Interactive Edification: The Effectual Approach for Apprentices

Saiful Islam Tanvir [1*] and Md. Mehedi Billah [2]
1. Lecturer and Adviser, Department of Apparel Manufacturing Management and Technology
2. Jr. Lecturer, Department of Graphic Design and Multimedia
Shanto-Mariam University of Creative Technology, Uttara, Dhaka-1230, Bangladesh
[*]Correspondence: House: 42, (5-A), Road: 04, Sector: 13, Uttara, Dhaka-1230, Bangladesh
E-mail: tanvir.saiful@gmail.com

Abstract
This paper focuses axis of concentration on the brunt of the interactive edification and the preferences for the recent astuteness in educational associations. In seeking to expand the lenient, indulgent, constraint and understanding of interactive edification strategy on the apprentices, it assesses the affiliation between the regular and effectual measures. Students in a fully interactive based learning surroundings achieved better performance and higher levels of contentment than those in a traditional classroom and those in a less interactive learning atmosphere. The fallout of study designate that there are impacts of an interactive edification and its progression is exceedingly esteemed by the recent world to steadiness the superiority and antagonism in terms of individual advancement and the career elucidation. The study activated by the triangulation of the data derivation and undeviating surveillance of the newest features under succession of students' acceptances.
Keywords: Interaction, Education, Interactive Edification, Apprentice

1. Introduction

Education and edification in its general sense is a form of learning in which the knowledge, skills, and habits of a group of people like apprentices are transferred from one generation to the next through lessons, training or research. Education frequently takes place under the guidance of others, but may also be autodidactic (Steven Hick, 2011). Any experience that has a formative effect on the way one thinks, feels, or acts may be considered educational. Education is commonly divided into stages such as preschool, primary school, secondary school and then college, university or apprenticeship (Shang, 2005). A right to education has been recognized by some governments. At the global level, (Article 13 of the United Nations' 1966) International Covenant on Economic, Social and Cultural Rights recognizes the right of everyone to an interactive education. Although interactive education is compulsory in most places up to a certain age, attendance at school often isn't, and minorities of parents choose home-schooling, e-learning or similar for their children. Leidner and Jarvenpaa (1995) categorize interactive learning representation into several categories: objectivism, constructivism, collaborative learning, cognitive information dispensation and socio-culturism. Among   them, the constructivist learning model, which calls for learner-centered instruction (Dobbs, 2007), is the most commonly adopted (Sims, 2007) in interactive edification. Learning in interactive environment refers to the expansion of intellectual states and aptitudes for the apprentices.

2. Interactive Edification Modalities

There has been much attention and wakefulness in interactive learning modalities and styles over the last two decades (Webster, 2008). The most commonly employed interactive learning modalities are:

- Visual: learning based on observation and seeing what is being learned.
- Auditory: learning based on listening to instructions/information.
- Kinesthetic: learning based on movement, e.g. hands-on work and engaging in activities.

Other commonly employed modalities include pleasant-sounding, interpersonal, verbal, logical, and intrapersonal. Some theories propose that all individuals benefit from a variety of learning modalities, while others suggest that individuals may have preferred learning styles, learning more easily through visual or kinesthetic experiences (Alavi, 2009).
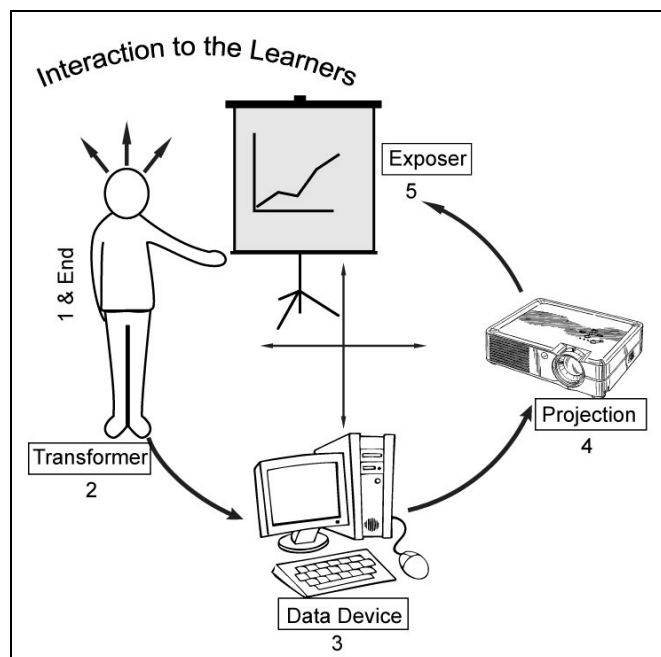
Figure 1: Interactive Edification Rudiments and Revolves [Authors Constructed]

A consequence of the latter theory is that effective teaching should present a variety of teaching methods which cover all three learning modalities so that different students have equal opportunities to learn in a way that is effective for them. Guy Claxton has questioned the extent that learning styles such as VAK are helpful, particularly as they can have a tendency to label children and therefore restrict learning. Recent research has argued "there is no adequate evidence base to justify incorporating learning styles assessments into general educational practice" (Chapman, 2010).

