

International Journal of Education Sciences (IJES)

Received on. 21. 05. 2013/13. 06. 2013

REF. NO. IJES-328

(Always refer our Reference No. for all correspondence)

Opinion Analysis on Curriculum Framework Dimension of Educational Excellence in Home Science Colleges across SAUs of Northern India

Parul Gupta¹ and Varinder Randhawa²

^{1,2}Department of Home Science Extension and Communication Management,

College of Home Science, Punjab Agricultural University, Ludhiana, 141004

Telephone: ¹<09888164684>, ²<09876081778>

E-mail: ¹<gupta.p@live.com, parulgupta145@gmail.com>, ²<varinderrandhawahsee@pau.edu, v_randhawa@hotmail.com>

Opinion Analysis on Curriculum Framework Dimension of Educational Excellence in Home Science Colleges across SAUs of Northern India

Parul Gupta¹ and Varinder Randhawa²

^{1,2}Department of Home Science Extension and Communication Management,

College of Home Science, Punjab Agricultural University, Ludhiana, 141004

Telephone: ¹<09888164684>, ²<09876081778>

E-mail: ¹<gupta.p@live.com, parulgupta145@gmail.com>,

²<varinderrandhawahsee@pau.edu, v_randhawa@hotmail.com>

KEYWORDS Opinion, Curriculum Framework, Educational Excellence, SAUs

ABSTRACT Educational excellence in higher education focuses on developing those capabilities in an individual which would enable him/her to conceptualize a phenomenon and contribute to societal development through his/her knowledge, skills creativity. This can be possible only through systematized and sequential curriculum framework of an institution that caters to these needs of individuals. Therefore, the study was conducted to elicit opinions regarding 'Curriculum Framework' dimension of educational excellence in Home Science colleges of SAUs of northern India. A questionnaire using Likert scale technique was developed to measure the opinions against principles governing 'Curriculum Framework' dimension of educational excellence. The respondents were 65 teachers (Assistant Professors, Associate Professors and Professors) representing five SAUs of northern India i.e. HAU, PAU, MPUAT, GBPUAT and CSHPKV. Survey design was used to collect information through questionnaire technique on this dimension. The results revealed that the opinions of

teachers regarding the curriculum principles such as ‘Allocating sufficient time on focus topics’ and ‘Ensuring inclusion of core knowledge as well as specific knowledge’ were found to be neutral i.e. neither favourable nor unfavourable, whereas the opinions showed favourable bend towards remaining principles i.e. ‘Arranging content in a coherent and sequential way’, ‘Having common rigorous standards for evaluation’ and ‘Using multiple pedagogical approaches to instruction’. Based on the findings, it is concluded that in today’s classrooms the learners come with diverse backgrounds, abilities, and interests and in this scenario teachers have to design their own research-based pedagogical approaches for helping individual learners gain and retain requisite content knowledge and skills.

INTRODUCTION

The curriculum of a country like its constitution reflects the ethos of the nation and its chief concerns and commitments. It prepares individuals of the country to be useful and productive citizens. A good curriculum framework helps teachers plan and deliver appropriate instruction, design valid assessment tasks and strategies and ensure that instruction and assessment are aligned with the objectives. In such preparation it is necessary to take into consideration the knowledge of how learning occurs and what factors facilitate learning, the knowledge of socio-psychological aspects of learning process that go to constitute curriculum development.

Curriculum is developed by cross-current of various factors and cross-fertilization of multifarious ideas and philosophies. All these constitute the foundation of curriculum planning. The emerging objectives, philosophy of education, culture, learning theories and knowledge, warrant appropriate changes in curriculum from time to time. Research studies are undertaken to determine impact of changes and to inhibit unhealthy trends from influencing the curriculum. So, curriculum development or renewal efforts need to be made on regular basis for achieving excellence in teaching –learning. In keeping with above ideas, the present the study was designed with thrust on following objectives:

- To obtain opinions on curriculum development dimension of educational excellence based on established principles of Home Science professionals (teachers) belonging to different SAUs of Northern India.

METHODOLOGY

The study was conducted in Home Science colleges of five SAUs viz; Haryana Agricultural University, Hisar; Govind Ballabh Pant University of Agriculture and Technology, Pantnagar; Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vidyalaya, Palampur; Maharana Pratap Agricultural University, Udaipur and Punjab Agricultural University, Ludhiana representing Northern India. The number of teachers selected for the study was 65 teachers. Survey research design, a suitable and widely adaptable research design was followed to elicit opinions of teachers towards 'Curriculum Development' practices of their respective universities based on established principles of curriculum development. To make the survey more representative of the group, the sampling plan included 5 Home Science colleges of different SAUs from Northern India.

