

**A STUDY ON THE EFFECTIVENESS OF BITE-SIZED LEARNING
AMONG COLLEGE STUDENTS WITH SPECIAL REFERENCE
TO ETHIRAJ COLLEGE FOR WOMEN CHENNAI**

UGC CARE
APPROVED

ABSTRACT

Bite- sized literacy or Micro literacy are tutoring strategies to engage scholars with content in small, every concentrated gobbets. Micro learning surroundings are designed using digestible content to allow information to move from short term to long term memory. This will not just engage scholars in small micro conditioning, but to also help them to ultimately retain information. The paper presents the effectiveness of Bite- sized lecture pedagogy on learning issues The methodology involves breaking a typical one hour lecture into 3 to 4 short answers. All bite sized literacy modules are short, between 1 and 15 twinkles. Therefore, learning about a subject in bite- sized gobbets keeps scholars more focused and involved in the literacy process. Bite- sized literacy is decreasingly popular as a form of training for scholars. Breaking down information into small nuggets can also serve as a lesson of half- forgotten generalities and chops. The study focuses on the effectiveness of Bite- sized literacy. The Present exploration has been designed in the form of a check with a structured questionnaire. Primary data will be collected from a sample size of 100 scholars of final time U.G. Economics, Ethiraj College for Women. The study would introduce Bite- sized literacy modules in financial Economics and evaluate the literacy outgrowth. Audio mouthfuls of the units from financial Economics will be participated with the scholars in class whats-app group. Pre and post tests will be conducted to estimate the bite- sized literacy.

DR. G. RADHIKA

Assistant Professor

Department of Economics

Ethiraj College for women Chennai

DR. G. NEELAVATHY

Assistant Professor

Department of Economics

Ethiraj College for women Chennai

Introduction

Education originated as transmission of cultural heritage from one generation to the next. Today, educational goals increasingly encompass new ideas such as liberation of learners, critical thinking about presented information, skills needed for the modern society, empathy and complex vocational skills. Education improves skills and people's lives resulting in better livelihoods. The United Nations Sustainable Development Goal -4 emphasizes the achievement of Universal quality education.

The corona virus disease 2019 brought transition to online education. In response to school and college closures, UNESCO recommended the use of distance learning programmes and open educational applications and platforms that teachers can use to reach learners remotely and limit the disruption of education. This resulted in an immediate increase in innovation and technology. To keep the world's students learning, countries have been implementing remote education programmes.

Role of ICTs in Education

Information and communication technologies (ICTs) offer unique educational and training opportunities as they improve teaching and learning, and innovation and creativity for people and organizations. Furthermore, the use of ICT can promote the development of an educational policy that encourages creative and innovative educational institution environments. It is defined as the use of diverse kinds of ICT and electronic devices in teaching (Gaebel et al. (2014). Technological development, experience, the adding of digital knowledge of preceptors and scholars and also the growing demands of scholars in relation to quality and layout of the subject matter forces us to come up with new or founded styles of tutoring which are supported by digital technologies. Social, profitable and technological everyday changes spark new generalities and strategies which support e-learning. E-learning reduced significantly the administrative effort, preparation and teaching, attendance, and leaving classes. ICT has become an integral part of education in many countries.

During the Pandemic the students of schools and colleges were most affected. As they were only exposed to chalk and talk method with personal care by teachers, the educational loss was too heavy and could be felt in the learning outcome. In addition to regular teaching, it was very essential supplement with additional learning techniques like bite sized learning or micro learning.