3. Interactive Edification Postulation

Learning in interactive environment refers to the development of mental states and abilities of all types including conceptual knowledge, technical skills, automatic rules, mental models, and problem-solving. Forms of higher-order outcomes such as motivation, intellectual curiosity, and the habits of lifelong learning are especially relevant because these are the most demanding types of erudition to extend further. Interactive Multimedia in Education and Training emerges out of the need to share information and knowledge on the research and practices of using multimedia in various educational settings. The researchers discuss issues related to planning, designing and development of interactive multimedia in a persuasive tone and style, offering rich research data. Roles and application of multimedia in different education and training contexts are highlighted, as are case studies of multimedia development and use, including areas such as language learning, cartography, engineering education, health sciences, and others. The researchers also report by their experiences of designing multimedia materials that are pedagogically appropriate and suitable to the cognitive abilities of the target groups. The conception of interactive learning has evolved over the last century (Grabinger, 1996) lists some of the major changes in assumptions:

Old Assumptions	New Assumptions
People transfer interactive edification with ease by abstract and decon-textualized concepts.	People transfer interactive edification with difficulty, needing both content and context.
Apprentices are receivers of knowledge.	Apprentices are constructors of knowledge.
Learning is behaviorist and involves the strengthening of stimulus and response.	Learning is cognitive and in a constant state of evaluative and comprehensive growth.
Learners are blank slates ready to be filled with customary kind of knowledge.	Learners bring their own needs and experiences to learning situations.
Skills and knowledge are acquired context.	Skills and knowledge are realistic contexts.

Table 1: Getting on versus innovative conjecture about interactive edification

4. Decisive Literature Review

Knowledge of your audiences especially apprentices, also called stakeholders or publics, is vital in designing messages and selecting interactive media to produce an effective program. All audiences are different. The

"general public" does not exist. Rather communicators must identify different segments of the public they wise to communicate with, a process that advertisers call market segmentation (Susan K. Jacobson, 2009). So the interactive education can enlarge the students' capacity in terms of their accountability. Interactive education and entertainment edu-business (Zhang, 2008) today are undergoing major transformation. By refocusing, restructuring, and realigning core business, they are adapting to new technology that are rapidly changing how we receive and view our entertainment (Michael J. Ceitelli, 2011). Several industry trends are at work that will affect media management (Rivera and McAlister, 2005) teams:

- Traditionally independent local providers of content have been gobbled up by a small number of large, publicly traded international conglomerates.
- That competes across multiple interactive education sector, both online and offline of edu-campus.
- More companies have multiple distribution strategies that include television/cable, online, and print rather than focusing on one channel of distribution.
- Media, technology, and telecommunications in terms of interactive edification are converging, although more slowly than anticipated.
- The educational organizations, as for example, have yet to organize and centralize itself around a digital interactive model that techno-savvy listeners will embrace.
- The web has created a thread to traditional copyright protection, posing and urgent management challenge regarding how to protect contents in the new digital environment.

The social theorist Karl Marx and Max Weber focused on the stratification approved-systems for interactive edification associated with industrialization. The socio-economic effects of industrialization were mixed English national income tripled between 1700 and 1815 and increased 13 times more by 1939. Standards of comfort rules, but prosperity were uneven. At first, factory workers got wages where than those available in the domestic system. Later, owners started recruiting in places where living standards were low and labor was cheap. (Conrad Phillip Kottak, 2004). Connection is the glue of interaction education, bonding minds and revealing thinking. Recently it was shown that speaking and interactive education merging each other on the essence of studentship. As part of the session, students are able to brainstorming in model of perfection (Kevin Cashman, 2007).