RESULTS AND DISCUSSION

The discussion below pertains to opinions of Home science teachers from five State agricultural universities regarding their curriculum framework.

1. Opinions of respondents regarding observance of the Curriculum development

Principle of 'Arranging content in a coherent and sequential way'

Coherence is the key to developing sound cognitive base of learners. It builds the conceptual framework of learners that helps them retrieve and transfer knowledge to new contexts. Developing the cognitive abilities provides a foundation for continuous learning that should be the goal of education in all subject areas (Nelson, 2001). Table 1 shows the opinions of respondents regarding the principle 'Arranging content in a coherent and sequential way'. The data reveals that majority of the teachers consented that their instructional delivery was in line with the goals of the course/programme (89.23%), curriculum covers all skills and concepts that are required to be developed amongst students (78.46%) and learning objectives flow well with the theoretical underpinnings of the content and skills and concepts related to course curriculum required to be developed (78.46%). Also, the curriculum framework provides scope for what should be taught and the sequence in which it should be taught (76.92%). The finding is in conformity with Schmidt (2003) who observes that Content standards must be articulated overtime as a sequence of topics and

performances that reflect a logical, sequential or hierarchical nature of the disciplinary content from which the subject matter is derived. In other words, the evolution in content structure and sequence should occur both over time within a particular grade level and across grades. The table further reflects that around 30.77 per cent of teachers were of the view that the scope of curriculum and sequence of contents addressed all the developmental areas (physical, emotional, cognitive and social). Further, 26.15 per cent believed that learning materials were not aligned to instructional objectives. A meager percentage of 16.92% and 1.54% respectively believed that communicating their expectations to students make them lose interest and sequencing of learning objectives for a class session serves no purpose.

In general, the opinions of teachers reflected favourable inclination towards the observance of the principle 'Arranging content in a coherent and sequential way'.

2. Opinions of respondents reflecting adherence to the Curricular Principle of 'Allocating Sufficient Time on Focus Topics'

A good curriculum focuses on the most essential topics and ensures sufficient instructional time for each focus topic. The amount of time devoted by teachers and students to the chapters has direct influence on student's understanding of the content. Also, the more topics that a single course covers, the less instructional time would be available to teach other topics (Schmidt, *et al*, 2001). Therefore, the coverage of course contents should not go beyond the reasonable instructional time needed for articulating each topic.

A perusal of data in Table 2 depicts that majority of the respondents expressed conformity with the statements that their curriculum reflected priority of learning objectives based on time allocation (83.08%), there is an appropriate balance between the number of major topics and subtopics covered in their curriculum (70.77%), curriculum is unified, comprehensive and an integrated package (67.69%), time allotted to explore the major learning objectives in depth is sufficient (66.15%), curriculum framework is acceptable to all stakeholders (52.31%) and resources are sufficient to support in-depth learning of major ideas (50.77%).

Less agreement was recorded for the statements that elements of the curriculum framework are flexible rendering them liable to modification based on the needs of the instructors, learners and society (44.62%), scope of the curriculum does not match well with the time available to teach (40.00%), curriculum needs no physical, social and environmental support (35.38%) and seeking

collaboration of stakeholders in curriculum development leads to utter confusion and waste of time (33.85%).

3. Opinions of respondents reflecting adherence to the curricular Principle of Ensuring Inclusion of Core Knowledge as well as Specific Knowledge

Core-knowledge based curricula equip all students with a common base of ability for taking future steps towards a fuller and richer understanding. Researches indicate that systematic accumulation of student background knowledge in their earlier grades enables teachers to conduct more effective classroom activities.

Majority of the teacher respondents agreed to the statements that their curriculum allows access to a core set of knowledge and skills for all students (81.54%), addresses specific needs of the local community while dealing with the core concepts (61.54 %), deals with core knowledge learning objectives without permitting flexibility for more advanced study (58.46%), includes assessment procedures for ascertaining student understanding of learning objectives before the instruction begins (52.31%) and is in equitable to a community's diverse backgrounds and values (50.77 per cent). However, least number of teachers consented to the statement that their involvement is prevented while preparing the curriculum framework (24.62%).

Based on the above opinions regarding this principle it can be inferred that there is a nominal bend towards inclusion of core knowledge as well as specific knowledge which needs to be taken into account while framing curriculum to ascertain excellence in teaching and learning in different SAUs.