In moment's fast- paced world full of distractions and online stimulation, it's veritably delicate to have a learner sit down in one spot and continually absorb educational material and remain focused on a content for hours upon hours. Scholars find it delicate to keep down from distractions on their mobile bias. Likewise, learners of the moment are contemporaneously doing multiple other conducts rather than purely learning. Education needs metamorphosis in an applicable way in which we live, work and learn. Recent studies indicate that short content may increase information retention by 20 percent. Recent exploration on how the brain learns suggests that learners must visit information multiple times and in different ways and reprise the practice of learned material or skill to move it from short term to long term memory (Hattie and Yates, 2014). The exploration also suggests that spaced instruction is better for the memory than massive instruction, and thus, learning should be spaced out over time. Bite-sized literacy or Micro-learning is a tutoring fashion that uses a series of short parts of content combined with short conditioning. It's also called bite- sized literacy.

Objectives of the Study

1. To Study the effectiveness of Bite- Sized literacy among council scholars.
2. To assess the performance of scholars ahead and after the preface of Bite- sized literacy

Review of Literature

Manningetal (2021) quoted that bite sized literacy is an intercultural system that utilizes brief focused literacy units. This approach may be salutary in medical education. Given demands on learners that tutoring via brief focused literacy units delivered by peers is well entered by learners and appears to have a significantly lesser impact on immediate knowledge recall than case- grounded tutoring.

Kulkarni & Naik (2019) examined the effectiveness of traditional and ultramodern approaches of literacy. The study used multimedia during training programs like robustness, and on- screen relations started getting important. Bite sized literacy modules are small, tone- contained information nuggets which concentrated to achieve defined objectives. The study briefed the preface of bite sized literacy modules which was gaining fashion ability because of the availability it handed to the learners, Bite sized modules were concentrated on achieving the specific objects in short span of time. The study concluded that bite sized literacy

was a step towards the right direction especially for the glories, who were from the dynamic terrain and wanted to grasp knowledge with a great speed.

Bite-sized learning

Bite- sized literacy Bite- sized literacy – also known as Micro literacy – breaks down information into small, manageable gobbets rather than subjugating scholars to long, continued sessions, but length is only one factor of what makes it up. Micro-learning is fairly small, focused literacy units conforming to condensed literacy conditioning (generally one to 10 twinkles), available on multiple biases. The assignment strategies are designed for skill-grounded training, literacy, and education. The short bursts of assignments are also replete with interactive multimedia. It can be used for informal training (with a focus on performance gain) or to educate large, complex material broken down into manageable pieces. Generally designed and delivered in rich media formats, it's a learner- centric approach that provides just-by-time training that's available on multiple biases. Factors contribute to the growth of Bite- sized literacy Rising demand for mobile earning adding share of Gen-Y in the pool Shorter sessions suit ultramodern learners Available just in time bite- sized nuggets Emergence of new courses at low cost Content development and operation is simpler and more applicable .

Tips for creating Micro-Learning material for Bite- Sized literacy

1. Stick to One Subject Due to the deficit of time to deliver the information and have to constrict down the subject matter as much as possible. In fact, it's stylish to stick to just one subject.

2. Take A Spaced eLearning Approach Time should be given to learners time to duly absorb and assimilate the information before moving onto the coming eLearning exertion. A spaced eLearning program allows scholars to go at their own pace and offers them to reflect after each bite-sized eLearning module. An illustration of a spaced eLearning approach might be one micro learning assignment every day. By the end of the week scholars will learn a variety of chops and tasks by taking one step at a time.

3. Use Social Media To Your Advantage scholars are formerly using Twitter, Facebook, LinkedIn, and YouTube on a diurnal base. So, why not use that to your advantage by incorporating social media into your micro learning strategy. However, social networking spots are actually the perfect complement to bite-sized eLearning, If given some study. Online learners have the occasion to partake feedback, ask questions, and address their enterprises with their peers. Micro learning

conditioning is frequently asynchronous, but spots like Facebook can make the eLearning experience more social and cooperative. Social media spots can be used to produce bite-sized eLearning content. For illustration, posting a link to a noteworthy eLearning composition or videotape will give online learners the chance to expand their knowledge base.

