-

/

() ... %
... %
%
%
%
%
%
.())
%
.()

%
.()

%
.()

.()

.

.()

. ()()

.

<u>-:</u>

:

. ()

. . ()

.()

.()()()()()()()().

() Butts .

•

	()	Hamilton	
		() Lasalle	
	()	Everwijin	
. (івм)		() Brent	
		·	
		(/)	
п			
- :			<u>-:</u>

() -:

-: -: . () " .()"

()() -

% % %

%

%

%

.

-

.()()

--

.()()()

.()

.()

.()(

:

```
.( )( )( )
                   -:
(
                    ):
        ):
           -:
```

					-:			-:	
						()	
()		()			()()		
				()					
		-:	()			-:	
		•					<u>-:</u>		
	. /			()					
/									_
									_

-:

```
-:( )( )( )( )
            Learning About Computer
                      Learning from Computer
                      Learning About Computer
                      Learning from Computer
                            -:( )( )
                                                                ( )
%
%
                   %
              %
                                                     %
                                              )Maurer
                                   ( )Sullivan
```

						(
			()	Betza		
					()	Deasy
	()	Sales			,	J
	, ,					
				()	Bitter	
		Carr	ier			
_					-:	_
						-
						-
					-:	
	<u>-:</u>					
					:	-
					-:	_
		-:			-	

-: () (-)

()							1
				-: -:			
		I				<u>-:</u>	
		. /			<u>-:</u>		_
ıı				-:			_
-: /) .(/	()					_
. (/) -: (/)					
		()			·		
% , % ,							
	`		-:		<u>-:</u>		_
% , ()		. ()			

				,	`
			•	()
)					
					-:(
				()
		()			
ı	ı			-	
1	,			-	
,	,				
,	1				
ı	1				
ı	ı				
				-:	

)

()

		%					
-Circuit maker - Visio AutoCA D - Word		,		()	1 1 1 1	
- Word -Excel -power point	-	1				-	
All		1				-	
All		ı					
All		ı				-	
All		ı					
All		ı		-	=	-	

							<u>-:</u>		
	(Circuit ma	(% ,) ker, Visio , A	autoCAD, W	ord)	()	()		
% (,)	((%	, %,		Word) % , point, ex	cel,
						п			<u>-</u>
		-: -: <u>(</u>)						()
				()				·	
		,				<u> </u>			
		%			%				

% ,	ı	%	,	
% ,	1	% ,	ı	
% ,	1	% ,	1	
% ,	1	%	ı	
%	1	% ,	ı	
%	1	% ,	ı	
%	1	% ,	ı	
% ,	1	%	1	

.

-; -

. ()

()

			•		
%		%			
70		70			
,	,	,	1	<u> : : : : : : : : : : : : : : : : : : :</u>	
		%			
	1	,	,		
		%			
				Software	
,	1	1	1		
		%			
,	,	,	,		
		%			
	ı	ı	1		
		%			
,	ı		,		
, '	,		,		
		%			
	ı	/0	1		
		0/			
,	,	%	1		
,	,	ı	,		
		%			
,	,	1	,		
		%			

()

%					
	1	%	,	<u>-: :</u>	
	ı	, %	1		
,	,	, %	1		
	1	% ,	,		
ı	ı	, %	1		
ı	ı	%	1		
	ı	%	1		
	ı	%	1		
	,	, %	1		
,	ı	, %	1		
	ı	 , %	1		

	1	, %	,		
,	,	, %	,		

()

			`		
ı	,	,	,	-:	
1	1		1		
1	,	_	_		
,	,	,	,		
1	,	1	,		
1	,	,	1		
ı	1	,	,		
	,	,	,		
ı	1	,	,		
	1	ı	,		
	,		1	-: :	
			-		
	ı	ı	1		

1	,	1		
1	,	1		

				I	
ı	,	,	,		<u>:</u> :
1	,	%	1		
	,	%	1		
					486
,	,	,	,		
		%			
ı	,	, %	1		
	,	1	,		
	,	%	•		
	,		,		
		%			·
,	,	, %	,		
	,	1	,		<u> </u>
1	,	,	,		
,	ı	1	,		
	-	-	-		
,	1	1	,		

	1			1				
,	,		,	,				
,	,		ı	,				
,	,		1	,				
,	,		,	,				
	()							

 %
 %

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,
 ,

 ,</t

			-
		-:	_
-:	()		

Software

```
( , )
)
              (% ,
       -:
         Software
(% , )
( , )
           . (% , )
        Bitter
          Deasy
```

·

 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '
 '

 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,
 ,

(,) .(% ,) Bitter Carrier Deasy Sales () -: (% ,) (,) .(% ,) ()

-:

```
(% , )
( , )
                    .(% )
                  Maurrer
              Bitter
                <u>-:</u>
, % ) ( , , , , ) . (% , % , %
   (% ) ((, )
 )
                 .(% , )
                <u>-:</u>
 ( , , , , , )
                (%
                     % %)
                   %
```

(%) (,) .(%) Deasy <u>-:</u> () -: 486 (, , , , , , , , , , ,) . (% , % , % , % , % , % , % , % (% ,) (,) .(% ,) () -: 486

```
( , )
                                 (% , )
( , )
                  . ( % , )
              ( )
   Betza
                                     Bitter
                                             Sales
  ( , , , , , , , , , , , , , )
(% , % , % , % , % , % , % , % , % , )
                (% , )
```

```
( , , , , , , , , , , , , , , )
(% , % , % , % , % , % , % , % , % )
              (%)
                     (% , )
Betza
       Deasy
                           ( )
 , )
                   (%, % %,) (,,
                            ( , )
                (% , )
 ( , )
                              . (% , )
                           ( )
 , )
                        % % , ) ( , ,
                   (%,
```

```
(% , )
   ( , )
                         . (% , )
( , , , )
                    (% % , % ,
, ) ( , )
                 .(%)
) (,,,,)
                       (%
                         %
                           %
(% ) ( , )
                    .(%) (,
-:
```

. Software

<u>-: (</u>

· -

<u>-: (</u> -:

-: -:

-: ---

-:

. : -___ : -

--

.