5. Study Objectives with Illuminations

Interactive edification has been defined in a number of ways. It is not our intention here to go into the details of these definitions. But, in order to clarify the use of the term in the context of this article, it would have a preference to quote a few of them:

Definition 1: "Interactive edification is the combination of a variety of communication channels into a co-ordinate communicative experience for which an integrated cross-channel language of interpretation does not exist" (Elsom-Cook, 2001). This definition gives way for two approaches—one that is termed the "interaction" utilization, and the other in which a combination of different channels acquires unification as a medium. The latter approach leads us to the next definition:

Definition 2: "Interactive edification can be defined as an integration of multiple media elements (audio, video, graphics, text, animation, etc.) into one synergetic and symbiotic whole that results in more benefits for the end user than any one of the media elements can provide individually" (Reddi, 2003). Definition 2 essentially tries to emphasize the second approach of Definition 1 with more clarity and spells out the components of interactive edification. Taking a systems theory perspective, it also tells us that the overall effectiveness of multimedia is better than any one component of it. But, neither of the definitions explicitly includes the "interactive" power of multimedia, as in:

Definition 3: "The term 'interactive edification' is a catch-all phrase to describe the new wave of computer software that primarily deals with the provision of information. The 'multimedia' component is characterized by the presence of text, pictures, sound, animation and video; some or all of which are organized into some coherent program. The 'interactive' component refers to the process of empowering the user to control the environment usually by a computer" (Phillips, 1997). The study aimed to find out the interactive education's endeavor and inabilities in as follows:

1. Deriving the interactive edification in a sense.
2. Converting and comprising the contemporary edification measures.
3. Pronouncement of the solemn factors of interactive edification.
4. Distinguishing the consecutively actions with the actuality to balance inclusive edification.

6. Study Methods and Obligations

The conclusive, reminiscent of descriptive research presented in this study and the impact showed through a basic data analysis. The factor and discriminated analysis has also tried to make percentage of the different variables and issues.

- Data Foundation: Primary (From 5 Institutions, 30 Respondents Each) and Secondary (Reviewed)
- Approach: Triangulation of qualitative and quantitative movement
- Questionnaire: Semi structured with undisguised parameters
- Investigation: Through Annotations and FGD procedure
- Manners: Inferential and Communal
- Framework: Examples and Records

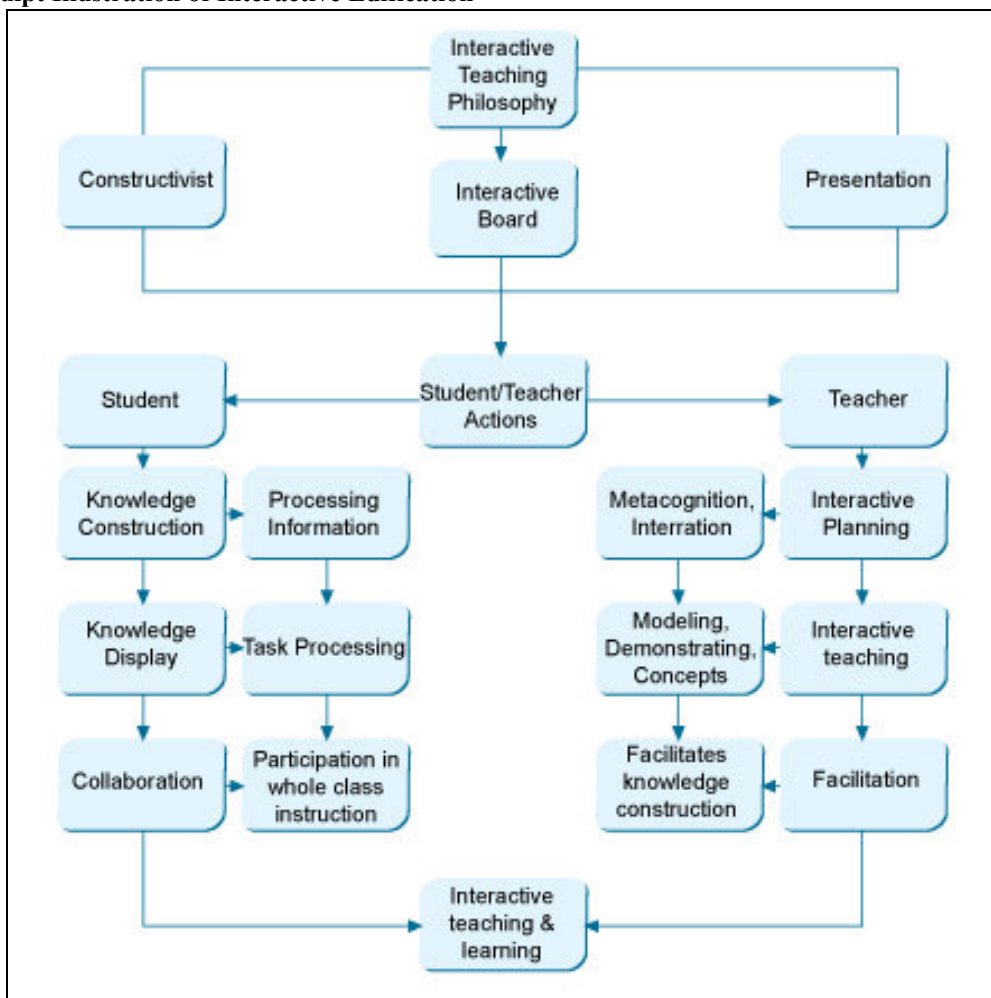## 7. The Sculpt Illustration of Interactive Edification