4. Design A Micro learning Road Map If the number of micro literacy conditioning and modules are more it may be delicate to keep track of your eLearning content. Therefore, online learners won't be suitable to snappily pierce the information demanded. Still, a road chart can help to organize all of the bite-sized eLearning conditioning that are available and allow online learners to track their progress.

5. Address Their "Moments Of Need" One of the main benefits of bite-sized eLearning is being suitable to give learners the knowledge they need when they need it the most.

Benefits of Bite Sized Learning

1. Bite sized literacy results in better learner engagement. This is the biggest advantage of using literacy nuggets to conduct training to scholars. Learners frequently find it hard to concentrate on courses for further than 20 twinkles at one stretch (Kelly, 2013). Also, it's common knowledge that the former learner's focus is lost, the end of the course is defeated. Can effectively overcome this problem if Bite sized modules are used because of their short duration.

2. Effective Digestion of Learning Nuggets. It's a well-known fact that humans have limited capacity to reuse information. Lynne Millward, in his book Understanding Occupational & Organizational Psychology, states that information is most likely to be meaningfully reused when it's presented in gobbets (Millward, 2005).

Research Methodology

The study is to examine the effectiveness of Bite-Sized learning among college students with special reference to Ethiraj College for women Chennai.

Sources of Data

Primary data was collected from students of final year U.G.Economics, Ethiraj College for Women.

Research Instrument for data collection

The study introduced Bite-sized learning modules in fiscal Economics and evaluated the learning outcome. Audio bites of the units from Fiscal Economics were shared with the students in class whats-app group. Pre and post tests were conducted to evaluate the bite- sized learning. A socio economic questionnaire was administered to the respondents, which includes demographic data, impact of online classes and bite-sized learning.

Sample size

100 students of final year U.G .Economics, Ethiraj College for Women.

Hypothesis

1. There is no significant difference in the scores obtained before and after the introduction of bite-sized learning.
2. There is no association between preference for Bite-sized learning and improvement in the performance of students
3. There is no significant difference in the mean rank preference of Bite-Sized Learning.

Table 1 Socio-Demographic Characteristics of the respondents

Particulars	Percentage
Father's Educational Qualification	
Illiterate	0
School level	52.4
Graduate	15.9
Post Graduate	14.3
Professional	12.7
Mother's Educational Qualification	
Illiterate	0
School level	60.3
Graduate	17.5
Post Graduate	11.1
Professional	7.9
Father's Occupation	
Government Employee	19
Private Employee	23.8
Entrepreneur	14.3
Professional	0
Others	38.1

Mother's Occupation	
Government Employee	9.5
Private Employee	7.9
Entrepreneur	0
Professional	1.6
Others	81
Family Monthly Income	
Less than 10,000	14.3
10,000-30,000	20.6
30,000-50,000	19
50,000-70,000	19
Above 70,000	27
Type of Family	
Joint Family	4.8
Nuclear Family	95.2

Source: Primary Data

Table 1 indicates the Socio economic demographic features of the respondents. Majority of the parents' educational qualifications of the respondents were at school level, and most of them were private sector employees. Nearly 20.6 Percent of the respondents belong to the income bracket Rs10, 000 to 30,000 followed by 19 percent in income brackets Rs 30,000 to 50,000 and Rs 50,000 -70,000. Majority (95.2) percent are from Nuclear family

Hypothesis 1:

There is no significant difference in the scores obtained before and after the introduction of bite-sized learning.

Table 2

	Variable 1	Variable 2
Mean	6.7	8.73
Variance	0.939394	0.441515
Observations	100	100
Pearson Correlation	0.359173	
Hypothesized Mean Difference	0	
Df	99	
t Stat	-21.184	
P(T<=t) one-tail	7.38E-39	
t Critical one-tail	1.660391	
P(T<=t) two-tail	1.48E-38	
t Critical two-tail	1.984217	

Source: Computed Data

Interpretation

The t value and degrees of freedom are significant at 95 percent confidence level for mean difference. So the Hypothesis is rejected, hence there is significant difference in the scores obtained before and after the introduction of bite-sized learning. The respondents scored more marks in the post test after listening to the bite-sized audios. So there is improvement in the learning outcome of the students.

