DOCUMENT RESUME

ED 065 123 JC 720 185

AUTHOR Vaughan, George B.
TITLE Learning in Transit at Mountain Empire Community College.
INSTITUTION Mountain Empire Community Coll., Big Stone Gap, Va.
PUB DATE 72
NOTE 20p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Bus Transportation; *Commuting Students; Educational Innovation; *Instructional Innovation; *Junior Colleges; *Mobile Classrooms; *Mobile Educational Services
IDENTIFIERS *Virginia

ABSTRACT

This proposed program at Mountain Empire Community College (MECC, Virginia) is designed to teach credit courses to students while they are traveling to and from college. About 86% of the potential student population at MECC will spend from one to over three hours a day commuting. Six adequately equipped buses would facilitate a productive use of this time by offering individualized instruction in transit. It would decrease transportation cost and offer educational and cultural opportunities to more people. Stable classrooms for those who cannot travel, mobile counseling vans, and trips to concerts and other cultural offerings are other services these buses would provide. Related topics discussed are the college's stance on instruction and instructional accountability, evaluation of the program, preparation of the instructors to mobilize learning, "block" scheduling, student obligations, and the reasons MECC was chosen for the project. (RN)

LEARNING IN TRANSIT

AT

MOUNTAIN EMPIRE COMMUNITY COLLEGE

1972

Prepared By:

Dr. George B. Vaughan
President
Mountain Empire Community College
Big Stone Gap, Virginia

LEARNING IN TRANSIT

STATEMENT OF THE PROBLEM

Today, the commuter college has put quality post-high school education within reach of a great number of people who would not otherwise have had the opportunity to attend college. This is true in Virginia, where, beginning with the 1972 fall quarter, every citizen of the state will be within commuting distance of a comprehensive community college. However, commuting does not necessarily carry the same connotation in a rural area that it does in an urban area.

Mountain Empire Community College, located near Big Stone Gap, is part of the Virginia Community College System and is founded on the belief that most citizens can profit from some type of post-high school education. The college is a commuter college which will serve the counties of Lee, Scott, Wise, Dickenson (partial), and the city of Norton. (See attachment 1.) Relatively speaking, the college's service area represents a large geographic area; moreover, in the southwestern section of the state, travel is difficult. (See attachment 2.) Only one area of the college's service area (southeastern Scott County) derives any significant benefit from four-lane roads. (See attachment 3.) Even with this situation, this populous southeastern section of the county is approximately 40 minutes driving time from the college.

Other sections of the college service district are served by two lane roads except for some minor exceptions. (See attachment 3.) In many cases the travel time will almost surely prevent people from attending college when one considers the time involved in simply getting to and from the college. For example, Thomas Walker High School in Ewing is located approximately 52 miles from the college. This represents a driving time of approximately one hour and twenty minutes. Similarly, in many other areas of the college's service district, distance must be measured in terms of time rather than miles. If one goes to the outlying areas of Lee, Wise, and Dickenson counties, the travel time is increased by as much as 30 minutes. In fact, only two high schools in the entire service district are located any closer than 30 minutes driving time from the college. (See attachments 4 and 5.) This means that approximately 86 percent of the college's potential student population will be traveling from one to over three hours a day in order to attend college. (See attachment 5.)

As the situation currently exists, then, students will spend entirely too much time commuting to and from the college. For example, a student who spends three hours a day traveling to and from the college is being asked to give up 15 hours a week out of his life just to get to college. From a practical point of view, very few people can afford to have 15 hours lifted from their busy life's schedule. From the point of view of wasted man hours, the sacrifice a student is being asked to make is tragic. On a 33-week academic year, the student traveling 15 hours a week has spent 495 hours or 12 forty-hour

weeks unproductively. These 12 weeks represent over one-third of the "forty-hour weeks" available in the nine-month period.

Yet, when one examines the situation, the comprehensive community college with its wide range of curriculums (See attachment 6.) represents a major avenue for the great majority of the students in this section of the state. But should this waste of time involved in travel be accepted as a necessary part of the solution to solving the post-high school educational needs of the area? We believe not.

A SOLUTION TO THE PROBLEM

Man hours spent traveling to and from a given area cannot be eliminated; however, they can be used <u>productively</u> Given the appropriate type of vehicle, students can learn while in transit. If Mountain Empire Community College can obtain six buses of the appropriate type with adequate equipment, we believe that <u>credit</u> courses can be taught while the students are traveling to and from the college.