4 Opinions of respondents reflecting adherence to the curricular principle of Having Common Rigorous Standards for Evaluation

Curriculum evaluation is a responsive evaluation if it orients more directly to program activities than to program intents; responds to audience requirements for information; and if the different value perspectives present are referred to in reporting the success and failure of the program. (Stake, 1975).

Table 4 indicated that majority of the teachers expressed agreement to the statements that curriculum employs progress monitoring methods that are culturally, linguistically and individually non-biased (81.54%), addresses different learning styles and outcomes by adopting

different evaluation measures (78.46%), clearly communicates the criteria of achievement for students (73.85%), includes methods for ongoing evaluation of student's progress (69.23%), uses authentic monitoring methods to measure progress(63.08%).

Minimum number of respondents agreed that families/guardians are informed about the progress of their wards/children (16.92%). The reason could be that the learners are quite mature at university level so the teachers do not feel the need to approach their parents until some major issue crops up. A negligible of eight per cent agreed that they donot ensure total secrecy of evaluation. Overall, the opinions of teachers reflected affirmative bending towards the principle 'Having common rigorous standards for evaluation'.

5. Opinions of respondents reflecting adherence to the curriculum development Principle of Use Multiple Pedagogical Approaches to Instruction

Effective curriculum is designed with the learner in mind. As different students approach learning differently, teachers must be able to deliver instruction in a variety of ways. Curriculum materials should be designed to support the different ways that teachers may decide to engage students regarding a particular learning objective. For some types of knowledge and skills, direct instruction, didactic conversations and teacher centered approaches may prove most efficient and effective. So, an effective curriculum must consider different teaching methodologies in relation to the learning objectives. This principle therefore covered all these aspects to elicit opinions of teachers.

A large majority them opined that they are well prepared to deal with the curriculum (92.31%), their curriculum provides scope for instructional planning to build student learning around stated objectives (89.23%), it helps them to decide as to which method of instruction would be most effective for a given group of students to learn specific set of learning objectives (86.15%), it gives them liberty to decide which learning approaches are most appropriate for delivering instructions(84.62%) and provides scope for linking instructional activities and practices are directly with students immediate and long term goals (80.00%).

Negligible percentage agreed to the use mono-sensory approach to instruction (20.00%) and that the curriculum limits their delivery of instructions to classroom based techniques (9.23%). The inference could be that in today's classrooms the learners come with diverse backgrounds, abilities, and interests and in this scenario teachers have to design their own research-based pedagogical approaches for helping learners to gain and retain content knowledge and skills.

In general, the opinions of teachers reflected positive inclination towards the principle of using multiple pedagogical approaches to Instruction.

V. CONCLUSION

Based on the findings it is concluded that we need to further develop our teaching-learning processes by adopting latest curriculum strategies, evaluation methods and its alignment with socio-cultural contexts to ensure holistic development of education so that the standards of universities can be taken to greater heights.

5. ACKNOWLEDGEMENT: NA

6. NOTES: NA

7. REFERENCES

Nelson G D (2001). Choosing Content That's Worth Knowing. *Educational Leadership*, **59(2)**:12-16.

Schmidt W H (2003) The quest for a coherent school science curriculum: The need for an organizing principle. *Review of Policy Research* **20**: 569-84.

Schmidt W H, McKnight C C, Houang R T, Wang H, Wiley D E, and Cogan L S (2001). *Why schools matter: a cross-national comparison of curriculum and learning*. Pp: 235-78, A Wiley, San Francisco.

Stake R E (Ed.) (1975). *Evaluating the arts in education: A responsive approach*. Columbus, OH: Bobbs-Merrill

8. Tables

Table 1 Opinions of respondents towards the Principle of curriculum construction ‘Arranging content in a coherent and sequential way’

n=65

Statements	Opinions of Teachers (Frequencies)										Total	
	PAU n ₁ =15		HAU n ₂ =15		GBPUAT n ₃ =15		MPUAT n ₄ =10		HPKV n ₅ =10			
	f	%	f	%	f	%	f	%	f	%	f	%
Delivery of instructions is closely aligned with the goals of a particular course/programme	10	66.67	13	86.67	15	100.00	10	100.00	10	100.00	58	89.23
Sequencing learning objectives for a class session serves no purpose	4	26.67	0	0.00	0	0.00	1	10.00	0	0.00	5	1.54
Communicating your expectations to students make them loose interest	7	46.67	1	6.67	0	0.00	0	0.00	3	30.00	11	16.92
Curriculum covers skills and concepts required to be developed amongst students	8	53.33	13	86.67	14	93.33	7	70.00	9	90.00	51	78.46
Teaching and learning materials were not aligned to instructional objectives	6	40.00	0	0.00	2	13.33	3	20.00	6	60.00	17	26.15
Good curriculum should be a mixed bag of low and high level of concepts	8	53.33	3	20.00	0	0.00	3	20.00	7	70.00	21	32.31
Learning objectives of courses are stated logically and coherently	9	60.00	12	80.00	10	66.67	8	80.00	8	80.00	47	72.31