Hypothesis 2:

There is no association between preference of Bite-sized learning and improvement in the performance of students

Table 3

		Preference	Improvement	
Spearman's rho	Preference	Correlation Coefficient	1.000	
		Sig. (2-tailed)	.001	
		N	63	
	Improvement	Correlation coefficient	..669*	1.000
		Sig.(2-tailed)	.001	
		N	63	63

*Correlation is significant at that 0.05 level (2-tailed)

Source: Computed Data

Interpretation

The null hypothesis is rejected, hence there is association between Preference for Bite-sized learning and improvement in the performance of students. Students prefer bite-sized learning as the performance is increased because of Bite-sized learning.

Hypothesis 3:

There is no significant difference in the mean rank preference of Bite-Sized Learning.

Friedmen test for significant difference among mean rank preference of Bite-Sized Learning.

Table 4

Factors influencing	Mean Rank	Chi – Square value	P Value
Bite sized learning is useful In understanding the concepts	4.01	18.574	0.002
Repeated learning enables me remember and reproduce the concepts easily	4.01		

Improve focus and supports long term retention	3.75		
Bite sized learning is useful In remembering the concepts	3.56		
Bite-sized enables me to be more focused	3.30		
Bite -sized learning preferred over class lectures	3.03		

Source : Computed Data

Note: ($\chi^2=18.574$ $p < 0.05$), $N = 100$

Since P Value is less than 0.05, the null hypothesis is rejected at 5% level of significance. Hence it is concluded that there is a significant difference among mean rank preference of Bite-Sized Learning. The test results indicate most of the respondent's prefer Bite Sized Learning is useful in understanding the concepts and repeated learning enables the respondents to remember which in turn helps them to reproduce the concepts with 4.01 mean rank. Only few respondents have preferred over class lectures with 3.03 mean rank. The results of the Friedman test indicate that significant differences exist in the above mentioned preference.

Conclusion

Bite-sized learning can be implemented by creating easy to grasp study material which will help the students to learn at their own pace with a lot of material at once. Teachers can make use of Bite-sized videos, quizzes and other instructional content to promote learning retention of students. Instead of just memorizing material from a source, teachers can break every answer down step by step so that the students will understand what is happening at every level. Learning topics in manageable chunks will be more effective. This method can be used for a number of subjects and in both school and college settings. One main advantage of bite-sized learning is that it is simple to comprehend and makes it ideal for any student who needs to learn anything in a short span of time. This will be one of the effective strategies for a teacher to raise the student performance level and to motivate them.

Reference

1. *Luminita Giurgiu titled Micro learning an Evolving e learning Trend ,Journal Scientific Bulletin June 2017,10.1515/bsaft-2017-0003.*

2. *MriganK.S.Shail, titled Using Micro learning on Mobile applications to increase knowledge retention and work performance.*
3. *Rebeca P. Díaz Redondo, Manuel Caeiro Rodríguez, Juan José López Escobar & Ana Fernández Vilas titled Integrating micro-learning content in traditional e-learning platforms Multimedia Tools and Applications volume 80, pages 3121–3151 (2021).*
4. *Koh Noi & Gottipati, Swapna & Shankararaman, Venky. (2018), titled Effectiveness of Bite-sized lecture on student learning outcomes.10.4995/HEAD18.2018.8027.*
5. *Kulkarni and Naik(2019)“Bite-Sized Learning: Transforming Global e learning, International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.6, Issue 3.*
6. *.<https://elearningindustry.com/bite-sized-learning-strategies-benefits-how-build-it>.*
7. *<https://elearningindustry.com/bite-sized-learning-future-of-elearning>.*