To be most effective, each bus should meet the following specifications:

--Be essentially sound proof

--Have a power system that will furnish heating and cooling as well as provide the power for a number of audio-visual aids

--Have the seats equipped with earphones

--Have "airplane type" desks for each seat

--Have a pull-down screen located in the center of each bus

--Have one section that can be closed off from the remainder of the bus, thus allowing for group instruction

--Have an instructor's station with a slide projector, an overhead projector, and other audio-visual aids

--Have an instructor's station with a control panel and microphone

--Have a seating capacity of approximately 42

--Be equipped with various other audio tutorial aids such as tape decks, etc.

Each bus, so equipped, would become a classroom on wheels. It would be used for the following purposes:

1. The students can take credit courses while traveling to and from college.
2. Students can review work through taped lectures, while in transit.
3. The lecture sections of shop courses such as air conditioning and plumbing can be taught while in transit; the students would then move directly into the shop portion of their work upon arrival at the campus.
4. On selected days instructors will travel with the buses for the purpose of answering questions, checking progress of the students, and evaluating the effectiveness of transit instruction.
5. The buses will travel to the far reaches of the region and remain stationary for a number of hours for the purpose of teaching those who want only one course or who, for reasons such as old age, physical disabilities, or lack of time, cannot travel to college.
6. The buses will serve as mobile counseling vans; they will travel to the shopping centers, towns, high schools, and villages, for

the purpose of counseling with potential students. In fact, "instant admittance" is possible in many cases since professional counselors will accompany the buses and since the college operates under an open door policy.

7. The buses will be used to take MECC students to concerts at neighboring colleges and even to cities as far away as Atlanta, New York, and Washington, D. C. (Remember, the students can take trips and keep up with their studies in many cases since taped lectures, etc. can be used on the buses.)
8. The buses will be used to bring area residents to the college for the purpose of hearing concerts, seeing college-community drama productions, and for special forums on subjects such as local government, zoning, etc.
9. Finally, the buses, by reducing transportation costs, will make possible an education for a large number of people who otherwise could not afford to attend college. This is especially true for those students who need financial aid and who find that transportation costs absorb a large portion of the aid package.

To our knowledge, no attempt has as yet been made to teach such a large portion of a college's student body while in transit. Moreover, the approach under a consideration will provide individualized instruction whereby a student may review previous lectures, work on a course assignment, or simply listen to good music while traveling. The cassette tape makes the choice of material almost unlimited and relatively inexpensive once the initial investment is made in equipment and buses. The implications of a demonstration project of this nature are staggering for a nation concerned with "busing" a large number of students.

THE COLLEGE'S STANCE ON INSTRUCTION

One of the tenets upon which Mountain Empire Community College is being built is instructional accountability. An important part of every interview with potential faculty members consists of a thorough discussion regarding the instructor as a "manager of learning" as well as a "dispenser of knowledge." This means that each instructor should determine what skills and knowledge a student possesses when he enters a course and what skills and knowledge he is to possess when he satisfactorily completes a course. If a student is to move satisfactorily through a course, the course should be divided into blocks or instructional units. The student's progress--or lack of progress--must be evaluated after each unit of the course. If the student is unsuccessful, both he and the instructor must determine why he was unsuccessful. In essence, both the instructor and student will know what is expected from each course offered at the college. If a student is weak, he will be given additional time and help to correct these weaknesses. (See attachment 7 for one approach that will be used in this regard.)

Each course will be defined in assessible terms. Since each course will be sub-divided into instructional units, it will be much easier for the instructors at MECC to develop learning units that are adaptable to bus usage than would be true if the college were taking a more traditional approach to instruction. As a "manager of learning," the instructor will be able to provide short lectures with worksheets that can be used on a bus as well as in the

college's learning laboratory, or elsewhere. In fact, similar self-contained learning packets will be developed for use in the various instructional areas of the college as well as in transit. The buses, then, will become truly mobile classrooms which utilize many of the same instructional techniques as are used in the on-campus classroom.

In our opinion, each faculty member has a constant obligation to evaluate student progress and to revise each instructional approach to assure that learning takes place. Therefore, each subject offered in transit will be built around instructional practices which call for constant student, instructor, and course evaluation and give-and-take among faculty members and students to assure that the course is compatible with the philosophy of the institution and with individual student goals. Instructors will travel on the bus during certain class periods, thus allowing for immediate feedback on the effectiveness of the instruction.

