### Population projections, 1960 - 1980 (in thousands) 1

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<td>26,990</td>
<td>31,777</td>
<td>37,537</td>
<td>44,579</td>
<td>53,291</td>
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<td>3.6%</td>
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</table>

| All-age total | 26,990| 31,777| 37,537| 44,579| 53,291|

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<thead>
<tr>
<th>School ages</th>
<th>7 - 10</th>
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<th>14 - 16</th>
<th>17 - 19</th>
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<td>F</td>
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<tr>
<td>F</td>
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MAP OF THAILAND: Showing the six Geographical Regions.

Source: Fisher, Charles A., South-East Asia, p. 484
MAP OF THAILAND: Showing Educational Regions.

Source: Ministry of Education, Thailand, The Department of Teacher Training, its Work and Organization, p. 1
1. Satrividhaya School
2. Satri Mahaprutaram School
3. Suksa Nari School
4. Wat Suthevararam School
5. Taithapisek School
6. Suan Kulab School
7. Yothin Burana School
8. Intrachai Trade and Industry School
9. Uthentawai School of Building and Construction
10. Kantabut School
11. Deves Suksa School
12. Satri Prachakorn School
13. Samecom Rongreparad School
14. Putungsit Pidhaya School
15. Burana Vidhaya School
16. Bangkok Christian School
17. Watana Suksa School
18. Kam Pidhaya School
19. Satri Bamrung Vidhaya School
20. Nantavaravit School

MAP SHOWING THE SCHOOLS' LOCATIONS: BANGKOK
TYPICAL LAYOUT OF A LECTURE ROOM

SOURCE: AUSTWICK, KENNETH, MEDIA AND METHODS, INSTRUCTIONAL TECHNOLOGY IN HIGHER EDUCATION
MODEL CLASSROOM  NEA - SPECIAL EXHIBIT  E. T. E. R. HIGGIN, ARCHITECT.
MB A RADIO SET SHOULD BE ADDED

4 PROJECTION SCREEN
3 FLAP CHART
2 CLOSED CIRCUIT TV
2 TV RECEIVERS
PLAYBACKS
10 SOUND RECORDERS
9 2X2 PROJECTOR
18 3X4 PROJECTOR
17 POSTERS
16 STILL PICTURE FILE
15 PEG BOARD
14 OVERHEAD PROJECTOR
13 OPAQUE PROJECTOR
12 MOTION PICTURE PROJECTOR
11 WALL CHARTS & MAPS
10 MAGNETIC BOARD
9 LIGHT BOX
8 BOOKLETS & MANUALS
7 FLANNEL BOARD
6 ELECTRIC BOARDS
5 DISPLAY CASE
4 PASSOUTS
3 DIAGRAMS
2 BULLETIN BOARDS
1 CHALKBOARDS

CLASSROOM

EQUIPMENT IN THE
A-V MATERIALS AND

TECHNOLOGY, P. 116
SOURCE: BRICKSON, CARLTON, W. H., FUNDAMENTALS OF TEACHING WITH AUDIOVISUAL
(Appendix)

Questionnaire for the School Principals.
(English Translation)

(1) Name __________________________ (if desired)

Educational qualification

--- M.A.
--- B.A.
--- Diploma
--- Higher Certificate
--- Certificate
--- M.S. 5
--- M.S. 3

Professional qualification ________________________________

Experience as a principal _________ Years _________ Months

Teaching experience _________ Years _________ Months

Primary School
Secondary School
Higher Secondary School
College

At present you are the principal in a

(1) Public School ______
(2) Private School ______
Did you study Audio-Visual Procedures in teaching?

Yes______ No______

If yes, where did you study?

Teacher's College__________
University__________
In-service training programme__________
From books and magazines__________

2. Below is given statements regarding audio-visual facilities and advantages, etc. Please check / in the space provided.

—— Audio-visual aids are not useful.
—— They help the teaching to be more effective.
—— It is the teachers' responsibility to find their own audio-visual aids.

—— It is the responsibility of the school to provide audio-visual aids to the teachers.

—— The school should manage audio-visual aid programme by establishing a systematic service.

—— The teachers of your school use audio-visual aids in teaching.

3. If the teachers in your school use audio-visual aids, do they use

—— Frequently
—— Sometimes
—— Never.
4. (a) What arrangements have you made for the procurement of audio-visual aids in your school?

- Procured out of school budget
- Purchased out of government funds
- Procured out of financial assistance from other sources
- Borrowing from other schools
- Prepared by the teachers

(b) In what way do you encourage the teachers who use audio-visual aids?

