Presenter

Dr. Qais Faryadi

Research Title

Bahasa

Arab

Interaktif

Kurikulum

BAIK

Qais Faryadi.(2009) Determining a Theoretical and an Empirical-Based Interactive Multimedia Arabic Language Courseware to Teach Arabic as a Foreign Language: Malaysian Experience. Journal of Basic and Applied Sciences Vol. 1, No. 2, pp. 207-212.

Problem Statement

✓The majority of foreign language classes are taught with little or no regard with The current field-tested instructional design intervention.

Hwang, 2008, Payne, 2007, Krashen, 1987, Petty, 2007, Ibrahim, (2003), Jassem (2000)

James Asher, (2000)

Research Novelty

- ✓ **Methodological Contribution**

  Guideline for the future researchers on the methodology of acquiring Arabic as a foreign language. Contribute for the development of a paradigm such as Constructivism. Paradigm shift

- ✓ **Empirical Contribution**

  Empirical Evidence of the Effectiveness of BAIK. It can be prototyped.

- ✓ **Data Collection Contribution**

  Interviews, observations, questionnaires, checklists and pre-post tests of this research are valuable guideline for the future researchers.

The following are some specific implications of BAIK for the instructors:

1. BAIK reduces stress from the teacher because its environment is student centered and the content and methodology have been integrated in the courseware.

2. BAIK changes the teachers' job to that of a facilitator, thereby allowing her/him to pay more attention for the individual learner in the classroom.

3. BAIK ensures quality control of teaching standards as the courseware is constant in quality.

Specific implications Continues…..

4.   BAIK reduces disruption of teaching in the classroom in the event of teacher absence or change.

5.   BAIK is cost effective as it does not depend on the high cost of hiring highly qualified teachers.

6.   BAIK assists teachers in maintaining high performance of the students as well as producing highly qualified young intellectuals to the society.

Literature (Models and Theories)