As suggested earlier, we believe that this project will have great value as a demonstration project. However, to be successful as a demonstration project, it will be necessary to have a control group for each subject taught in transit. This will be done and will, in fact, arise quite naturally in some courses. Certain students will live a very short distance from the college and therefore will not ride a bus. These students may go directly to their class and begin their subject. For example, a student enrolled in the air conditioning curriculum will be expected to have lectures in conjunction with his shop work. The lecture might start at 9:00 a.m. for all students in the curriculum. Some students would have the lecture in an on-campus

class situations; others would hear the lecture while in transit. All members of the class would then proceed to the shop portion of the course and all would have their lecture completed. The "control group" would then become the students who have their lectures in the on-campus setting.

On the other hand, a complete English composition course can be taught in transit, with the instructor traveling on the bus when needed. Other English composition sections will be taught on campus. The on-campus group then becomes the control group. Other courses will operate in a similar manner.

By defining entry and exit level skills and by using assessible objectives, the instructor will know how well the student who takes a subject in transit does in comparison to the goals set for the course. Through the use of control groups, the instructor will know how well the student in transit is doing in comparison to the "on-campus student. Thus the guesswork on the success of the project will be held to a minimum. If transit instruction, then, is indeed successful, the results can be far-reaching.

It is important, in our opinion, for each student at the college, regardless of curriculum or learning environment, to know that he is getting the same quality instruction as other students receive. Ideally, the instruction received on the bus will be viewed as just another part of the instructional program offered each student.

PREPARING THE INSTRUCTOR TO "MOBILIZE" LEARNING

In the early stages of the project, instructors will be required to work additional hours to prepare instructional units that can be

taught while in transit. We believe this can be done during the summer months preceding the academic year. In this respect, MECC is indeed fortunate since it is a new college and will enroll only freshmen the first year. This means that the sophomore courses and the learning materials that go with them will be delayed for one year, to the obvious advantage of the instructors in their lesson preparations.

The instructors will necessarily need a great deal of help in developing their taped lectures and accompanying worksheets and other audio-visual presentations. Part of this instruction will be provided by the Dean of Instruction and Division Chairmen; however, a "Project manager" well versed both in writing and evaluating instructional objectives and in audio-visual technology will be needed in the early stages of the project. The "manager" will also be responsible for follow-up studies to determine the success of the courses taught in transit in relation to the non-transit courses.

BLOCK" SCHEDULING

MECC plans to offer three basic class schedules for its students. One "block" will begin at 8:30 a.m. and end at 2:30 p.m. Another will begin at 12:30 p.m. and end at 6:30 p.m.; and a third block will begin at 4:30 p.m. and end at 10:30 p.m. "Common courses" such as mathematics and English will be taught in the overlapping periods. The students living close to the college and those who work during the day will be encouraged to take courses during the evening block. Therefore, very little in-transit instruction will take place during the evening hours.

It is anticipated that the buses will travel to the outlying areas during the evening--and to a lesser degree during the daytime--to become stationary classrooms.

Attempts will be made to schedule classes in such a manner as to allow students to carry a full class load on a Monday-Wednesday-Friday schedule.

THE STUDENT'S OBLIGATION

It is anticipated that 80% of the students enrolled at MECC will need some financial aid. (See attachment 8.) Transportation costs will absorb a substantial portion of any financial aid package the college can provide these students. Through the use of buses, the transportation cost for each student can be reduced. A charge of $0.50 to $0.75 per day for each student will allow the college to begin to build a replacement and maintenance fund for the buses and will stretch the students' financial aid dollar considerably since the cost will be substantially cheaper than other means of transportation for most students. However, until the fund is built to a substantial level, it will be necessary to have an operating fund for the first year of the project.

WHY CHOOSE MOUNTAIN EMPIRE COMMUNITY COLLEGE FOR THE PROJECT

There are several good reasons why MECC is ideal for a demonstration project of this nature:

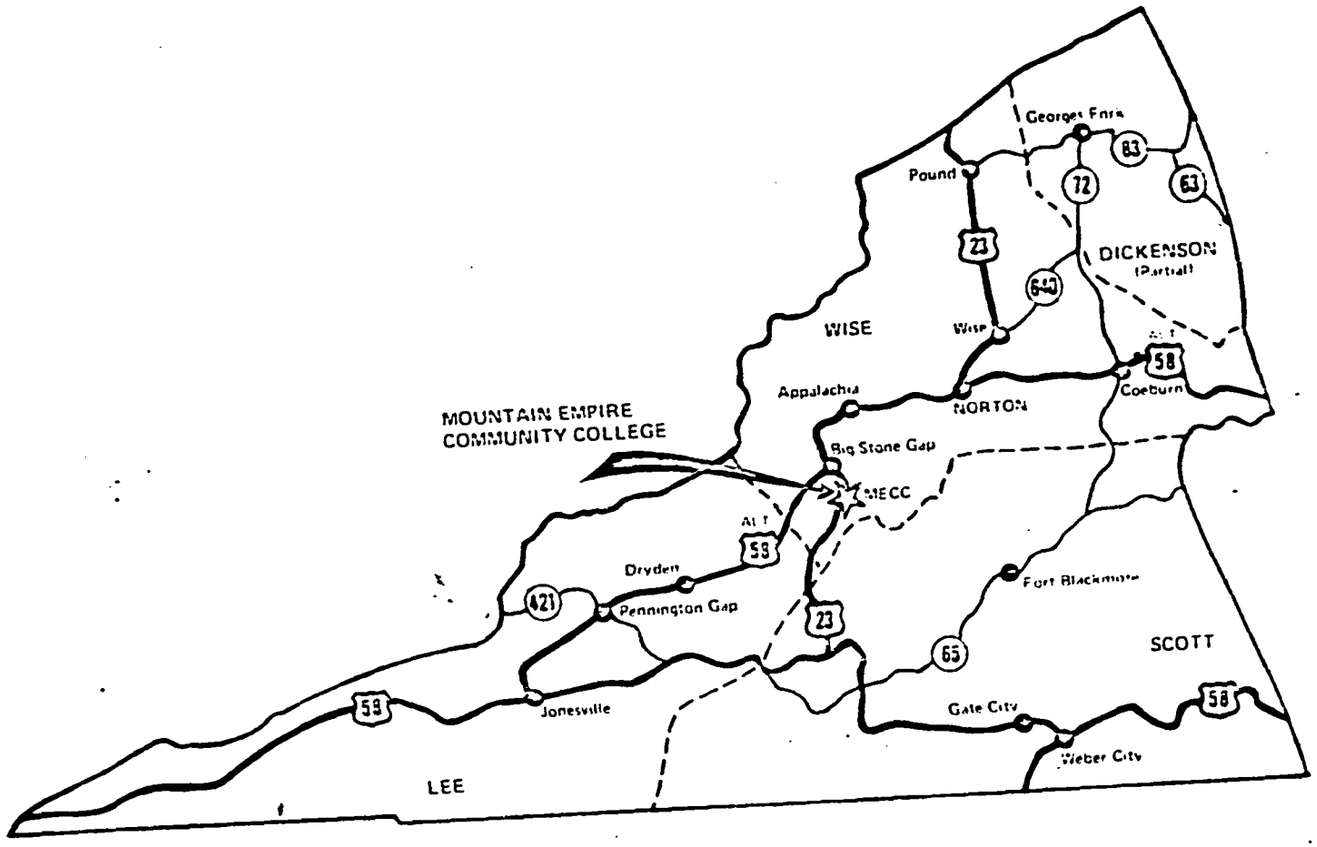
1. The college has an extremely difficult geographic region in terms of travel time.

2. Traditionally, a large portion of the people of the area have been unable to attend college because of lack of colleges near-by and the lack of financial resources.
3. The administration of the college is committed to an instructional program that lends itself to different time blocks and different instructional environments.
4. The faculty being presently employed are being employed partially on the basis of their willingness to define their courses in assessible terms and on their beliefs that if "students fail, the instructor has also failed."
5. The financial situation of the majority of the students is such that any savings in transportation costs will make it possible for more students to attend college.
6. Many adults are "locked-in" at the entry level of their jobs. Using the buses throughout the area will provide these adults with an opportunity to upgrade their skills.
7. Most cultural events require some travel time on the part of the people of the area. Often, those people who are economically deprived are also culturally deprived. The buses will take people to cultural events and will allow the students to listen to lectures covering new material, and to review material already covered while traveling to and from different points.
8. Work-study students at the college will be utilized in productive work. Driving the bus and operating certain pieces of audio-visual equipment on the buses will provide meaningful employment for the students.
9. As a new college, MECC has the opportunity to develop a philosophy of learning that dwells on learning objectives and not on "50-minute

