that no single criterion or cut-off score is used to exclude a student from placement.
7. Use of at least two objective and two subjective measures (one of which must assess creativity), chosen from the following:

Objective

Standardized mental ability test
Standardized achievement test
Test of creative ability

Subjective

Behavioral checklists (Parent and/or teacher)
Rating scales
Evaluations of products
Student interviews
Biographical inventories
Grades
Auditions

A list of possible assessment instruments may be found in Appendix D.

8. Assurance that instruments and procedures are non-discriminatory.
9. Provision that educationally useful, student-specific information obtained in the identification process is communicated to the appropriate instructional staff.
10. A process by which parents are informed of placement decisions, give permission for their child to participate, and have the opportunity to appeal a decision with which they disagree.
11. Provisions for continuous evaluation of the identification process:
 - a. Opportunity for consideration for placement at any time;
 - b. Annual review of students' placement;
 - c. Policies for exit from a program; and
 - d. Maintenance of records of placement decisions and data on all nominated students for a minimum of five years or for as long as needed for educational decisions

<u>Standard</u>	<u>Evidence Verifying Compliance</u>
4.1 The process for identifying students has several stages.	Copy of written procedures
4.2 Identification procedures are clearly stated, uniformly implemented, and communicated to the entire school staff.	Copy of written procedures
4.3 A committee chaired by a trained specialist in gifted education and including administrators, teachers, and/or counselors collects and analyzes data, maintains appropriate records, and makes professional decisions on placement of students.	List of members
4.4 The identification process yields information obtained through a variety of procedures and from many independent sources.	List of instruments and procedures

- | | |
|--|---|
| 4.5 Student placement decisions are based on multiple criteria. No single criterion or cut-off score is used to exclude a student from placement. | Copy of written procedures and data on nominated students |
| 4.6 Instruments and procedures used in the identification process are non-discriminatory with respect to race, cultural or economic background, religion, national origin, sex, or handicapping condition. | List of instruments and procedures |
| 4.7 Instructionally useful information about individual students obtained during the identification process is communicated to the instructional staff regardless of final placement decisions. | Copy of procedures for dissemination of information |
| 4.8 Written identification and placement procedures include parental involvement. | Copies of consent forms
Written appeals procedures |
| 4.9 Identification of gifted/talented students is an ongoing process extending from school entry through grade 12. | Copy of written procedures
Records of placement |

5.0 Program Options

Gifted children are as different from each other as they are from other children. They have needs for differing amounts of homogeneous grouping, and at various stages of development their interests differ. No single program option can ever meet all of the needs of all gifted children.

Programs should be systematically developed, with long-range goals that are coordinated to guide the development of gifted students from the time they are identified through graduation from high school. There must be consistency among the program's components; curriculum objectives and evaluation procedures need to be based on the district's philosophy of education.

Most program alternatives will include some kind of combination of enrichment (experiences which supplement the regular curriculum), acceleration (activities designed to allow students to progress at a rate faster than average), and guidance (planned activities that promote understanding of the self and one's relationship to others). Districts are encouraged to be innovative in designing programs that combine these elements in ways that best meet the needs of their gifted students.

In whatever form the program for the gifted is organized, there must be clear delineation of roles, responsibilities, and coordination procedures. A written table of organization outlining lines of responsibility and authority must be developed.

Possible administrative arrangements for providing programs for the gifted are listed below. They represent the organizational patterns used in gifted programs across the United States. Please note that these are descriptions of ways to organize program options, not prescriptions.