Diagram 1: The Process Flow of Interactive Edification [Authors Constructed]

8. Pedagogical Issues on Interactive Edification

Interactive edification is primarily the process through which we become the human beings we are, and it takes place through a variety of media, strategies, and processes, of which interactive multimedia is just one. Using these media and technologies, we internalize information and knowledge available in the external world to construct our own experiences. Researchers into human learning are primarily categorized into three distinctive groups: behaviorism, cognitivism, and constructivism. There are others who also believe in experiential learning and androgogy.

8.1 Interactive Erudition

Traditionally, apprentices sit and absorb knowledge from teacher lecture and notes on the board. Interactive earning means that students are active participants in the learning process. In a learning environment that integrates the interactive board, students are focused on stimulus presented by the teacher on the interactive board and the student, either verbally or physically, interacts with the interactive board. In the definitions of Interactive Teaching, an example was given about students "dragging" words to compose a sentence that described a digital image. This is a form of interactive learning because students interact with the content through a combination of the abstract and the concrete. This type of student-centered learning follows the principles of constructivist learning, a building block of an interactive learning environment. Students are

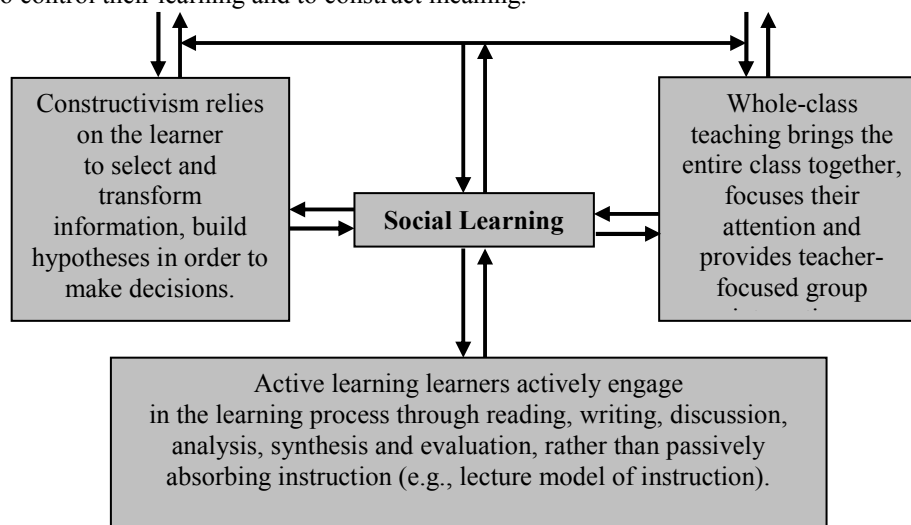encouraged to control their learning and to construct meaning.

Diagram 2: Interactive Edification in Erudition [Authors Constructed]

8.2 Interactive Tools

Interactive Boards, also known as electronic blackboards, are display monitors that are produced in various sizes by different companies such as Smart Technology, Promethean, Sony, and others. Interactive boards have two distinct functions: display and interactivity. As a display tool, teachers can display specific content related files, software, or Internet resources. As an interactive tool, interactive boards allow the user to write and manipulate objects including images and text. Interactive boards connect through a USB port to a computer (desktop or laptop) and a projector is connected to that computer. The computer screen is projected onto the interactive board and the user has access to all files, software, and Internet at the touch of a finger or a device depending on the type of interactive board.

8.3 Multimedia Courseware

Multimedia courseware is many things to many people. In general terms, multimedia courseware is the use of different communications mediums within a single computer program used to present information. By communications mediums, we mean audio for music, sound effects, or voice-over narration, still photographs and / or graphics to help the end user understand the message that is being presented, video to further explain or illustrate ideas.