(c) What facilities do you provide to such teachers?

5. Which of the following audio-visual materials and equipment you have in your school for use by the teachers? Please check / in the space provided.

- chalkboard
- magnetic board
- flannel board
- bulletin board
- real object
--- specimen
--- model
--- museum or collection
--- picture
--- map
--- globe
--- graphic material
--- slide
--- filmstrip
--- tape for recording
--- microfilm
--- facilities for fieldtrip
--- motion pictures
--- language laboratory
--- raw materials for the preparation of audio-visual aids.

6. Which of the following equipment *you* have in your school for teacher's use? Please check /

--- slide projector
--- microfilm projector
--- motion picture projector
--- opaque projector
--- overhead projector
--- tape recorder and player
7. What materials and equipment are in your opinion, frequently used by the teachers in your school?

Materials

Equipment

8. While recruiting new teachers do you prefer those who are qualified in the use of audio-visual techniques in teaching?

9. What facilities exist in your school for a better understanding of audio-visual programme for your teachers?

10. What is the average size of classrooms in your institution?

   length (meter) 
   Width (meter) 

Which of the following is provided in the classroom in your school?

--- Storage space, size

--- Display area, size

--- Projection area, size

--- Projecting area, size

--- Teacher preparation area, size

--- Work space for students, size

--- Bulletin or display board, size

--- Sectional tables for group projects

--- Chalkboard, size

--- Shade, drape, venetian blind, or louver at the windows and doors, type

--- Overhead light, how many?

--- Switch for overhead light, where is it?
   - At the front end
   - At the back end
   - At the middle of the room

--- Sink

--- Electric outlet, how many?

--- Bad ventilation when all doors and windows are closed
--- Good natural ventilation when all doors and windows are closed.
--- Mechanical system of ventilation.
--- Sound amplifier.
--- Acoustical materials attached to floor, wall, ceiling.
--- Fixed screen for projection.
--- Movable screen, type? Hanging

            With stand

--- Hooks for hanging chart, screen, map, etc.
**QUESTIONNAIRE FOR TEACHERS OF HIGHER SECONDARY CLASSES.**

1. Name ____________________________________________ (If desired)

   Educational qualification
   
   "--- M.A.
   "--- B.A.
   "--- Diploma
   "--- Higher Certificate
   "--- Certificate
   "--- M.S. 5
   "--- M.S. 3

   Professional qualification ____________________________________________

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<tr>
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<th>Year</th>
<th>Month</th>
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<tr>
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<td></td>
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<tr>
<td>Secondary school</td>
<td></td>
<td></td>
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<tr>
<td>Higher Secondary school</td>
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<tr>
<td>College</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   At present teaching in a (1) Public school _________
   (2) Private School _________

   Average number of students in the class that you teach ____________

   Average number of periods you teach per week ________________

   Did you study Audio-visual procedures in teaching?
   Yes _________ No. _________
If yes, where did you study?

- In the Teachers' College
- In the University
- In the in-service training
- From books and magazines

2. In your opinion, the utilization of audio-visual aids in teaching is:

- Time wasting
- Time wasting, but worthwhile
- Time saving
- The cause of disorderliness in the classroom
- Making the students bored
- Suitable to be used outside the classroom
- Suitable to be used outside the class period
- Suitable to be used in the classroom and in the class period

Audio-visual aids are used:

- To make teaching-learning process simple and easy to understand.
- To make teaching more effective.
- To make lessons more interesting to the students.
- To give a better understanding to the students.
- To help in imparting more knowledge to the students.
3. Below is given a list of audio-visual materials.

   a. Which of these have you ever heard, seen, or used? (Please check ✓ in column A).

   b. If you have used them, how frequently you have used them? (Please check ✓ in column B).

<table>
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<th>No</th>
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<th>B</th>
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<td>Heard</td>
<td>Seen</td>
<td>Used</td>
<td>Most frequently</td>
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<td>3</td>
<td>Flannel board</td>
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<td>4</td>
<td>Bulletin board</td>
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<tr>
<td>5</td>
<td>Field-trip</td>
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<td>6</td>
<td>Real objects</td>
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<tr>
<td>7</td>
<td>Specimens</td>
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<tr>
<td>14</td>
<td>Globes</td>
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<td>15</td>
<td>Graphs, Charts, Diagrams</td>
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<td>Seen</td>
<td>Used</td>
<td>Host frequently</td>
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</table>
4. You have used the materials because:

--- You think that these aids will make your teaching more effective.
--- You are aware of their advantages.
--- Other teachers use them so you use them too.
--- You can prepare them yourself.
--- Only these are available in your school.