Learning objectives flow well with the theoretical underpinnings of the content	10	66.67	13	86.67	10	66.67	8	80.00	10	100.00	51	78.46
Curriculum framework provides scope for what should be taught and sequence the guidance in which it should be taught	8	53.33	12	80.00	14	93.33	8	80.00	8	80.00	50	76.92
Curriculum framework addresses all content areas	7	46.67	14	93.33	15	100.00	5	50.00	6	60.00	47	72.31
The scope and sequence of contents basically reflect meaningful development of skills and concepts	10	66.67	13	86.67	11	73.33	8	80.00	7	70.00	49	75.38
Aligning scope and sequence of contents with national needs is a farce	9	60.00	3	20.00	4	26.67	3	30.00	1	10.00	20	30.77

Table 2 Opinions of respondents towards the Principle of curriculum construction ‘Allocating Sufficient Time on Focus Topics’

n=65

Statements	Opinions of Teachers (Frequencies)										Total	
	PAU n ₁ =15		HAU n ₂ =15		GBPUAT n ₃ =15		MPUAT n ₄ =10		HPKV n ₅ =10			
	f	%	f	%	f	%	f	%	f	%	f	%
The curriculum establishes priority of learning objectives based on time allocation	7	46.67	14	93.33	13	86.67	10	100.00	10	100.00	54	83.08
It works at balancing between the number of major topics and subtopics covered	10	66.67	14	93.33	12	80.00	3	30.00	7	70.00	46	70.77
Time allotted to explore the major learning objectives in depth is sufficient	7	46.67	13	86.67	11	73.33	2	20.00	10	100.00	43	66.15
Ensures the provision of requisite resources for teachers to support in depth learning of major ideas	4	26.67	14	93.33	5	33.33	3	30.00	7	70.00	33	50.77
Allows the learners to explore core concepts of the topic in a superficial manner	8	53.33	2	13.33	5	33.33	2	20.00	3	30.00	20	30.78
The scope of the curriculum does not match well with the time available to teach	8	53.33	5	33.33	5	33.33	5	50.00	3	30.00	26	40.00
The curriculum framework must be acceptable to all key stakeholders	9	60.00	11	73.33	9	60.00	0	0.00	5	50.00	34	52.31
The curriculum framework represents the program’s mission, philosophy and values	4	26.67	11	73.33	10	66.67	4	40.00	10	100.00	39	60.00

The contents of the curriculum should be rigid	5	33.33	10	66.67	7	46.67	4	40.00	0	0.00	26	40.00
The elements of the curriculum framework are flexible	5	33.33	9	60.00	8	53.33	3	30.00	4	40.00	29	44.62
The curriculum needs no physical, social and environmental support	6	40.00	4	26.67	3	20.00	4	40.00	6	60.00	23	35.38
Seeking collaboration of stakeholders in curriculum development leads to utter confusion and waste of time	5	33.33	3	20.00	6	40.00	5	50.00	3	30.00	22	33.85
The curriculum must be a unified, comprehensive and integrated package	7	46.67	12	80.00	12	80.00	5	50.00	8	80.00	44	67.69
The curriculum framework must be inter-disciplinary in nature	8	53.33	9	60.00	9	60.00	1	10.00	7	70.00	34	52.31