Design Models

Mayer

Gagne

ARCS

ASSURE

Learning theories
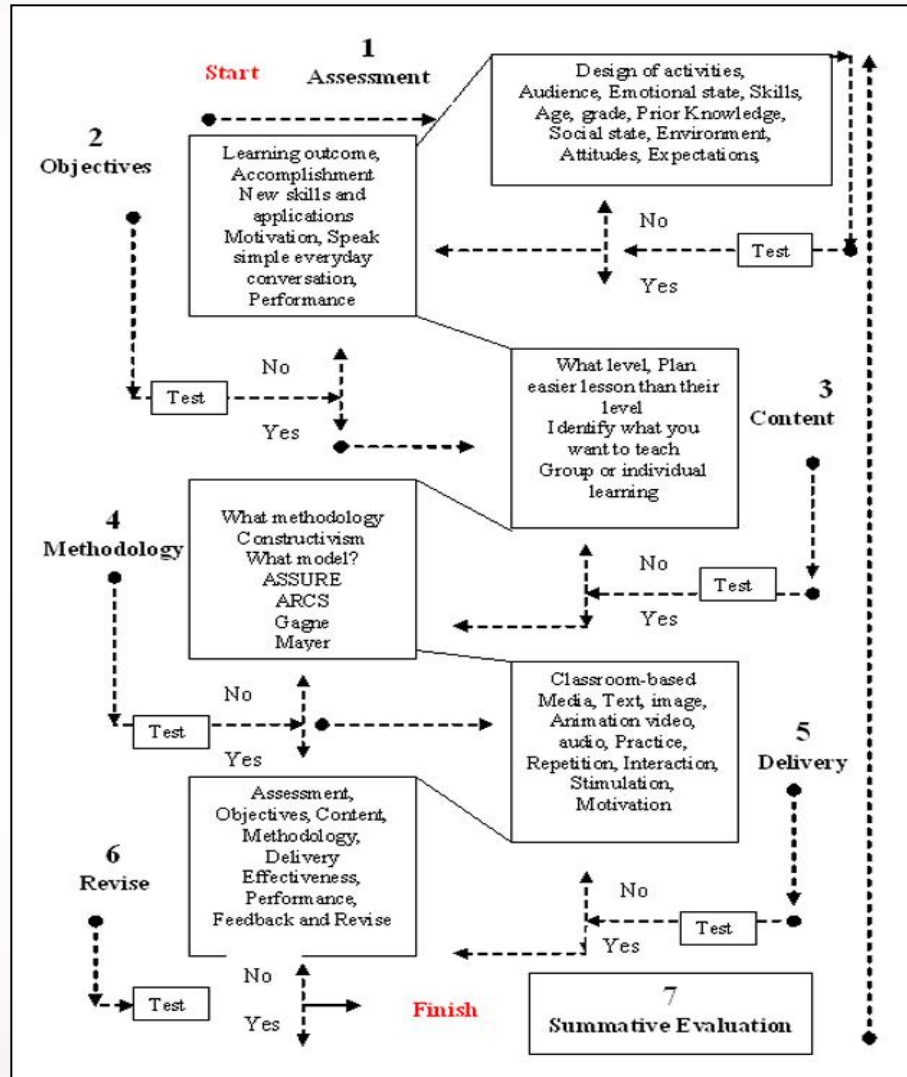
Jean Piaget

Jerome Bruner

Vygotski

Skinner

Montessori

BAIK Road Map Design

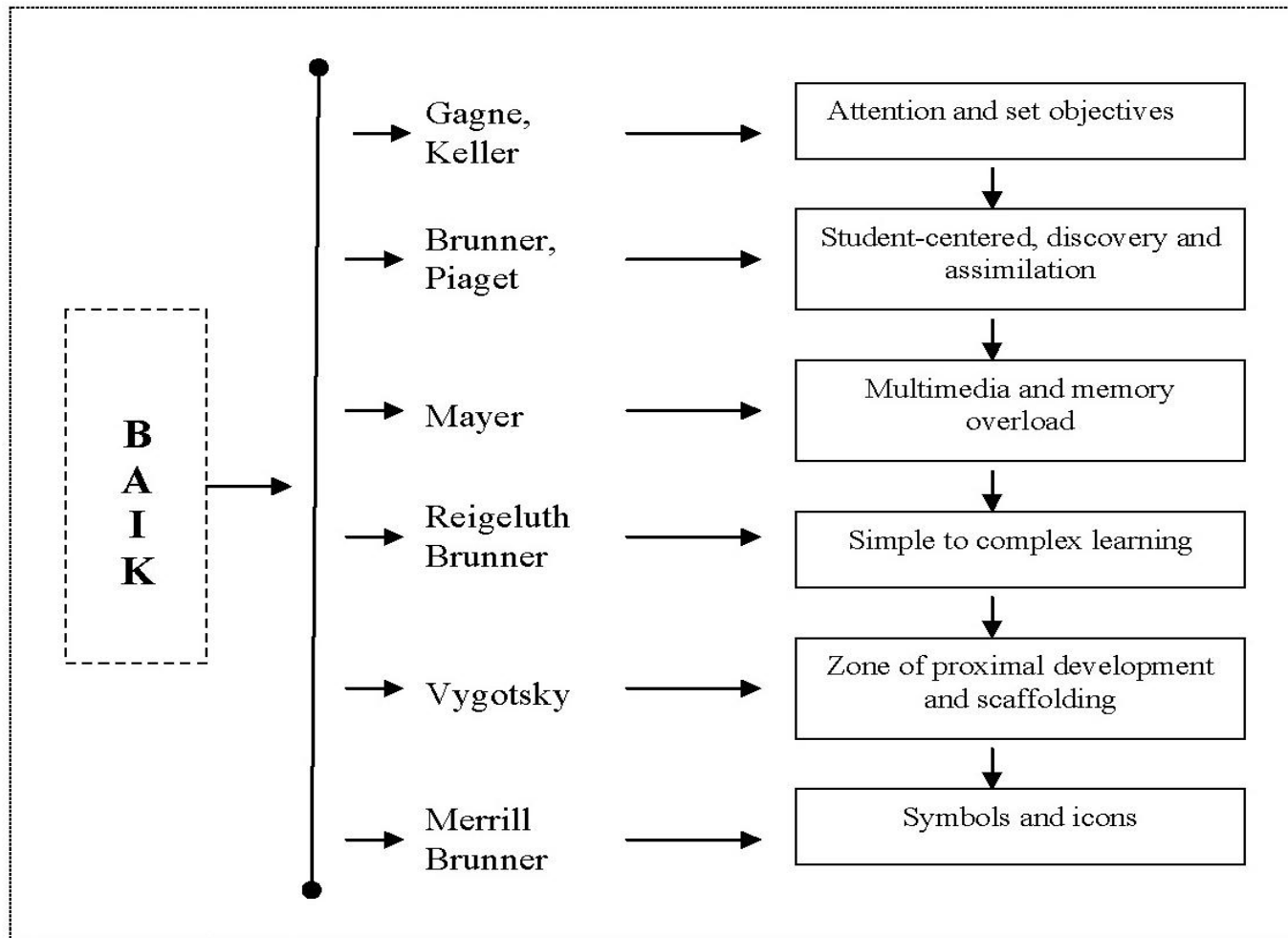# Application of Theories of Instructional Design to BAIK