8.4 Benefits of Interactive Courseware

Traditional classrooms can limit the scope of education, requiring students and teachers to report to a central location and receive their education at that location. Learning can be difficult in adult education programs when students and educators have employment outside the classroom. For traditional students, interactive learning can supplement classroom learning. Interactive learning utilizes computer software programs to assist students and teachers with lessons, according to HRdictionary.

8.5 Improves Learning

Numerous studies over the years have shown that interactive multimedia learning takes less time, is enjoyed more and increases learning. In a review of numerous meta-analysis studies Najjar (1996:30) found that "learning was higher when information was presented via computer-based multimedia systems than traditional classroom lectures".

8.6 Interaction

Interactivity is mutual action between the learner, the learning system, and the learning material. Numerous studies have found that interactivity has a strong positive effect on learning (Bosco, 1986, Fletcher, 1989, 1990, Stanfford, 1990). For example, Bosco (1986) reviewed 75 learning studies and found that learners learn faster, and have better attitudes toward learning when using interactive multimedia.

8.7 Bendable

Multimedia courseware on CD-ROM can be used at work on the desktop or at a learning centre, at home, while travelling, or to enhance facilitated management development programs. Multimedia courseware can also be used on networks, Intranets or the Internet. These distributed learning approaches allow for even more flexibility, but in the cases of Internets will involve much lower quality images and will preclude the use of video, at least in the near future.

8.8 Modular

Each topic or section can stand alone, so managers or trainers can delve deeply into the topic areas they need to learn, and skip over the ones they don't. In many cases applications include the option to custom build the

application for your specific use where you can choose modules, and even edit the content in some fields. Some systems employ plasma screens instead of a projector, but they are very expensive and are therefore not considered further here. All are effective methods for developing practical skill and increasing information retention. Action on the surface of the display panel is communicated with the computer over a cable or wireless connection and interpreted via the installed software.

8.9 No-Nonsense
It is capable of presenting true-to-life situations that learners face every day. Adults are very practical learners, they learn best when faced with real problems that have real consequences. Decision tree simulation, video simulations or simple animations allow learners to learn-by-viewing, learn-by-doing or learn-by-coaching.

8.10 Unswerving
All learners learn the same principles and skills. Computer-based courseware typically forces instructional designers to better organize and structure learning materials, and this alone can result in learning advantages. Fully-functioning interactive whiteboards usually comprise four components: a computer, a projector, appropriate software and the display panel. The computer is connected to the projector and whiteboard. The projector displays the computer screen image onto the board.

8.11 Opportune
Learners can turn to the program when situations arise on the job, or when they are faced with new or increased responsibilities. This is critical, since research has shown that learning is enhanced and better retained when the topic is relevant to current needs. Display panels can be either front or back projection. Additional components are available for some systems, including handheld key pads for gathering individual responses and interactive white board tablets: in effect a small personal version.

8.12 Appealing
Interactive learning with live-action video, audio, graphics, feedback, expert advice, and questions and answers keep learners interested and reinforce skills. Because it is exciting, challenging, and fun to use, it encourages learners to return to the program again and again. Through continual practice, learning is absorbed and integrated into daily performance.

9. Data Discussions
Interactive Edification has provided new capabilities that can transform the process of teaching and learning. Transforming the process of teaching and learning will mean that teachers create fundamentally different learning environments that promote interactivity. New ways of teaching will be accomplished through enhancing the skills of veteran teachers but also through future teachers. Pre-service teachers need time to sift through the capabilities of interactive technology and to understand which of those capabilities can influence teaching and learning practices.

9.1 Trait Data
This study maintained through 5 (Five) educational institutions by observing and Focus Group Discussion (FGD) methods which are delivering instructions with the practices of interactive edification this days in Bangladesh City Arena. Sampling was ended for at least 30 (Thirty) students for each sources.
Institutions are as follows:
   a.   Shnato-Mariam University of Creative Technology (SCTFT)
   b.   BGMEA University of Fashion and Technology (BUFT)
   c.   National Institute of Fashion Technology (NIFT)
   d.   Sikder College of Textile and Fashion Technology (SCTFT)
   e.   Lankan Clothing Institute (LCI)

No	Trait Data	Upshot Data				
		SMUCT	BUFT	NIFT	SCTFT	LCI
1	Advancement	23%	12%	33%	13%	8%
2	Interface	11%	8%	17%	6%	28%
3	Bendable	14%	18%	12%	11%	3%
4	Modular	6%	26%	2%	7%	23%
5	Convenient	16%	8%	9%	22%	13%
6	Unswerving	13%	6%	4%	15%	2%
7	Opportune	2%	11%	7%	9%	6%
8	Appealing	3%	7%	13%	4%	8%
9	Money-Spinning	12%	4%	3%	13%	9%

Table 2: Commutation of students' fondness by each Trait Data (Authors Instructed)

9.2 Frequency Distributions and Exposing
The beneath Table analyzing: Institutional Respondent Frequency as per the Percent Values, Valid Percent

Distributions and with Cumulative Gradation.