I. Modifications in Regular Classroom

- A. Cluster grouping: Groups of gifted students are placed in a regular classroom. A trained teacher modifies instruction and curriculum to meet their special needs (ELEMENTARY). **Maximum class sizes: 20 students, kindergarten; 23 students, grades 1-3; 25 students, grades 4-6.**
- B. Consultant teacher: A trained teacher of the gifted meets regularly with identified students and designs activities to meet their needs. The trained teacher works with the regular classroom teacher in delivering services to identified gifted students by developing management plans, providing demonstration lessons in the classroom, and supervising gifted students' progress (ELEMENTARY/SECONDARY). **A consultant teacher may supervise a maximum of 75 students.**

II. Pull-out Programs

- A. Resource room: Gifted students participate in classes in which they receive instructional services different from those normally provided in the regular classroom. They have the opportunity to work at the level of their abilities and in their area of interest or talent (ELEMENTARY/SECONDARY). **Recommended class size is 10-12.**
- B. Resource center: Students are transported on a regular basis to a center which serves a local district, county, or region. Instructional services are the same as those in a resource room (ELEMENTARY/SECONDARY). **Recommended class size is 10-12.**

III. Special Classes

- A. Self-contained classroom: Gifted students are provided instructional services different from those normally provided in the regular classroom. All basic subject areas are included. Resources of the regular education program, such as art, music, and physical education, are used to supplement the gifted program (ELEMENTARY). **Maximum class sizes: 20 students, kindergarten; 23 students, grades 1-3; 25 students, grades 4-6.**
- B. Honors or advanced classes: Students of high ability, though not necessarily identified as gifted, are placed in a class in which the curriculum focuses on higher levels of thinking and complexity (SECONDARY). **Maximum class size is 30 students.**
- C. College Board Advanced Placement classes: Students have the opportunity to pursue college-level studies while still in secondary school and to receive advanced placement and credit, or one of these, upon entering college (SECONDARY). **Recommended class size is 17-20 and in no case may exceed 30.**
- D. International Baccalaureate: The program is sponsored by the International Baccalaureate Office in Switzerland and begins at the eleventh grade level (SECONDARY). **Maximum class size is 30 students.**
- E. Special classes/seminars: Courses are offered to identified gifted students. These may be in subject matter fields not normally offered in high school or may be interdisciplinary in nature (SECONDARY). **Recommended number of students per period is 15-20.**

BEST COPY AVAILABLE

IV. Special Schools

- A. Special school: School serves only identified gifted students at local, county, or regional level.
- B. School-within-a school: School for gifted students functions as a separate unit although housed within a regular school complex.
- C. Magnet schools: School (or component within a school) which is designed to attract students with high interest/ability to its particular curriculum.

V. Extra-School Opportunities

- A. Mentorship: Student works on a regular basis with an adult resource person, matching student interests and needs with the expertise of the mentor (ELEMENTARY/SECONDARY).
- B. Concurrent enrollment in high school and college: Student is enrolled in college courses while continuing to attend high school (SECONDARY).

Districts may choose to implement more than one of the foregoing patterns. However, the maximum total number of identified gifted students for whom a full-time teacher of the gifted may provide direct services is 75. Waivers from this requirement, based upon program options offered, may be requested by individual districts.

Standard

Evidence Verifying Compliance

- | | |
|--|-------------------------------|
| 5.1 Program is systematically developed, with long-range goals that are coordinated to guide the development of gifted students from the time they are identified through graduation from high school. | Written program goals |
| 5.2 A table of organization is developed which clearly delineates roles, responsibilities, and coordination procedures. | Copy of table of organization |
| 5.3 Identified students' placement in program options is based on their abilities, needs and interests, and resources of the district. | Student assessment data |
| 5.4 Administrative arrangements are used which promote interaction among gifted students and both their intellectual and chronological peers. | Schedule |

22

6.0 Curriculum

In making changes in a curriculum that has been geared toward the ability levels of average learner, it is important to avoid simply "more of the same." Curriculum for the gifted must differ not only in degree but in kind. It should be coordinated with the district's basic curriculum objectives but must be in place of rather than in addition to required classroom work. Students should not be penalized for being identified as gifted by being given extra work. Teachers should be sensitive to student interests and talents in planning activities.