Any other reasons. ____________________________

_______________________________

5. (a) Does your school provide audio-visual aids to the teachers?

_______ Yes _______ No_______

If it does, which of the aids? (Please check / in the first or second column as the case may be).

(b) If your school does not provide, do you prepare audio-visual materials yourself?

(If you do, check / in the third column).
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<th>Not provided by school</th>
<th>Your own preparation or procurement</th>
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<td>(2)</td>
<td>(3)</td>
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<td>4</td>
<td>Real objects</td>
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<td>Museum or collection</td>
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<td>Pictures</td>
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<td>Globes</td>
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<td>Graphs, Charts and Diagrams</td>
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<tr>
<td>14</td>
<td>Puppets</td>
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<tr>
<td>18</td>
<td>Filmstrips</td>
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<tr>
<td>19</td>
<td>Films</td>
<td></td>
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</tbody>
</table>
(c) If you prepare audio-visual materials yourself, how do you meet the expenses?

- Yourself.
- Out of the school funds.
- Contributed by other teachers.
- Contributed both by the school and other teachers.
- Take help from the students.
- Take help from other sources.

(d) If you prepare them yourself, where do you prepare them?

- At your home
- At the student's home
- In the school working room.
- In the school art room.

6. If you do not use audio-visual aids frequently, what are the reasons?

- Because you have no knowledge of such aids and their uses.
- Because the school does not provide them to you.
- Because you have no time to prepare them.
- Because it is not easily available from other sources.
- You have time to prepare them, but no money to spend.
- You have time to prepare them, but you think that it is not of much use.
- You have time to prepare them, but you think that it should be the school's responsibility.
--- You feel that audio-visual aids are not advantageous.
--- Because your students show no interest when you use audio-visual aids.
--- Other teachers never use them, and if you use this may not be appreciated by others.
--- You do not get time to use audio-visual aids because you have to cover a lengthy syllabus.
--- Audio-visual aids are available, but there are no facilities in the classroom for their proper use.
--- Your school has enough audio-visual aids, but the distribution system is insufficient.

Other reasons ---------------------------------------------------------------

7. Do you think you can make your teaching more effective if (Please check / in the space provided at the left side of the questions).
--- Your school provides sufficient audio-visual materials and equipment including other facilities.
--- Your school has good distribution system.
--- The classrooms are in good condition for audio-visual utilization.
--- You have faith in the utilization of audio-visual aids.
--- You have more time to prepare audio-visual materials which the school cannot provide.

--- You have better understanding and knowledge of audio-visual procedures in teaching.

--- Your students show more interest when you use audio-visual aids.
QUESTIONNAIRE FOR STUDENTS OF HIGHER SECONDARY CLASSES.

You are studying in Class -----------------------------

1. Which method(s) is / are used in teaching in your class? (Please tick / in front of the method or methods given below):

   - Ordinary method, that is by reading text-books, doing exercises, and listening to the explanations given by your teachers.
   - There are other activities also, such as singing, dramatizing, acting by the students, etc.
   - The explanations are supported by other techniques such as photographs, pictures, specimens, and real objects, etc.
   - Slides, moving pictures, or other projections are used before, between, or after the lesson.
   - Radio, television, tape recordings, or gramophone etc. are used during or after the lesson.
   - Lessons are followed by demonstrations.
   - Vitalizing the lessons by excursions.

2. Do you like or dislike if your teachers teach you by:

   - Oral explanation ________________________

   - Writing words or sentences on the chalkboard while explaining ________________________
Like

Dislike

-- Drawing pictures, cartoons, diagrams, charts,
or graphs on the chalkboard while explaining.

-- Telling students to write words, sentences,
or to draw pictures, etc. on the chalkboard while learning.

-- Using some visual aids such as maps, globes, real objects, models, pictures, etc. to simplify the lesson.

-- Demonstrating the lesson.

-- Taking you to real places (field-trip).

-- Taking you to the museum.

-- Using other activities such as dramatization.

-- Using projection such as slides, movies,
or others.

-- Using gramophone, tape recording or radio.

-- Using television.

-- Asking you to participate in activities, such as experimentation, collecting specimens, making models, cut out articles from newspapers, note down topics from radio, drawing pictures or diagrams, collecting pictures for displaying, etc.