Application of Theories of Instructional Design to BAIK		
Theorists	**Principles**	**BAIK**
Gagne Keller	Attention and clear objectives. Motivation	Familiar pictures of student's school gain their attention. Clear objectives are provided in every lesson.
Brunner Piaget	Student-centered and discovery learning. Practice and critical thinking.	Relevant activities allow learners to discover patterns in the language. Students learn with little assistance from the teacher.
Mayer	Multimedia and memory overload. Icon and Symbol	Sound, pictures, icons, symbols and graphics carefully placed. Memory overload is avoided by eliminating background noise.

Application of Theories of Instructional Design to BAIK

|		
Reigeluth	Simple to complex learning	Starts with vocabulary and slowly builds simple sentences.
Vygotsky Brunner	Zone of proximal development and scaffolding.	Symbols and icons assist continues learning. Low-ability students learn through symbols. Interaction with friends and teacher.
Merrill	Symbols and icons	Provided symbols assist them to connect ideas.
Piaget Keller	Practice, relevancy and critical thinking.	Familiarity and relevancy of the topics to the learners. Interactive lessons encourage learners to practice and think critically.

Application of Theories of Instructional Design to BAIK

Application of Models of Instructional Design to BAIK

Application of Models of Instructional Design to BAIK		
Models	**Principles**	**BAIK**
ASSURE	Analyze learners	BAIK identified the needs and capabilities of the users.
Mayer	Segmentation of information and interactivity	Content of BAIK arranged in a lesson format with sub-divisions for easy comprehension and reinforcement.
ARCS	Motivate learners	Earning points and playing games motivates learners.
Gagne	Review and evaluate learners	Interactive activates in BAIK allow learners to review and self-correct.

Application of Models of Instructional Design to BAIK
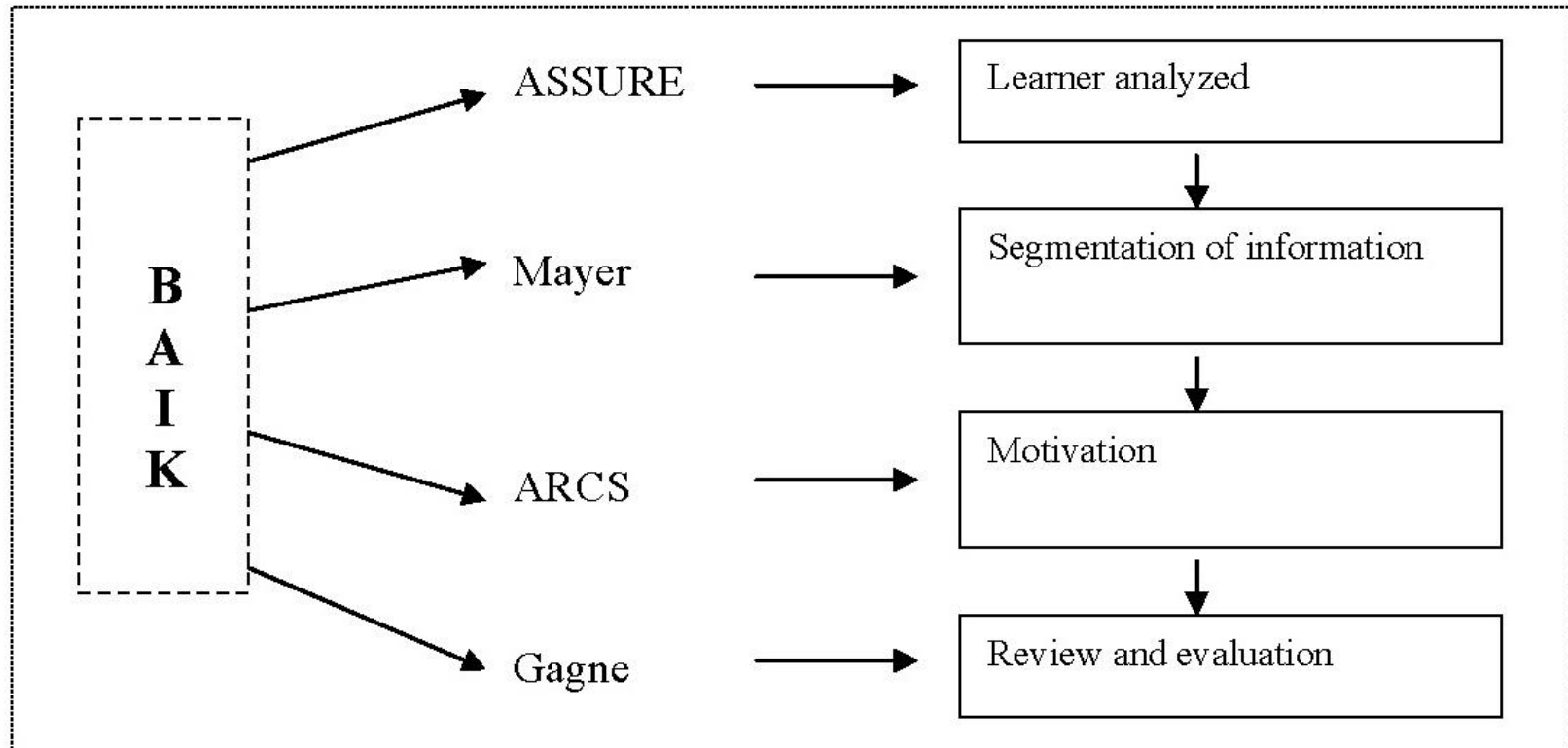
The Findings