To assure that curriculum opportunities are appropriate to the abilities, accomplishments, and interests of gifted students, modifications should be made in content, process, and/or product.

Content refers to the body of knowledge presented to the student. Differentiation may be made in level of complexity, pace of learning, or degree of abstractness. Another means of differentiation is the study of topics not ordinarily a part of the regular curriculum.

The process skills which should be a part of the curriculum for gifted students include critical thinking, creative thinking, independent learning skills, problem-solving, and logic. Students in a gifted program should be expected to achieve a greater degree of proficiency in these skills than would be required in the basic curriculum.

Products are the end result of a learning experience. Gifted students should be encouraged to develop products that use new techniques, materials, and forms. They should be encouraged to select a specific area of interest and talent and pursue an intensive study rather than be assigned a prescribed problem. Results of such investigations should be communicated to an appropriate audience.

Curriculum objectives must be carefully sequenced for continuity. Development of a scope and sequence will avoid the "grab-bag" approach which has characterized some programs for the gifted.

More and more commercially prepared materials that are targeted toward gifted students are available. Certain cautions are advised in their selection. Materials should extend learning and avoid redundancy. They should provide challenging activities. Authorship is sometimes a good indicator of the caliber of the material. An actual examination or trial use is recommended. This exploration may be possible through the use of resource libraries which several regional educational cooperatives have established. Each district should establish guidelines for evaluation of instructional materials. A sample checklist is contained in Appendix E.

Standard

Evidence Verifying Compliance

- | | |
|--|--------------------------------|
| 6.1 Curriculum for the gifted extends or replaces the regular curriculum. | Written curriculum description |
| 6.2 Curriculum is differentiated in content, process, and/or product. | Written curriculum description |
| 6.3 Curriculum has scope and sequence to assure continuity. | Written scope and sequence |
| 6.4 Guidelines for evaluation of materials and resources for the gifted are established and used in selecting those appropriate for differentiated learning. | Copy of guidelines |

7.0 Evaluation

Arkansas Standards for Accreditation require that each school use procedures to evaluate the effectiveness of educational opportunities provided for gifted and talented students.

Evaluation, as it is applied to the program for the gifted, involves both a determination of the program's effectiveness and an assessment of student growth. The purpose is to provide accurate, timely, and relevant information to decision-makers for improving program options offered gifted students.

The plan for evaluation should be developed when the program is being planned. This should ensure that program objectives are clear enough that progress can be assessed. It will also enable the coordinator to select or develop instruments that will measure progress. There are two purposes of evaluation: to provide information so that modifications and adjustments can be made in a program as it develops and to examine overall program effectiveness. The evaluation plan must contain procedures for assessment in both these areas. Only if the evaluation is carefully planned is it probable that really useful information can be obtained.

To make reasonable judgments about the effectiveness of various facets of the program, all components should be included in the overall evaluation plan--identification, staff development, program options, curriculum, community involvement, and the evaluation process itself. A variety of procedures should be used because different components of the program call for different techniques. Neither outcomes of the program nor attitudes of the participants should be ignored. Input should come from students, teachers, administrators, parents, school board members, and other community members.

All data collected must be reviewed. The evaluation results are not expected to be positive at all times, nor are they to be used to prove success. Rather the results should be used to make adjustments and modifications in the gifted program.

The results should be compiled into a report and disseminated to appropriate audiences, including the school board, school faculty and administration, parent groups, and community civic clubs.

Evaluation of student growth must be based on appropriate and specific criteria and should include self-appraisal and criterion-referenced and/or standardized instruments. It must be kept in mind that programs for the gifted deal with a unique population. Gifted students' progress cannot be fully assessed by standardized tests which have been normed on a heterogeneous group because these tests will not present a true picture of student growth in gifted students. In fact, if a student has scored at the top of the scale on a test, the phenomenon of "regression toward the mean" may result in a lower score on a retest. In choosing methods to measure student progress, care should be taken to ensure that the methods chosen: 1) are in agreement with program objectives; 2) involve the student in self-evaluation; 3) consider process as well as product; and 4) are appropriate and valid assessments of the population being tested.