Institutions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BUFT	18	20.0	20.0	20.0
	LCI	9	10.0	10.0	30.0
	NIFT	9	10.0	10.0	40.0
	SCTFT	18	20.0	20.0	60.0
	SMUCT	36	40.0	40.0	100.0
	Total	90	100.0	100.0	

Table 3: Valid Institutional Frequency Preferences (SPSS, v.16)

The department of institutions as per interactive edification:
1. AMMT: Apparel Manufacturing Management and Technology
2. FDT: Fashion Design and Technology
3. GDM: Graphic Design and Multimedia
4. IA: Interior Architecture
5. TT: Textile Technology

Courses

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid AMMT	36	40.0	40.0	40.0
FDT	27	30.0	30.0	70.0
GDM	9	10.0	10.0	80.0
IA	9	10.0	10.0	90.0
TT	9	10.0	10.0	100.0
Total	90	100.0	100.0	

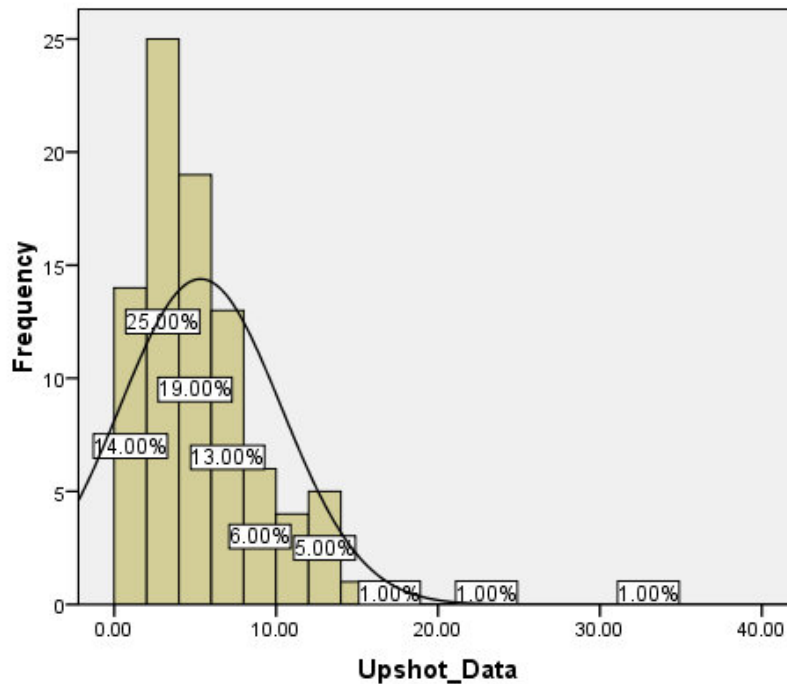**Table 4:** Valid Course Frequency Preferences (SPSS, v.16)

Diagram 3: Upshot Data Frequency Preferences with Distributed Percentage (SPSS, v.16)
Upshot Data

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	4	4.4	4.4	4.4
	1	10	11.1	11.1	15.6
	2	10	11.1	11.1	26.7
	3	15	16.7	16.7	43.3
	4	12	13.3	13.3	56.7
	5	7	7.8	7.8	64.4
	6	8	8.9	8.9	73.3
	7	5	5.6	5.6	78.9
	8	4	4.4	4.4	83.3
	9	2	2.2	2.2	85.6
	10	4	4.4	4.4	90.0
	12	3	3.3	3.3	93.3
	13	2	2.2	2.2	95.6
	14	1	1.1	1.1	96.7
	17	1	1.1	1.1	97.8
	23	1	1.1	1.1	98.9
	33	1	1.1	1.1	100.0
	Total	90	100.0	100.0	

Table 5: Upshot Data Progression and Gradation-Degradation (SPSS, v.16)

The entire snap shots through SPSS, v.16 showed and represented the gradation power of values and effectual movement in between. Variables, Trait Data and Upshot Data maintained the factors with descending progressions. Values are exposing the acceleration of causes stimulation and the significance of direction to the Trait Data.