✓ **Conventional Learning Result**

✓ **Products in the Markets**

✓ **BAIK Results**

Conventional Learning Result

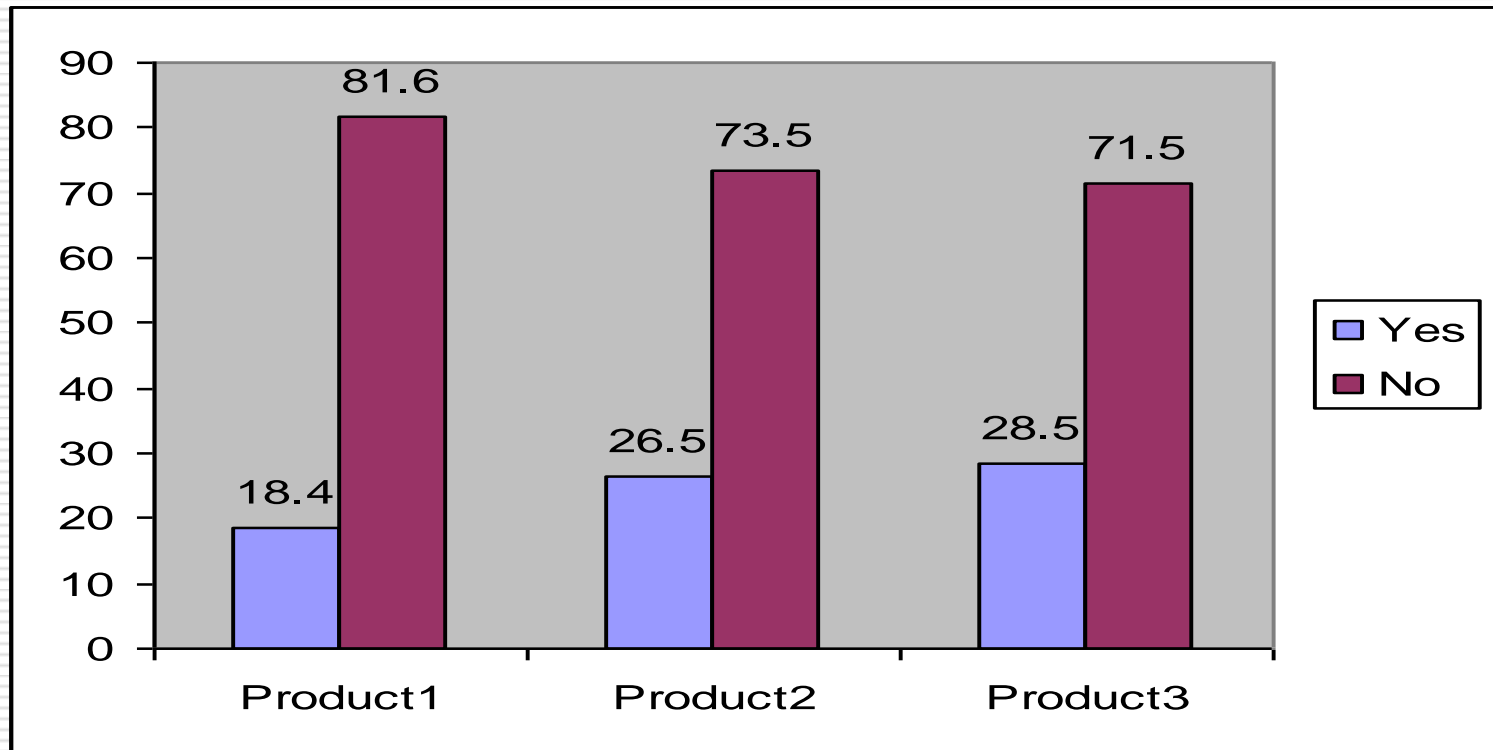Pre- Test: 52.44

Post-Test: 59.17

Interviews

Observations

Questionnaires

Students grade improved but not significantly

Market Arabic Courseware Result

General Checklist Result (49)