When a student is enrolled in more challenging, demanding courses in high school, note of this must be made on the student's transcript.

<u>Standard</u>	<u>Evidence Verifying Compliance</u>
7.1 The evaluation process provides accurate, timely, and relevant information to decision-makers for improving program options offered gifted students.	Written evaluation plan
7.2 A plan for evaluation is developed at the time the program is planned.	Written evaluation plan
7.3 All components of the gifted/talented program are evaluated: identification, staff development, program options, curriculum, community involvement, and the evaluation process.	Written evaluation plan
7.4 Data for evaluation are obtained from a variety of instruments, procedures, and information sources.	Copies of evaluation instruments
7.5 Evaluation findings are compiled, analyzed, and communicated to appropriate audiences.	Evaluation report
7.6 Student progress is assessed, with attention to mastery of content, higher level thinking skills, creativity, and affective growth.	Policy for student evaluation
7.7 Advanced content courses are noted on student transcripts.	Policy for student evaluation

A P P E N D I C E S

27

BEST COPY AVAILABLE

APPENDIX A

Community Resource Survey

The _____ School District is compiling a list of community resources that could be used in the gifted program in our school. Many persons in our community have special interests, hobbies, professions or vocations that could be shared with the students.

If you would be willing to share your expertise and knowledge with the students in our schools, please complete the following information and have your child return this form to his/her homeroom teacher. This information will be included in the community resource guide. Thank you.

Name _____ Company/Employer _____

Local Address _____ Business Address _____

Home Phone _____ Business Phone _____

Instructions: Please circle the appropriate response in the right hand margin and fill in blanks when applicable.

1. What is your occupation? _____

2. Could groups of students visit your place of work?YES NO
a. How many at one time? _____
b. At what time? _____ A.M. _____ P.M.
c. Is there an admission fee?YES NO
d. If answer to (c) is yes, list amount. _____

3. Would you or a representative of your firm be willing to come to school to talk about the type of work done in your business or profession?YES NO

4. Do you have a hobby or other interest area that you would be willing to demonstrate or talk about to students? If yes, describe:
_____ YES NO

5. If you prefer to not make an oral presentation, do you have material that could be displayed? If yes, describe:YES NO

6. If you have traveled,
a. Would you be willing to talk about any places you have been?YES NO

b. If your answer to (a) is yes, please list below the places you have visited and check any illustrative material you may have.

Country and/or state	Slides Films	Clothing	Products	Handicrafts	OTHER (Please write)
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

7. For what group(s) do you think your presentation or materials will be most suitable?

Elementary _____ Junior High _____ Senior High _____

8. Please suggest names of other people who have expertise in an area and might be willing to share it in a program for gifted education.

FROM Guidelines for Education of the Gifted, State of South Dakota, 1984.

APPENDIX B-1

Incentives to Encourage Participation in Inservice/Staff
Development for Education of the Gifted

Inservice programs that offer no incentive system are usually among the least successful. Planners and implementers of education for the gifted should consider not only the conventional methods of encouragement toward ISD participation, but should explore nontraditional alternatives for eliciting participation and long-term involvement.

Suggestions to consider for incentives include:

- A. Paid graduate credit
- B. Progress on a locally designed professional growth plan
- C. Credit on a salary schedule
- D. Inservice equivalency
- E. Mandatory attendance as a school district requirement
- F. Credits toward yearly evaluation of participant
- G. Stipend
- H. Appeal to curiosity
- I. Promise of make-and-take product
- J. Free meals
- K. Free materials to keep for classroom use
- L. Door prizes
- M. Assurance of attendance by district administrator(s)
- N. Listing of ISD participation in district educational goals
- O. Parent requests for staff participation
- P. Release time
- Q. Provision of a substitute to fulfill participant's professional duties
- R. Statement from local business men and women that improved educational programs will improve the business community
- S. Reduced teaching load for long-term participants in ISD
- T. Assurance that ongoing support to participants will be provided
- U. Certification renewal
- V. Assurance that the ISD will be built from needs assessment data.