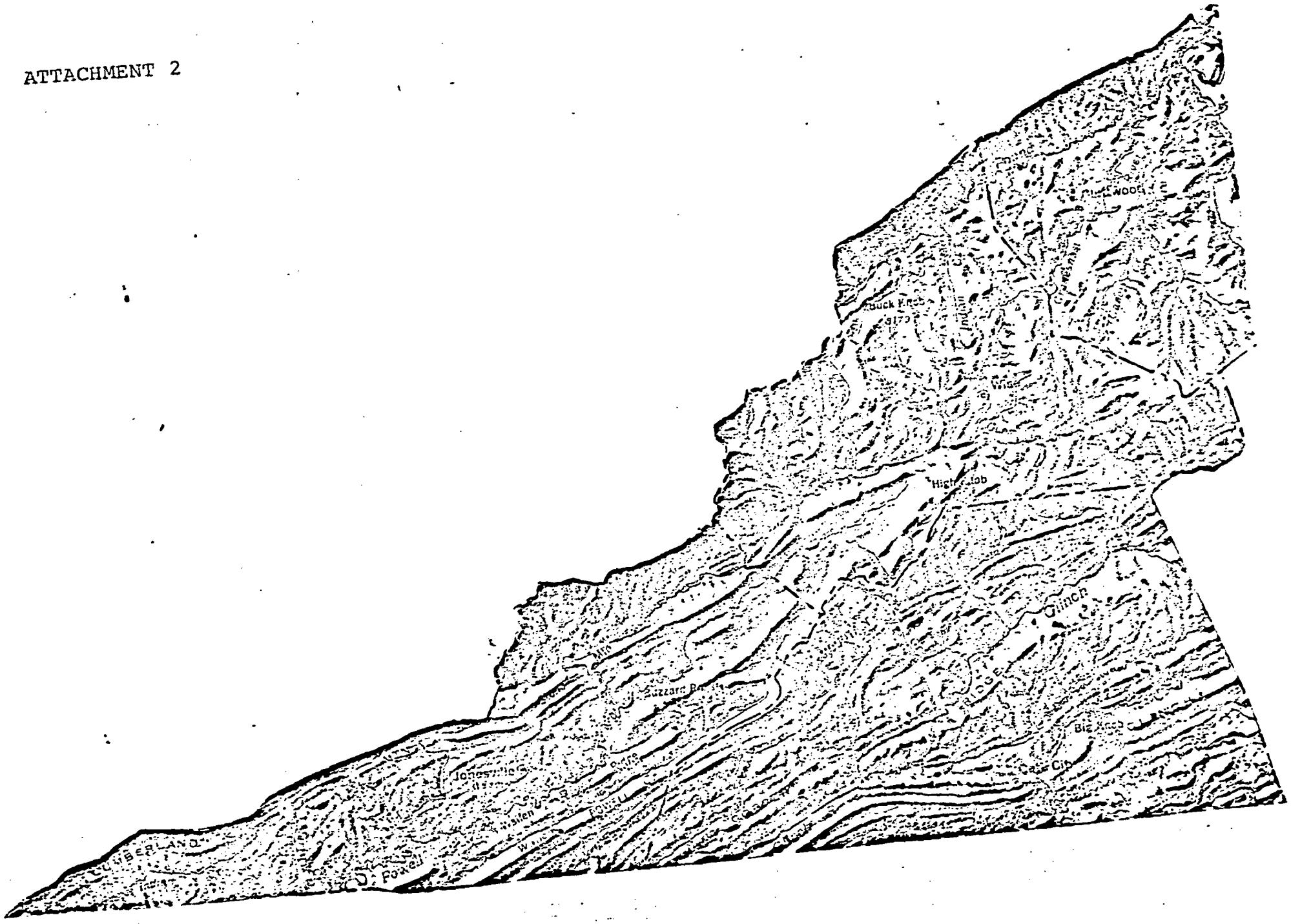
periods conducted in rectangular rooms."

10. The college is developing an instructional program that will include transit instruction as just another part of the curriculum and not conduct it wholly as an "experiment."