Table 3 Opinions of respondents towards the Principle of curriculum construction ‘Ensure Inclusion of Core Knowledge as well as Specific Knowledge’

n=65

Statements	Opinions of Teachers (Frequencies)										Total	
	PAU n ₁ =15		HAU n ₂ =15		GBPUAT n ₃ =15		MPUAT n ₄ =10		HPKV n ₅ =10			
	f	%	f	%	f	%	f	%	f	%	f	%
The curriculum framework												
Allows access to a core set of knowledge and skills to all students	11	73.33	15	100.00	15	100.00	5	50.00	7	70.00	53	81.54
Addresses specific needs of the local community while dealing	7	46.67	13	86.67	10	66.67	6	60.00	4	40.00	40	61.54

with the core concepts												
Offers no opportunity for enrichment on specific topics beyond the core curriculum	8	53.33	4	26.67	7	46.67	6	60.00	6	60.00	31	47.69
Includes assessment procedures for ascertaining student understanding of learning objectives before instruction begins.	4	26.67	12	80.00	9	60.00	3	30.00	6	60.00	34	52.31
Deals with core knowledge learning objectives without permitting flexibility for more advanced study	8	53.33	14	93.33	7	46.67	4	40.00	5	50.00	38	58.46
Denies involvement of teachers in the preparation of curriculum framework	6	60.00	0	0.00	2	13.33	5	50.00	3	30.00	16	24.62
Inequitable to a community's diverse backgrounds and values	7	46.67	4	26.67	6	40.00	6	60.00	10	100.00	33	50.77
Provides for different mechanisms to allow for periodic curriculum adjustments	5	33.33	13	86.67	8	53.33	5	50.00	3	30.00	34	52.31

Table 4 Opinions of respondents towards the Principle of curriculum construction 'Having Common Rigorous Standards for Evaluation'

n=65

Statements	Opinions of Teachers (Frequencies)					Total
	PAU n ₁ =15	HAU n ₂ =15	GBPUAT n ₃ =15	MPUAT n ₄ =10	HPKV n ₅ =10	

	f	%	f	%	f	%	f	%	f	%	f	%
Curriculum framework:												
Clearly communicates the expectations for student learning to parents and supporting community	4	26.67	12	80	7	46.67	4	40.00	4	40.00	31	47.69
Conveys high expectations for student learning among teachers and heads of the institution	7	46.67	12	80	9	60.00	4	40.00	5	50.00	37	56.92
Clearly communicates the criteria for achievement of students	12	80.00	13	86.67	12	80.00	7	70.00	4	40.00	48	73.85
Ensures total secrecy of evaluation	1	6.67	0	0.00	0	0.00	4	40.00	0	0.00	5	7.69
Involves summative evaluation to the total exclusion of formative evaluation	7	46.67	1	6.67	2	13.33	8	80.00	6	60.00	24	36.92
Clearly states the learning objectives for a given community of learners to be realized in the given amount of time.	10	66.67	12	80.00	12	80.00	7	70.00	7	70.00	48	73.85
Ensures minimum assessments by teachers that reflect student's cumulative learning in terms of achieving the stated learning standards	8	53.33	4	26.67	0	0.00	5	50.00	1	10.00	18	27.69
Deals with learning styles and outcomes through	11	73.33	11	73.33	15	100.00	5	50.00	9	90.00	51	78.46

different evaluation measures												
Includes methods for ongoing evaluation of student's progress	11	73.33	9	60.00	14	93.33	5	50.00	6	60.00	45	69.23
Uses authentic monitoring methods to measure progress	9	60.00	11	73.33	13	86.67	0	0.00	8	80.00	41	63.08
Employs progress monitoring methods that are culturally, linguistically and individually non-biased	12	80.00	11	73.33	13	86.67	7	70.00	10	100.00	53	81.54
Focuses on evaluating few areas of development and learning	8	53.33	11	73.33	10	66.67	4	40.00	5	50.00	38	58.46
The intensity and frequency of progress monitoring is tailored to the group needs	6	40.00	11	73.33	8	53.33	1	10.00	4	40.00	30	46.15
Families and guardians are informed about their wards progress	0	0.00	6	40.00	4	26.67	1	10.00	0	0.00	11	16.92
Employs achievement test scores to inform about students progress in courses	1	6.67	10	66.67	10	66.67	2	20.00	1	10.00	24	36.92
Progress monitoring results are purposefully used for modifying and revising elements of the curriculum framework	2	13.33	12	80.00	8	53.33	1	10.00	5	50.00	28	43.08

Evaluation results provide a comprehensive description of learner's current skills and abilities	8	53.33	11	73.33	11	73.33	6	60.00	6	60.00	42	64.62
--	---	-------	----	-------	----	-------	---	-------	---	-------	----	-------