Incentives for ISD must be predetermined, specific, and, of course, appealing to participants.

From Professional Training Institute - National Association for Gifted Children

APPENDIX B-2

EFFECTIVE INSERVICE/STAFF DEVELOPMENT

DO'S

- Do conduct a needs assessment.
- Do present at appropriate awareness level.
- Do set goals.
- Do arrive prepared.
- Do arrive early.
- Do check materials ahead of time.
- Do arrange pleasant surroundings.
- Do carry a "survival box" (spare bulbs, chalk, tape, 3-prong outlet, transparency pencil, etc.)
- Do provide intrinsic and extrinsic motivators
- Do develop rapport with participants' backgrounds and experiences.
- Do be enthusiastic.
- Do summarize often, in different ways.
- Do give everyone a chance to contribute.
- Do make eye contact often.
- Do give specific praise to participants.
- Do encourage administrators to attend.
- Do be flexible.
- Do provide handouts.
- Do remember that adults have limits on attention span and physical needs.
- Do be prepared to make modifications.
- Do set guidelines for handling questions. During? After?
- Do keep the group task-oriented.
- Do select times, days that suit as many participants as possible.
- Do provide opportunity for follow-up.
- Do follow up on promises.
- Do summarize.
- Do use the evaluations to plan better inservices.

DON'TS

- Don't play the "expert" role.
- Don't use poor quality audiovisuals.
- Don't lecture.
- Don't be afraid to say "I don't know."
- Don't demean efforts, expertise of participants.
- Don't treat inservice teachers as preservice teachers.
- Don't personalize it if people criticize or interject negative statements.
- Don't try to do too much at one time.
- Don't try to do too much at one time
- Don't assume that all teachers have the same capabilities and interests.
- Don't introduce isolated activities without discussion of learning conditions in which they can be used.
- Don't allow individuals to divert the group's attention with personal agenda.
- Don't be vague and unclear.
- Don't get unnecessarily technical.
- Don't be too simplistic.
- Don't schedule at an unpopular time.
- Don't run overtime!!!

From Professional Training Institute - National Association for Gifted Children

APPENDIX C

Duties of Coordinators of Gifted Programs

The Coordinator for the Gifted Program would:

1. plan the overall structure of the district gifted program in consultation with teachers, administrators, and parents.
2. take care of all administrative paper work inherent in the district program (such as writing proposals for funding, evaluating data, etc.).
3. interview and recommend teachers for the program for either integrated classes or special classes.
4. conduct teacher inservice in gifted education for identification and implementation of programs.
5. conduct parent meetings for inservice in gifted education and encourage active participation in the district program.
6. establish case studies on all students who have been screened for gifted identification.
7. conduct assessments of all students identified as gifted and establish profiles.
8. chair the selection committee for identification of students for the gifted program.
9. organize a mentor program as a part of the opportunities available to the gifted in the district.
10. arrange for field trips that are needed for the gifted program.
11. contact local colleges, universities, and museums for educational experiences available to gifted students advanced in areas not available within the local school.
12. provide support and resources for teachers with gifted students in their classrooms.
13. teach special classes for gifted students in small districts or occasionally in large districts.
14. evaluate the district program and individual school programs to strengthen service to gifted students by obtaining data from teachers, students, and parents.
15. provide a liaison between parents and the school, regular teachers and special teachers; the administration, the program personnel, and community at large. Communicate regularly with the school board.
16. serve on administrative committees with general education responsibilities to provide advocacy for the gifted learner (textbook selection committee, etc.).
17. attend workshops and meetings to stay informed about current ideas and practices in gifted education.