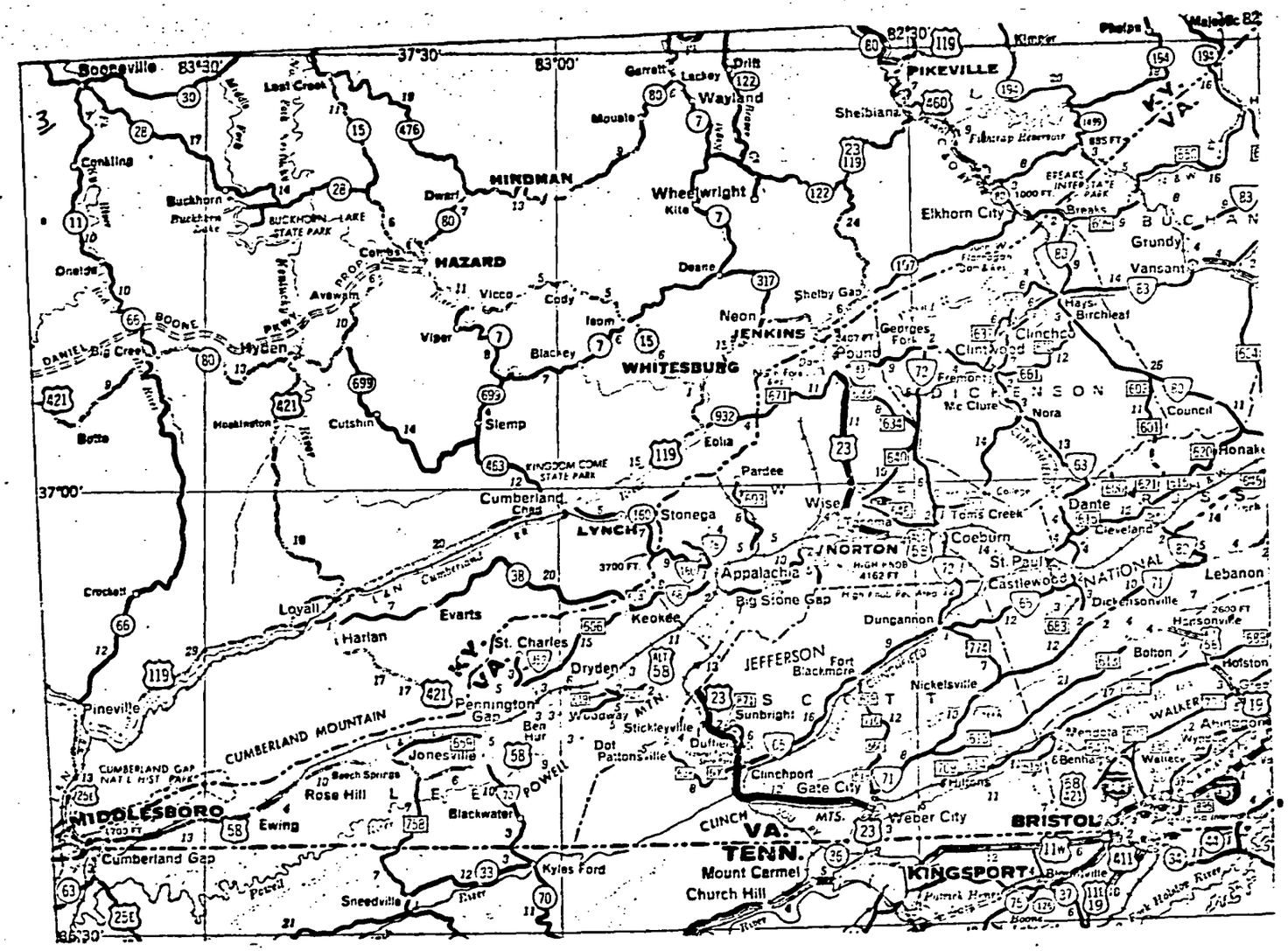
ATTACHMENT 1



ATTACHMENT 2



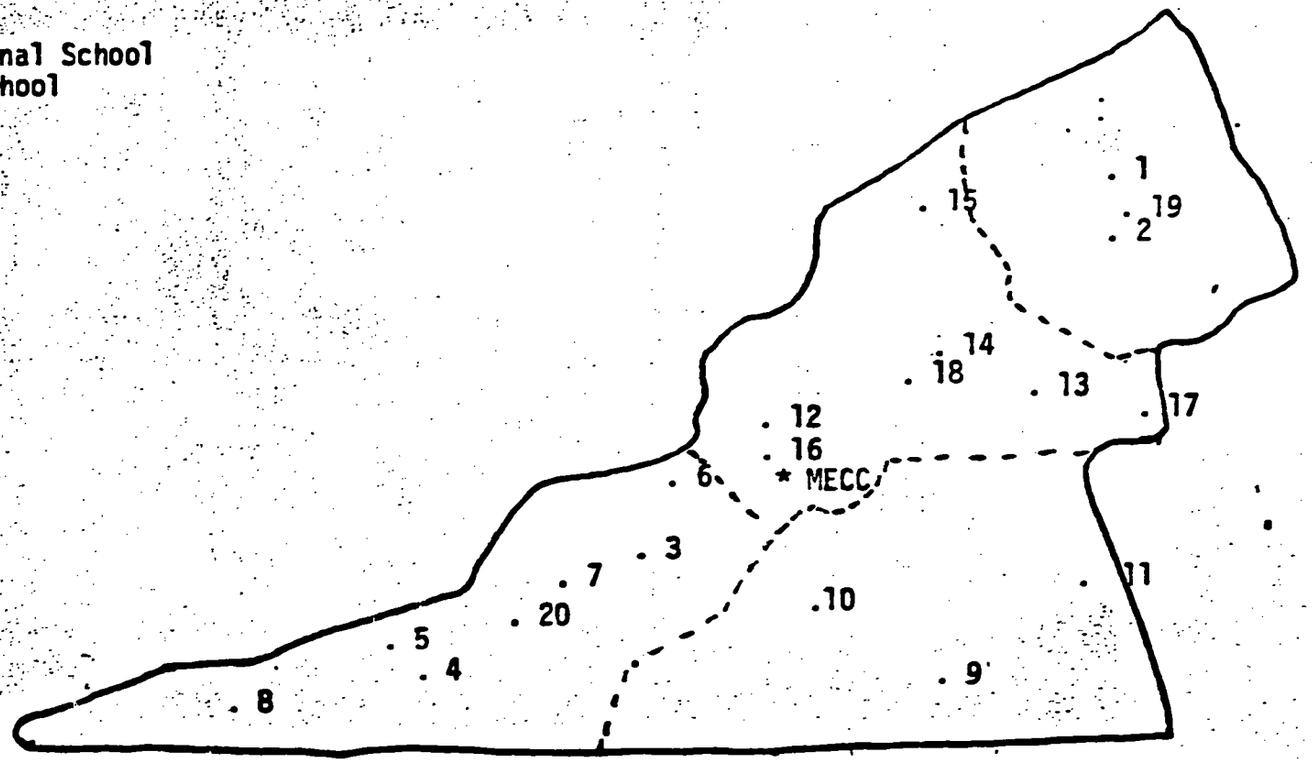
ATTACHMENT 3



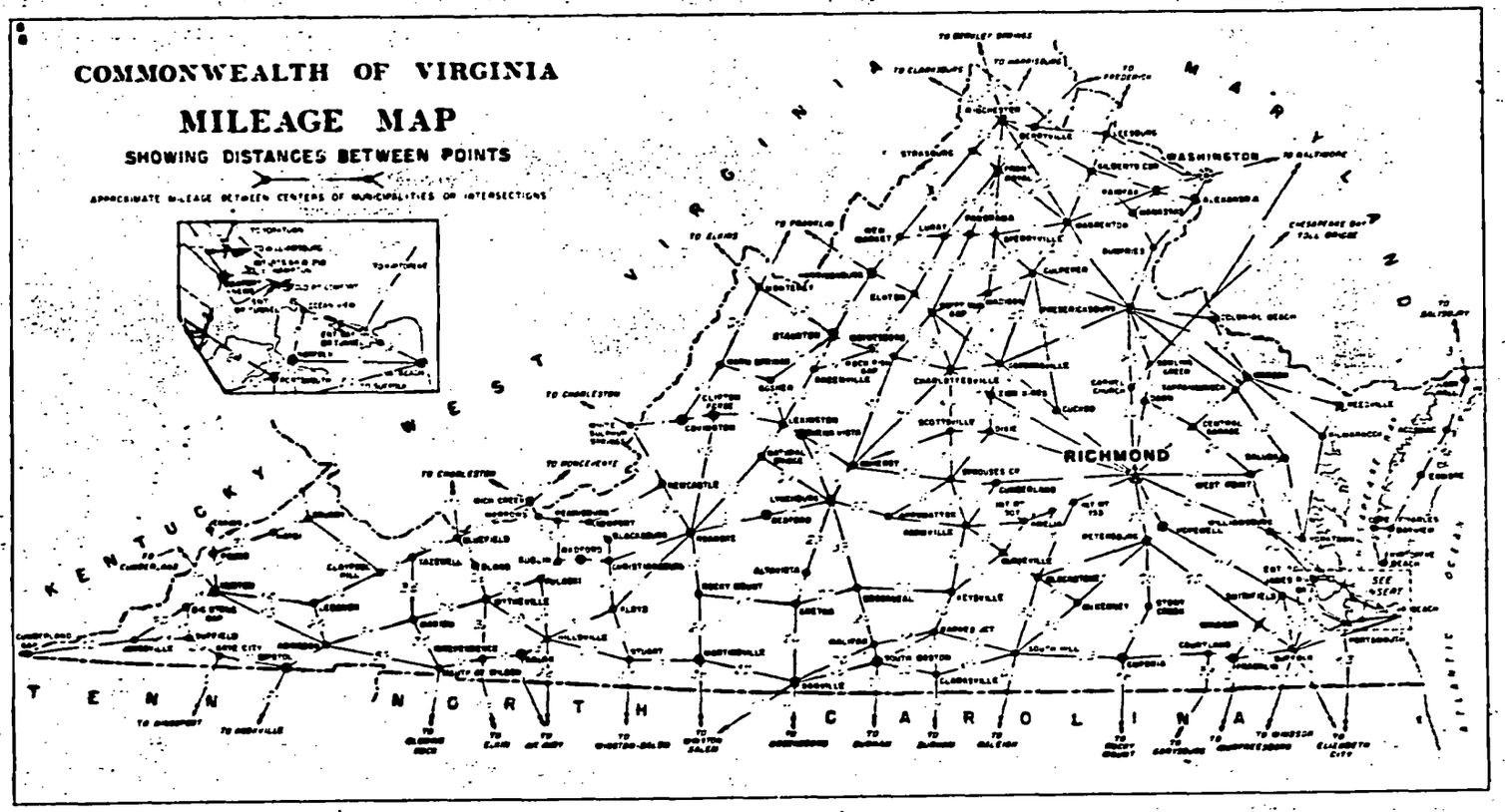
4 LANE HIGHWAYS ▬▬

ATTACHMENT 4

Clintwood High School
Ervinton High School
Dryden High School
Flatwoods High School
Jonesville High School
Keokee High School
Pennington High School
Thomas Walker High School
Gate City High School & Vocational School
Rye Cove High School
Twin Springs High School
Appalachia High School
Coeburn High School
J. J. Kelly High School & Wise County Technical School
Pound High School
Powell Valley High School
St. Paul High School
J. I. Burton High School
Dickenson County Vocational School
Lee County Vocational School