Market Arabic Courseware Result

Specific Checklist Result (31)
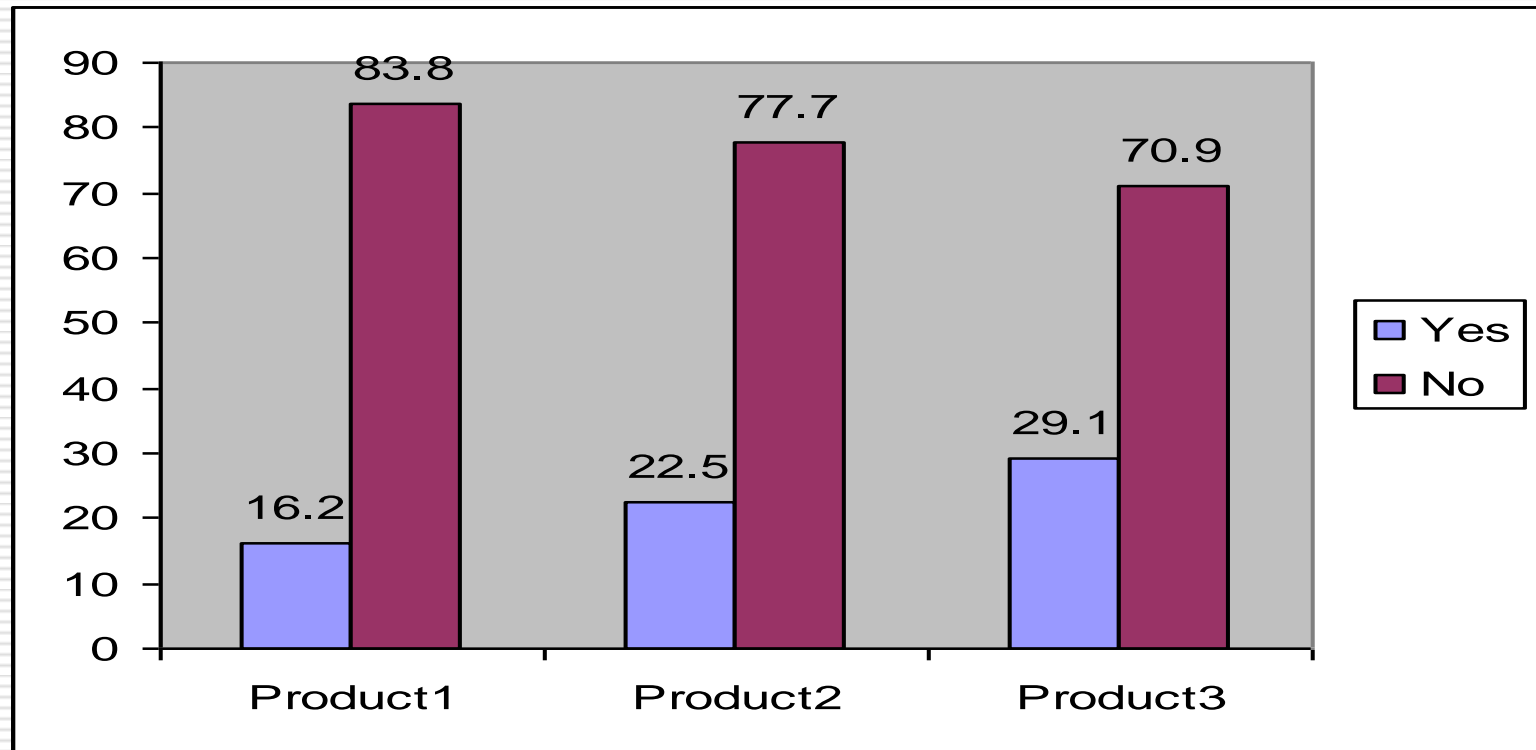
Evaluation Of BAIK by the Experts

General Checklist Result (49)

Experts' General Checklist Evaluation

Specific Checklist Result (31)