APPENDIX D

Possible Assessment Instruments

This list is not exhaustive and does not imply recommendation. It includes tests used in gifted programs in Arkansas. **More information may be obtained in Buros, Mental Measurement Yearbook.**

TESTS OF ABILITY

1. **Boehm Test of Basic Concepts - Revised (Boehm - R) 1986**

Individual or Group	The Psychological Corporation
Grades K-2	555 Academic Court
Preschool Version (Ages 3-5)	San Antonio, TX 78204
also available	

2. **Cognitive Ability Test (CogAT) 1972**

Group	Riverside Publishing Company
Primary (K-3) and	8420 Bryn Mawr Avenue
multilevel (3-12)	Chicago, IL 60631
editions	

3. **Columbia Mental Maturity Scale (CMS) 1972**

Individual	The Psychological Corporation
Ages 3 1/2 - 10	555 Academic Court
	San Antonio, TX 78204

4. **Cornell Critical Thinking Test 1985**

Group	Midwest Publications
Grades 4-12	P.O. Box 448
	Pacific Grove, CA 93950

5. **Developing Cognitive Abilities Test (DCAT) 1981**

Group	American Testronics
Grades 2-12	P.O. Box 2270
	Iowa City, IA 52244

6. **Kaufman Assessment Battery for Children (K-ABC) 1983**

Individual	American Guidance Service
Ages 2 1/2 - 12 1/2	Publishers' Building
Trained examiner required	P.O. Box 99
	Circle Pines, MN 55014

7. Kuhlmann - Anderson Tests (KA) 1981

Group
Grades K-12

Scholastic Testing Service
480 Meyer Road
P.O. Box 1056
Bensenville, IL 60106

8. Otis-Lennon School Ability Test (OLSAT) 1982

Group
Grades 1-12

The Psychological Corporation
555 Academic Court
San Antonio, TX 78204

9. Peabody Picture Vocabulary Test - Revised (PPVT-R) 1981

Individual
Ages 2 1/2 - Adult

American Guidance Service
Publishers' Building
P.O. Box 99
Circle Pines, MN 55014

10. Raven Progressive Matrices 1977

Individual or Group
Ages 8 - 65

The Psychological Corporation
555 Academic Court
San Antonio, TX 78204

11. Ross Test of Higher Cognitive Processes 1976

Group
Grades 4,5,6

Academic Therapy Publications
20 Commercial Blvd.
Novato, CA 94947

12. Slosson Intelligence Test (SIT) 1981

Individual
Ages 2 - adult

Slosson Educational Publication, Inc.
P.O. Box 280
East Aurora, NY 14052

13. Stanford - Binet Intelligence Scale (S-B) 1972

Individual
Ages 2 up
Trained examiner required

Riverside Publishing Company
8420 Bryn Mawr Avenue
Chicago, IL 60631

14. Structure of the Intellect (SOI) Test 1978

Group
Grades 2-12

SOI Institute
343 Richmond Street
El Segundo, CA 90245

15. Watson - Glaser Critical Thinking Appraisal 1980

Group
Grades 9-12, College, Adult

The Psychological Corporation
555 Academic Court
San Antonio, TX 78204

16. Wechsler Intelligence Scale for Children Revised (WISC-R) 1974

Individual
Ages 6-16
Trained examiner required

The Psychological Corporation
555 Academic Court
San Antonio, TX 78204

ACHIEVEMENT TESTS

1. California Achievement Tests 1978

Group
Grades 1-12

CTB McGraw Hill
Del Monte Research Park
Monterey, CA 93940

2. Iowa Tests of Basic Skills 1985

Group
Grades K-9

Riverside Publishing Company
8420 Bryn Mawr Avenue
Chicago, IL 60631

3. Metropolitan Achievement Tests (MAT6) 1985

Group
Grades K-12

The Psychological Corporation
555 Academic Court
San Antonio, TX 78204

4. Peabody Individual Achievement Test (PIAT) 1970

Individual
Grades K-12

American Guidance Service
Publishers' Building
P.O. Box 99
Circle Pines, MN 55014