10. Further Considerations

Interactive edification understanding within methods courses fosters the development of teaching philosophies enhanced by technology. While we can and should attempt to influence veteran teachers to use an interactive pedagogy supported by technological tools, it is even more critical to begin this process with pre-service teachers. Schools of education believe that it is a good idea to have pre-service teachers intern (apprentices + interactive + edification) before actually taking the reins of an individual classroom. Similarly, pre-service teachers must grapple with the complexities of effectively integrating technologies that will create interactive teaching and learning environments for students. It is important to have technology skills but teachers must carefully think about cognitive aspects of using technology in teaching and practice creating lessons that integrate technology while taking methods courses. Methods and foundations courses must infuse frameworks that highlight technology as an integral part of planning, designing, implementing, and assessing student learning. Future methods courses should have interactive technologies available, allowing pre-service teachers to practice with interactive technology as they learn.

11. Conclusion

Time allows pre-service educators to develop ways of integrating interactivity as a fundamental part of their teaching. While training and supporting veteran teachers can have a positive impact on the classroom, processing concepts of technology integration to create interactive learning environments as a pre-service teacher will provide a unique advantage. That advantage is related to the terms "digital native" and "digital immigrant". Currently, these terms are used to describe those who have grown up with technology and those who did not grow up with technology. In terms of professional growth in a formal education setting, many veteran teachers did not "grow up" with technology; however, pre-service teachers are now becoming digital natives. Schools of education have the opportunity to create these "interactive edification" by infusing concepts of interactive

learning environments into traditional programs. Interactive boards and various interactive tools must be to the pre-service teacher what the overhead projector is to veteran teachers. International Journal of Technology in Teaching & Learning When teachers are prepared with a sense of integrating technology to create interactive learning environments, it will be part of everything they do in the classroom. Pre-service teachers need to be trained in ways that encourage them to think of apprentices as knowledge producers, rather than consumers.

References

1. Susan K. Jacobson, 2009, Communication Skills for Conversation Professionals, 4th Edition, ISBN: 1-55963-508-8, pp: 31-37
2. Michael J. Critelli, 2011, The Career Navigation Handbook, 2nd Edition, Thunder Publications, ISBN: 0-471-64850-7, pp: 117-200
3. Conrad Phillip Kottak, 2004, Mirror for Huminity, 2nd Edition, Pearson Publications, ISBN: 0-07-290171-3, pp: 216-225
4. Kevin Cashman, 2007, Awakening the Leader within, 4th Edition, McHill Publications, ISBN: 0-471-27-319-8, pp: 287-291
5. *Steven Hick Ph.d., Benefits Of Interactive Multimedia Courseware, Trican Multimedia Solutions Inc. http://http-server.carleton.ca/~shick/mypage/benifit.html*
6. Alan Kirk, What Are the Benefits of Interactive Learning?
7. http://www.ehow.com/list_6468331_benefits-interactive-learning_.html
8. Bude Su, Curtis J. Bonk, Richard J. Magjuka , Xiaojing Liu ,Seung-hee Lee, The Importance of Interaction in Web-Based Education: A Program-level Case Study of Online MBA Courses, Volume 4, Number 1 Summer 2005, ISSN:1541-4914
9. Interactive Instruction: Creating Interactive Learning Environments Through Tomorrow's Teachers,
10. Sessoms, D. (2008). International Journal of Technology in Teaching and Learning, pp: 86-96.
11. Interactive Whiteboards and Learning, Improving student learning outcomes and streamlining lesson planning, March 2006, SMART Technologies Inc.
12. Interactive Whiteboards in Education, TechLearn, The Network Centre, Innovation Close, York Science Park, York, YO10 5ZF, www.technologiescentre.ac.uk.
13. Marina Milovanović, Ph.d., Application Of Interactive Multimedia Tools In Teaching Mathematics – Examples Of Lessons From Geometry, The Turkish Online Journal Of Educational Technology – January 2013, Volume 12 Issue 1, pp: 29
14. Anthony J. Rodrigues, Does Interactive Learning Enhance Education: For Whom, In What Ways and In Which Contexts?, Advances in Systems Modelling and ICT Applications
15. Interactive Media - What's that? Who's involved?, Elaine England and Andy Finney ATSF , January 2002 ... updated 2011, ATSF White Paper—Interactive Media UK, 2002/2011 ATSF
16. Sanjaya Mishra , Ramesh C. Sharma, Interactive Multimedia in Education and Training, Indira Gandhi National Open University, pp: 434, 2004, ISBN 1-59140-393-6
17. Teaching and Learning Research Programme, Using computers to enhance learning: integrating ICT into everyday classroom practices, September 2006, pp: 19, ISBN 0-85473-738-3
18. http://classicalhomeschooling.com/classical-homeschooling-second-issue/classical-vs-modern-ducationthe-principal-difference
19. Hiltz, S. R., and B. Wellman. 1997. Asynchronous learning networks as a virtual classroom. Communications of the ACM, pp: 44–49
20. Jonassen, D., M.Davidson, M.Collins, J.Campbell, andB.B.Haag.1995. Constructivism and computer-mediated communication in distance ed-ucation. The American Journal of Distance Education, pp: 7–26
21. Leidner, D. E., and S. L. Jarvenpaa. 1995. The use of information technol-ogy to enhance management school education: A theoretical view. MIS Quarterly, pp: 265–291
22. Merrill, M. D. 1994. Instructional design theory. Englewood Cliffs, NJ: Educational Technology Publications, pp: 65-87
23. Moore, M. G. 1989. Three types of interaction. The American Journal of Distance Education, 2nd Edition, pp: 1–6.
24. Northrup,P.2001.Aframeworkfordesigninginteractivityint:Web-based instruction. Educational Technology, pp: 31–39.
25. Piccoli, G., R. Ahmad, and B. Ives. 2001. Web-based virtual learning envi-ronments: A research framework and a preliminary assessment, pp: 401–426.
26. Piotrow, P.,O.Khan,B.Lozare,andS.Khan.2000.Healthcommunication programs: A distance-education class within the Johns Hopkins: Univer-sitySchoolofPublicHealthDistanceEducationProgram.InWeb-based learning and teaching technologies: Opportunities and challenges
27. Reeves,T.C.1993.Pseudoscienceincomputerbasedinstruction:Thecase of learner control research. Journal of