Specific Checklists Evaluation from the Experts

Legend: ☐ Yes ☐ No

Expert	Yes	No
Expert 1	83.3%	16.7%
Expert 2	66.7%	33.3%
Expert 3	80.0%	20.0%
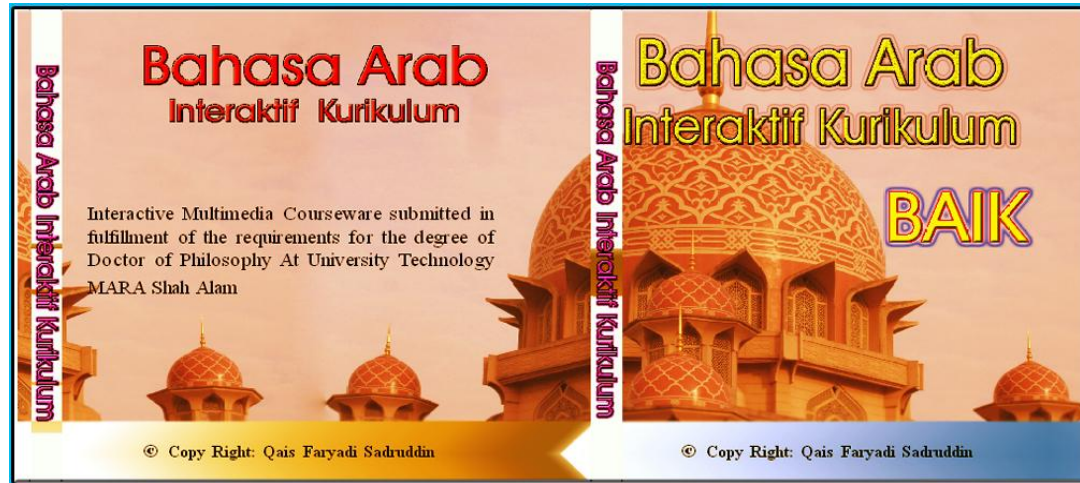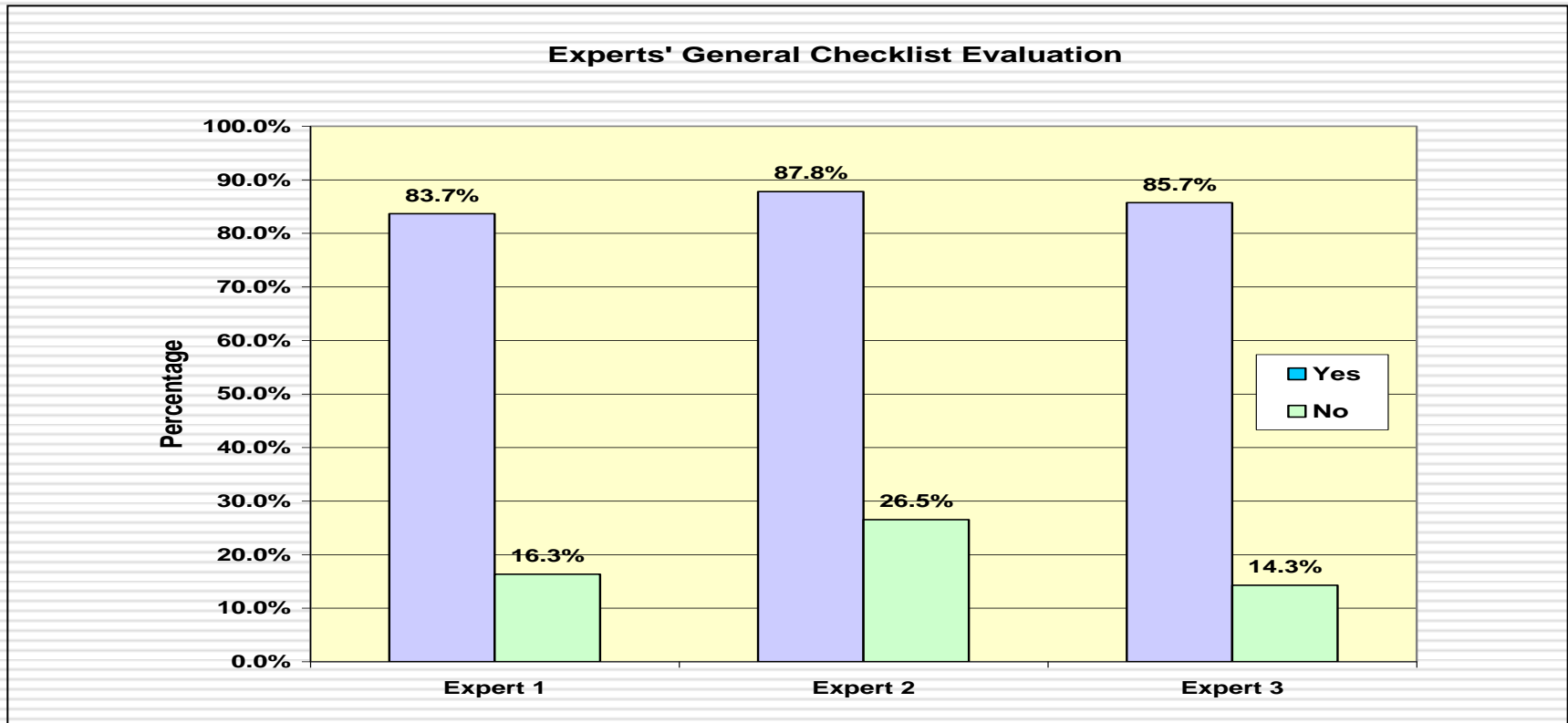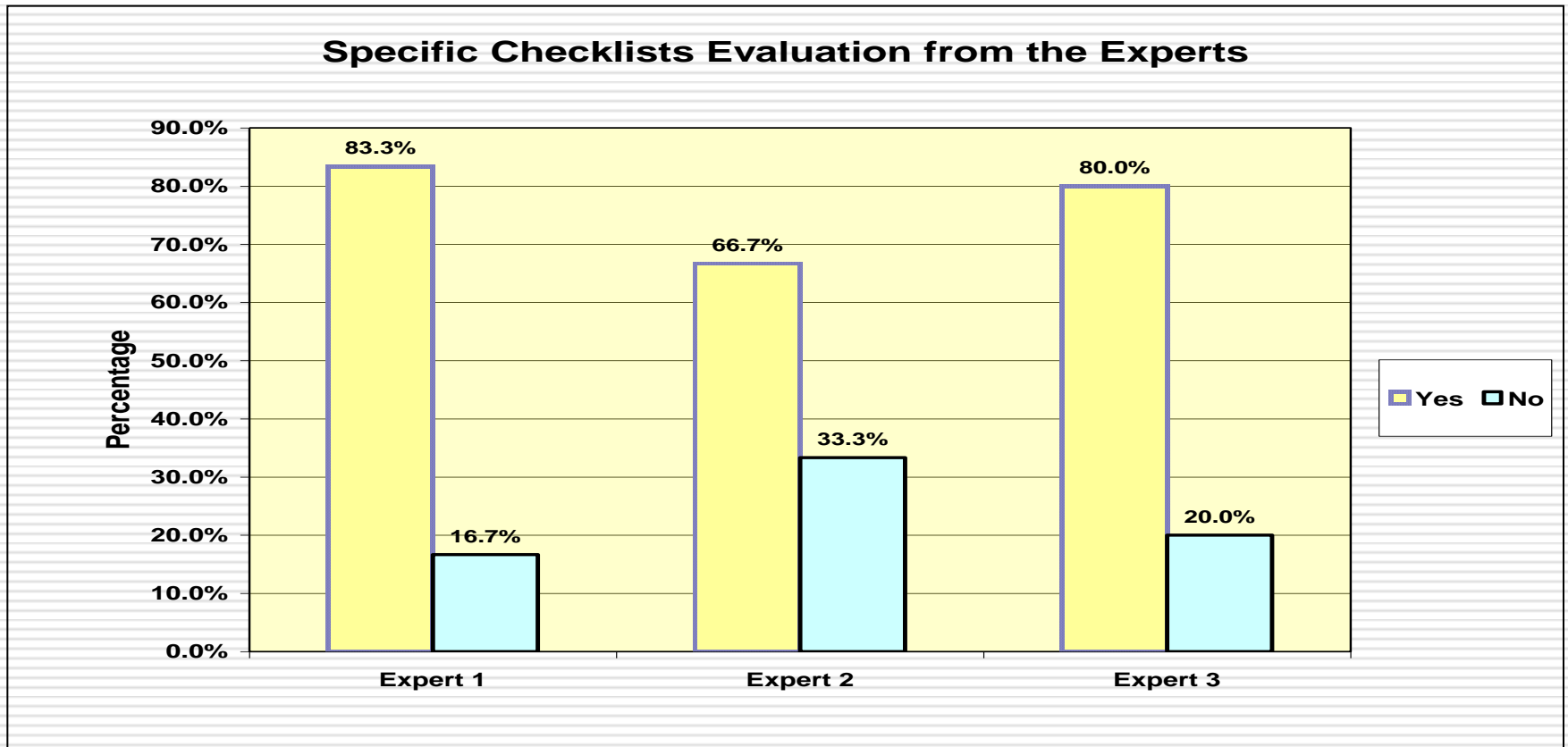
Pre-Post