ATTACHMENT 5



ATTACHMENT 5A

HIGH SCHOOL ENROLLMENT FOR THE SERVICE AREA OF

MOUNTAIN EMPIRE COMMUNITY COLLEGE*

HIGH SCHOOL	LOCATION	SENIOR ENROLLMENT	PER CENT OF TOTAL
Dickenson County			
Clintwood	Clintwood	116	8.13
Ervinton (1/2)	Ervinton	42	2.95
Lee County			
Dryden	Dryden	33	2.31
Flatwoods	Jonesville	28	1.96
Jonesville	Jonesville	55	3.86
Keokee	Keokee	25	1.75
Pennington	Pennington Gap	109	7.64
Thomas Walker	Ewing	35	2.45
Scott County			
Gate City	Gate City	201	14.10
Rye Cove	Rye Cove	61	4.28
Twin Springs	Nickelsville	77	5.40
Wise County			
Appalachia	Appalachia	92	6.45
Coeburn	Coeburn	127	8.91
J. J. Kelly	Wise	122	8.56
Pound	Pound	90	6.31
Powell Valley	Big Stone Gap	111	7.78
St. Paul	St. Paul	38	2.66
City of Norton			
J. I. Burton	Norton	64	4.49

*Based on Report of the Superintendent of Public Instruction, 1970.

ATTACHMENT 6

CURRICULA TO BE OFFERED AT MOUNTAIN EMPIRE COMMUNITY COLLEGE

FALL OF 1972

UNIVERSITY-PARALLEL

Associate in Arts Degree Curriculum (AA)
- Liberal Arts

Associate in Science Degree Curricula (AS)
- Business Administration
- Science
- Pre-Teacher Education

OCCUPATIONAL-TECHNICAL

Associate in Applied Science Degree Curricula (AAS)
- Business Management
- Construction Management
- Crafts Production
- Drafting and Design Technology
- Electronics Technology
- Secretarial Science

Certificate Curricula
- Air Conditioning and Refrigeration
- Electricity
- Plumbing