5. Sequential Tests of Educational Progress (STEP) 1979

Group or Individual
Grades 3-12

Addison-Wesley Testing Service
2725 Sand Hill Road
Menlo Park, CA 94025

6. SRA Achievement Series 1978

Group
Grades K-12

Science Research Associates, Inc.
155 N. Wacker Drive
Chicago, IL 60606

7. Stanford Achievement Test 1984

Group
Grades 1-10

The Psychological Corporation
555 Academic Court
San Antonio, TX 78204

CREATIVITY TESTS

1. Creativity Assessment Packet (CAP) 1980

Group or Individual
Ages 8-18

D.O.K. Publishers
P.O. Box 605
East Aurora, NY 14052

2. Group Inventory for Finding Creative Talent (GIFT) 1980

Group or Individual
Grades K-6

Educational Assessment Service, Inc.
Route 1, Box 139A
Watertown, WI 53094

3. Group Inventory for Finding Interests (GIFFI) 1980

Group
Grades 6-12

Educational Assessment Service, Inc.
Route 1, Box 139A
Watertown, WI 53094

4. Thinking Creatively in Action and Movement (TCAM) 1981

Individual
Ages 3-8

Scholastic Testing Services, Inc.
480 Meyer Road
P.O. Box 1056
Bensenville, IL 60106

5. Torrance Test of Creative Thinking - Figural 1972

Group
Grades K-12

Scholastic Testing Service, Inc.
480 Meyer Road
P.O. Box 1056
Bensenville, IL 60106

6. Torrance Test of Creative Thinking - Verbal 1972

Group or Individual
Grades K-12

36

Scholastic Testing Service, Inc.
480 Meyer Road
P.O. Box 1056
Bensenville, IL 60106

APPENDIX E

Criteria for Evaluating Curriculum Materials for Gifted and Talented Students

1. Individualization

Allows for individualization according to students' interests, learning styles and levels of development.

2. Organization

Involves the student, at least to some extent, in planning and evaluating his or her own work.

Allows for individual as well as small group projects.

3. Process

Fosters the development of flexibility, inquiry, discovery, investigation, creativity.

Develops skills of analysis, synthesis, evaluation, creative, divergent thinking.

Encourages use of higher level resources beyond the classroom.

4. Product Oriented

Encourages productive, creative outcomes rather than reproductive exercises.

Offers options for exploring real life problems.

5. Learning Environment

Fosters shift in responsibility from teacher to student.

Provides access to higher level resources.

Encourages role of teacher as facilitator, rather than focus of learning.

Value originality and divergence above conformity.

Educational Improvement Center-South, Sewall, New Jersey

Appendix F

STATE and NATIONAL ACTIVITIES CURRENTLY USED IN ARKANSAS WITH GIFTED STUDENTS

American Junior High School Mathematics Examination (AJHSME):

American Mathematics Competitions (AMC), Professor Walter E. Mientka, Executive Director, Dept. of Mathematics and Statistics, University of Nebraska, Lincoln, NE 68588-0322. AJHSME is a national mathematical competition designed to test problem-solving abilities of students in grades 5-8.

Arkansas Council of Teachers of Math (ACTM) Contest: Dr. Charles Watson, Arkansas Department of Education, #4 Capitol Mall, Little Rock, AR 72201. The ACTM annually sponsors regional contests and a State High School Mathematics Contest in the areas of Algebra I, Geometry, Algebra II, Trigonometry, and Advanced Math.

Arkansas Spelling Bee: Sue Harvey, Educational Services, Arkansas Gazette, P. O. Box 1821, Little Rock, AR 72203. The Arkansas Spelling Bee is a spelling competition for K-8 students on the local, state, regional and national levels. Sixty-five Arkansas counties participate through the Gazette; the remaining seven are sponsored by a Memphis newspaper.