- 23-Alessi, S. M. and Trollip, S. R. Computer Based Instruction: Methods and Development, Prentice Hall, 1985.
 - 24-Apple. Learning Tomorrow Apple Computers CA: Copertio.1987.
 - 25-Baker, H. J, "Using Computer for Instruction", Byte, Feb 1987, PP.149-162.
- 26-Bentley, D. and Watts, M. Learning and Teaching in School Science: Practical Alternatives Milton Keynes: Open University Press, 1989.
- 27- Betza .R . . " Instructional Uses Of Computers At The University Of Washington "<u>Paper Identified By The Task Force On Establishing Analional Clearing</u>
- House Of Materials Development For Training. Washington University .1986.
- 28- Bitter , G, G " Survey Of Arizona Public School Practices And Needs For Computer Assisted Instruction " College Of eduction , Arizona State University , <u>Journal</u>

Amouncement; Dec ,1982

- 29-Brent, Kronendonk, "Programmed for Partnership. IBM's Support for Business Education Partnership Includes a Focus on Vocational Education ", Vocational Education Journal . Vol. 67 No.1, Jan1992, PP. 28-29.
- 30-Butts, Covey ," A Study to Determine Skills and Competencies Needed for Office Employment as Reported by Selected Employers in Northwest Arkansas , University of Arkansas 1993, D. A. I., (A) Vol. 54 No. 7 , Jun1994, P. 2435.
- 31-Carol Fagan and Dan Lunley, Planning for Tech Prep A Guide Book for School Leaders.
 N.Y: Scholastic Inc., 1995, PP. 8-9.
- 32- Carrier, C. A: Glem. A.D and Sales. G.G "A Two Level Program For Training Teachers To Use Computers In Classroom "Educational Technology, Vol. .25 . (No (10) .1985, P 18.
- 33-Chambers, J. A. and Sprecher, J. W. Computer Assisted Instruction: It use in the Classroom, Prentice Hall, 1983.
- 34-Chambers, J.A. & Sprecher, J.W. Computer Assisted Instruction: Current Trends and Critical Issues. Communications of the Association for Computing Machinery 1980, Vol. 23(6), PP. 332-342.
- 35-Cohen, V.B. Criteria for the Evaluation of Microcomputer Courseware. Educational Technology, 1983, Vol. 23(1), PP. 9-14.
- 36- Deasy , R. J . " Computer In Instruction " Report Of Task Force On Computers In Instruction. Maryland State Dept. Of Education. June 1984
 - 37-Doerr, C. Microcomputer and the 3R, s N.J: Hayden Book Co., Inc. 1977.
- 38-Everwijin, S. and Others, "Ability or Competence Based Education the Gab between Knowledge Acquisition and Ability to Apply ", Higher Education . Vol. 25 No.
 - 4, Jun 1993, P. 22-33.
- 39-Hamilton, Steph F., and Hurrelmann Klaus," The School to Career Transition in Germany and United States, Teacher College Record Vol. 96 No. 2, Winter 1994, PP.

329-344.

- 40-Hebenstreit, J, "10,000 Microcomputers for French Secondary Schools " IEEE Computer Magazine , July 1980, PP. 17-21.
- 41-Hirschbuhl,K. The need for Computer Literacy and Computer Applications in the Nation's Classroom Journal of Educational Technology Systems,1980-1981, Vol. 9 (3), PP. 191-193.

- 42-Hirschouhl, J. J. " Hardware Considerations for Computer Based Instruction in the 1980,s", Journal of Research and Development in Education, 1980,14(1),
- 43-Kosinksi, J.R. Producing Computer Instruction for Biology Laboratories. The American Biology Teacher.1984, Vol. 46 (3), PP. 162-167.
- 44-Lasalle, Henry. " A Study to Determine Offering in Business Education in the United States by the Year Book . Temple University,1994. , D. A. I., (A) Vol. 55 No. 4, Oct.1994.P. 853.
- 45- Maurer, R. W. "An Examination Of Obstacless To The Implementation Of Computer Aided In Instruction In California Community Colleges 11' <u>Diss Abst.</u> Vol. 47
- 46-Mathews, W.M. & Winkle, L. Microliteracy School Administrators. Compact 1981 Vol. 15 (3), PP. 22-23.
 - 47- Office Of Educational Research And Improvement "The Determination Of Computer Competencies Needed By Classroom Teachers", Geographic Sources; U.S.,
 Taxis. Journal Announcement; May. 1986.
- 48-Rechard, Clark. Learning from Computer Theoretical Problems . Paper Presented at American Educational Research Association. New Orleans, 1984.
- 49- Sale, S, G, C., "Design Considerations for Planing A Computer Classroom". <u>Educational</u> Technology. (1985), Vol. 25. No (5) PP (7-13).
- 50-Self, J.A. " Student Models in Computer Aided Instruction", Journal of Man-Machine Studies, No. 6, 1974, PP.261-276.
- 51- Sullivan, D, J., "Computer Assisted Instruction for Management and Business Study; A Look to Future", Masters Thesis, George Washington University, and Journal
 Announcement: Mars 1976.