Table 5 Opinions of respondents towards the Principle of curriculum construction 'Multiple Pedagogical Approaches to Instruction'

n=65

Statements	Opinions of Teachers (Frequencies)										Total	
	PAU n ₁ =15		HAU n ₂ =15		GBPUAT n ₃ =15		MPUAT n ₄ =10		HPKV n ₅ =10			
	f	%	f	%	f	%	f	%	f	%	f	%
Curriculum spells different teaching methodologies in relation to the stated learning objectives	7	46.67	15	100.00	9	60.00	10	100.00	6	60.00	47	72.31
Prepares teachers to align objectives, contents, materials and assessments for cohesive learning	14	93.33	15	100.00	15	100.00	10	100.00	6	60.00	60	92.31
Provides scope for instructional planning to build student learning around stated objectives	14	93.33	12	80.00	15	100.00	10	100.00	7	70.00	58	89.23
Limits teachers to deliver instructions through classroom based techniques	2	13.33	2	13.33	0	0.00	0	0.00	2	20.00	6	9.23

Helps teachers decide which method of instruction would be most effective for a given group of students to learn a specific set of learning objectives	12	80.00	15	100.00	14	93.33	7	70.00	8	80.00	56	86.15
Takes care of teachers using hands on/minds on activities to support learning of specific objectives	7	46.67	13	86.67	9	60.00	4	40.00	4	40.00	37	56.92
Supports limited pedagogical options for teachers	10	66.67	11	73.33	7	46.67	6	60.00	4	40.00	38	58.46
Permits no choice in using learning approaches that are considered appropriate for delivering instructions	12	80.00	15	100.00	12	80.00	9	90.00	7	70.00	55	84.62
Includes instructional activities and practices												
-that are accessible to all students	8	53.33	15	100.00	7	46.67	9	90.00	8	80.00	47	72.31
-that are developmentally appropriate and based on local specific needs	10	66.67	14	93.33	11	73.33	6	60.00	6	60.00	47	72.31
-address all subject matter areas of learning	12	80.00	15	100.00	10	66.67	3	30.00	6	60.00	46	70.77
-are aligned together	11	73.33	15	100.00	14	93.33	3	30.00	5	50.00	48	73.85
-are responsive to develop individual student's strengths and needs	9	60.00	14	93.33	10	66.67	3	30.00	5	50.00	41	63.08
-that offer multiple and varied embedded learning opportunities	8	53.33	12	80.00	10	66.67	6	60.00	6	60.00	42	64.62
-that use hands-on experiences	14	93.33	11	73.33	11	73.33	2	20.00	6	60.00	44	67.69
-that offer experience based learning	9	60.00	12	80.00	11	73.33	6	60.00	3	30.00	41	63.08
-that are linked directly to children's immediate and long-term goals	11	73.33	14	93.33	15	100.00	7	70.00	5	50.00	52	80.00
Organizes classroom schedule and environment to support different instructional activities and practices	10	66.67	13	86.67	15	100.00	7	70.00	5	50.00	50	76.92
Emphasizes Instructional strategies that are:	9	60.00	13	86.67	14	93.33	7	70.00	6	60.00	49	75.38

-inclusive of learner goals, interests and learning styles												
-require learner to build on prior knowledge and construct meaning (build expertise)	11	73.33	13	86.67	11	73.33	6	60.00	7	70.00	48	73.85
-assist the learner to develop skills through application for meaningful, authentic uses (contextual)	8	53.33	12	80.00	11	73.33	6	60.00	7	70.00	44	67.69
-address the appropriate learning level(s)	8	53.33	13	86.67	10	66.67	3	30.00	7	70.00	41	63.08
-allow for choice and flexibility	6	40.00	13	86.67	11	73.33	5	50.00	5	50.00	40	61.54
-articulate meta-cognitive activity	5	33.33	12	80.00	10	66.67	1	10.00	5	50.00	33	50.77
- include learner reflection and feedback	6	40.00	11	73.33	7	46.67	5	50.00	5	50.00	34	52.31
-include combinations of individual, small group, and large group instruction	8	53.33	11	73.33	7	46.67	3	30.00	4	40.00	33	50.77
-make effective use of information and communications technology	7	46.67	13	86.67	11	73.33	6	60.00	6	60.00	43	66.15
Ensures use of Instructional resources that are												
-relevant to the curriculum and cross-curricular when appropriate	9	60.00	12	80.00	9	60.00	6	60.00	8	80.00	44	67.69
-rich, varied, and derived from multiple sources	8	53.33	15	100.00	13	86.67	6	60.00	6	60.00	48	73.85
-age and skill-level appropriate (readability)	9	60.00	13	86.67	12	80.00	6	60.00	7	70.00	47	72.31
Ensures use of mono-sensory approach to instruction	7	46.67	1	6.67	2	13.33	0	0.00	3	30.00	13	20.00