Test Results

BAIK

Pre-Post test Results Multimedia according to Categories

Students	Pre-test			Post-test		
	Fail	Average	Good	Fail	Average	Good
1		54				80
2	45					85
3	38					85
4	33					89
5	44					85
6	26					85
7	35					80
8		59				81
9	38					83
10	38					83
11	15					88
12		56			60	
13			68			69
14		60				73
15	25				60	
16		64			60	
17	25					70
18		62				75
19	30					97
20	40					100
21		55				95
22			65			95
23	48					90
24			66			100
25		50				100
26			90			95
27	35					83
28	45				63	
29			75			83
30	35			45		
31	15				52	
32	49				60	
33		55				76
34		60				65
35			67			89
36			65			81
37	24					85
38	40					65
39		58				77
40	45					67
41		50				70

Hypotheses Testing

Research Question 1: Increase Comprehension Skills

Research Question 2: Increase Satisfaction-Motivation

Research Question 3: Increase Critical Thinking Skills

Research Question 4: Significantly Increase Final Grade

1: BAIK increased Comprehension Skill

T.M did not increase Comprehension Skill

Question 1 was used to evaluate

Paired t-test Results for Students' Comprehension Skills in Pre-post Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	T_pre - T_post	1.02439	4.04962	.63244	-.25383	2.30261	1.620	40	.113
Pair 2	M_pre - M_post	-8.26829	5.30577	.82862	-9.94300	-6.59358	-9.978	40	.000

Paired Samples Test

Paired t-test results Traditional: Improved but not significantly

t (40)=1.620, p=0.113

Paired t-test results BAIK: Significantly improved

t (40)= -9.978, p=0.000

2: BAIK increased Satisfaction-Motivation
T.M. did not increase Satisfaction-Motivation

Interviews, observation and questionnaires used

Percentage Scores between the Traditional and BAIK

Groups	Motivation	Satisfaction
Traditional Based Learning	27.40%	30.10%
Multimedia Based Learning (BAIK)	72.60%	69.90%

3: BAIK increased Critical Thinking Skills
T.M.   did not increase Critical Thinking Skills

Question 3 was used to evaluate

Paired t-test Results for Students' Critical thinking Skill

Paired Samples Test								
		Paired Differences						
				Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation		Lower	Upper			
Pair 1	T_pre - T_post	-5.10976	7.93608	1.23941	-7.61469	-2.60482	-4.123	40	.000
Pair 2	M_pre - M_post	-9.12195	9.97546	1.55790	-12.27059	-5.97331	-5.855	40	.000

Paired Sample Test: T.M mean: -5.10976   t (40) = -4.123

Paired Sample Test: BAIK mean: -9.12195   t (40) = -5.855

4: BAIK Significantly Increased Final Grade
T.M did not Significantly Increase Final Grade

Pre-test and Post-test grades were used for evaluation

Paired Sample Test for Final Grade

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	T_Pre	52.44	41	14.620	2.283
	T_Post	59.17	41	16.052	2.507
Pair 2	M_Pre	47.49	41	16.686	2.606
	M_Post	78.63	41	13.705	2.140

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	T_Pre - T_Post	-6.732	15.011	2.344	-11.470	-1.994	-2.872	40	.007
Pair 2	M_Pre - M_Post	-31.146	19.768	3.087	-37.386	-24.907	-10.089	40	.000

Main Findings (BAIK- Traditional)

1. This research found that students who are exposed to BAIK significantly improved and outperformed the traditional group in mean score final grade. (BAIK 82% and traditional 18%).

2 BAIK also outperformed the traditional group on comprehension, satisfaction, motivation and Critical Thinking skills.   Test Hypothesis

Main Findings (BAIK and Market)

BAIK has successfully passed the test conducted by three experts

(Yes= 79.7% and No=20.3%)

Market's Arabic Courseware failed to fulfill 49 general and 31 specific requirements.
(38-32.9-30.4 Yes and 62-67.1 and 69.1% No.)

Recommendations

1.Support and create instructional design which focuses on student-centered.

2.Support the creation of curriculum which invites students' engagement, critical thinking and problem solving.

3.Support the allocation of funds so that schools and teachers can utilize the best technology and methodology.

4.Support and provide instructor sovereignty in the class so much so that the teacher can decide what to teach, how to teach and when to teach.

Thank You