Arkansas State Media Festival: Arkansas Audio-Visual Association, Jerry Eads, Special Services Supervisor, Arkansas Department of Education, #4 Capitol Mall, Little Rock, AR 72201. An annual media production festival designed to involve students K-12 in the creative production of five areas of audio-visual media. Winners at the state level may compete at the national and international levels.

Close Up Arkansas: 22nd & Main, North Little Rock, AR 72114. Close Up Arkansas is a non-partisan, non-profit educational program designed to involve Arkansas high school students in an in-depth study of state government.

Duke Talent Identification Program: Dr. Robert N. Sawyer, Director, West Duke Building, Duke University, Durham, NC 27708. This program helps schools meet the needs of intellectually gifted students by conducting an annual Talent Search which identifies and nurtures seventh graders who score at or above the 97th percentile on the national norms of a standardized test.

Future Problem Solving: National Director: Dr. Anne B. Crabbe, FPSP, St. Andrews College, Laurinburg, NC 28352. State Director: Dr. A. R. Steelman, Box U-C, University of Central Arkansas, Conway, AR 72032. The Future Problem Solving Program provides a K-12 interdisciplinary approach to studying and solving future problems and may function as a year-round curriculum project and as an interscholastic competition with local, state and national bowls.

Governor's Academic Competition - Arkansas Quiz Bowl: Brenda Matthews, Program Administrator, Arkansas Department of Education, #4 Capitol Mall, Little Rock, AR 72201. This statewide academic competition for high school students is authorized by Act 35 of 1983. It is designed to encourage academic excellence in all areas of the curriculum by using quick recall in a game format which has questions that range from the trivial to the profound.

Junior Great Books: The Great Books Foundation, 40 East Huron Street, Chicago, IL 60611. Junior Great Books is a program of interpretive reading and discussion for students grades 2-12. It provides opportunity for adult volunteers to help students interpret, discuss, and enjoy literature.

Knowledge Master: Academic Hallmarks, P. O. Box 998, Durango, CO 81302. Knowledge Master is a national academic competition for junior and senior high students who compete using an Apple II computer and a special contest disk provided by Academic Hallmarks.

Math Olympiads: Dr. George Lenchner, Mathematical Olympiads for Elementary Schools, Forrest Road School, Valley Stream, N.Y. 11582 (516-791-2220, 21). Math Olympiads is a national mathematics competition which involves elementary students with creative problem-solving in math contests five times annually.

Mathcounts: National Society of Professional Engineers Information Center, 2029 K. St., N.W., Washington, D. C. 20006 (202-463-2310). Arkansas Society of Professional Engineers, Suite 618, Medical Arts Building, 1124 Marshall, Little Rock, AR 72202 (501-376-4128). Mathcounts is a national mathematics contest which seeks to provide 7th and 8th graders with the motivation to achieve competency in math and the reinforcement derived from peer and public recognition of math competency.

Model United Nations: Mr. Simms McClintock, Director, Model U. N., University of Central Arkansas, Department of Political Science, P. O. Box 1755, Conway, AR 72032. Model U. N. is a political science/social studies program for students grades 10-12. Five-member teams research an assigned country and write resolutions on key world issues to be presented to the "Model U. N."

Odyssey of the Mind: OM Association, Inc., P. O. Box 27, Glassboro, N. J. 08028. The Odyssey of the Mind Program is an international competition that is used to stimulate and develop students' creative problem-solving abilities, K-12.

Stock Market Game: Mary Beth Henderson, Newspaper in Education Coordinator, Arkansas Gazette, P. O. Box 1821, Little Rock, AR, 72203. The Stock Market Game, sponsored by the Arkansas Gazette, is a computerized game through which students learn "first hand" about the investment world by reading the newspaper and investing an imaginary \$100,000 in the New York and American stock exchange over a ten-week period.