Computer-Based Instruction 20 (2): 39–46.

28. Rivera, J. C., and M. K. McAlister. 2001. A comparison of student out-comes & satisfaction between traditional & Web based course offerings.

29. In Proceedings of Information Resources Management Association In-ternational Conference, 770–772, Toronto, Ontario, Canada. Hershey, PA: Idea Group.

30. Shang, Y., H. Shi, and S.-S. Chen. 2001. An intelligent distributed environ-ment for active learning. ACM Journal of Educational Resources in Computing 1 (2).

31. Sims, R., G. Dobbs, and T. Hand. 2002. Enhancing quality in online learn-ing: Scaffolding planning and design through proactive evaluation. Dis-tance Education 23 (2): 135–148.

32. Syed, M. R. 2001. Diminishing the distance in distance education. IEEE Multimedia 8 (3): 18–21.

Saiful Islam Tanvir is a Certified Supply Chain Manager (CSCM) recognized from ISCEA, USA. He accomplished Professional Diploma in Apparel Merchandising from BGMEA University of Fashion & Technology, Bangladesh, Certificate Diploma in Advanced Research Methodology from IER, Dhaka University and Human Resource Management from Trinity, Bangladesh. He received M. Sc. in Environmental Studies from Uttara University, Bangladesh and B. A. (Honors) in Apparel Manufacturing Management & Technology from Shanto-Mariam University of Creative Technology, Bangladesh with outstanding triumph. He recently published an international book on "Indispensable Facets of Apparel Merchandising", ISBN-10: 3846585920, ISBN-13: 978-3846585924 from Lap Lambert Academic Publishing, Germany. At present he is one of the valued Members of American Center under US Embassy, Bangladesh, SCITI Alumni Association, Bangladesh and Bangladesh Research Club, BPDM & IER. He is functioning as a Lecturer and Advisor, Department of Apparel Manufacturing Management & Technology at Shanto-Mariam University of Creative Technology, Bangladesh and engaged with a Foreign Buying House as an International Conversationalist. His vicinity of concentration is Apparel Merchandising Management, Supply Chain Management, Sourcing and Negotiation, Sample and Store Room Management and Apparel Manufacturing Management. He attained in some of the International Conferences, Trainings and Workshops in USA, China, Malaysia, Singapore, Thailand, Hong Kong, Philippines, Sri Lanka, Maldives, India, Nepal and Indonesia.

Md. Mehedi Billah received B. A. (Honors) in Graphic Design and Multimedia from Shanto-Mariam University of creative Technology, Bangladesh and also in advancement of his M.A. Degree shortly. He is presently working as a Jr. Lecturer, Department of Graphic Design and Multimedia, Shanto-Mariam University of Creative Technology, Bangladesh. His area of interest is Ultra-Multimedia, Motion Graphics, Visual Scrutiny, Design Management and Illustrational Software Integration. He participated in a number of professional Trainings and Workshops and frequently participates as a freelancer to contribute the business phenomenon. He engaged with several types of social and cultural activities.