

# What's app - Can it be an effective teaching learning tool ?

V Sunanda<sup>1</sup>, Jagannadha Phaneendra D.S.<sup>2</sup>

<sup>1</sup>Professor and head, <sup>2</sup>Associate Professor, Dept of Biochemistry  
Kamineni Academy of Medical Sciences & Research Centre  
L.B. Nagar, Hyderabad

[ Received: 11/04/2017, Revised: 18/04/2017, Accepted:20/04/2017 ]

**Abstract:** Whats app is an instant free messenger application used by the students to send messages, videos, audio, images, URL links. Recently its role in using as a Teaching & learning aid is being evaluated.

**Introduction:** The aim of the present study is to study the perception of students in using Whats app as a T/L aid & evaluate its outcome in their examination performance.

**Methodology:** The study was Prospective analytical study done in the dept. of Biochemistry from march to july 2016 on I st year students. Sixty- five volunteered students were created as a whats app group which included the faculty of biochemistry. Students were asked to post their doubts/ questions in to the group. At the end of study period they were asked to fill a questionnaire which represented their perception regarding this new T/L methodology A comparison of marks obtained in second & third internal assessment was done to evaluate the effectiveness of Whats app as a T/L tool.

**Results:** 89.2% percent & 93.7% of students respectively agreed that this method helped in increasing their rapport with the teacher & learning any time any where was the greatest advantage of it. 87.6 % & 93.8 % students agreed that participation in discussions enhanced their knowledge and usage of video ,audio gave them in depth understanding of the topic . A comparison between the internal assessments (before & after whats app usage respectively) showed an increase in marks after whats app usage which was statistically significant( $p=0.0008$ )

**Conclusion:** In the present study we conclude that the usage of this method as a T/L tool increases the learning process of the student and can also act as a support the routine class room teaching methods. It can also increase the performance of the students in examination.

**Key words:** Whats app, Teaching/Learning, Students.

**Introduction:** Whats app is a messenger application that operates on all types of android mobile devices. It is an application through which various text messages, images, audio, video files and links of different web site can be shared between the users<sup>(1)</sup>. Basic requirements for what's app communication being a smart phone, active internet connection & a downloaded application . It's ease of operation is simple hence can be used by people of different ages. It is a social networking system allowing many people to access voluminous information in a lesser time. A group can be created where the members of the group can exchange/share ideas & information regarding a topic. Now a days what's app is considered as a educational networking system having an academic & educational potential. Being an educational

networking system it role as a teaching & learning tool has to be evaluated. Very few studies have been done on the usage of what's app as a Teaching/learning media. Plana et al<sup>(2)</sup> conducted a study among students of spain on the efficacy of usage of whats app as a T/L tool in teaching english language. Dan bouhnik and Mor Deshen<sup>(3)</sup> detailed the advantages and challenges faced by the teacher & students in their study on usage of whats app as a T/L media among school students.

• The present study was undertaken to evaluate the effectiveness of usage of what's app as a teaching learning tool.

### Material & methods:

The present study was undertaken in department of  
• Biochemistry, Kamineni academy of medical sciences & research centre L.B.nagar Hyderabad in association

### Correspondence:

Jagannadha Phaneendra D.S.  
Associate Professor, Dept of Biochemistry  
Kamineni Academy of Medical Sciences & Research Centre  
L.B. Nagar, Hyderabad  
Email:dingari.jagan@gmail.com

Access this article online

Website : [www.jermt.org](http://www.jermt.org)

Quick  
Response  
Code :



with our Medical education unit. Institutional ethical clearance was obtained prior to start of the study. This was an prospective analytical study done between period march to july 2016. The participation in to the study was on voluntary basis. The participants included 65 students of I st year M.B.B.S. Informed consent was obtained.

**Methods:** The volunteered students were formed in to a what's app group. Five faculty were added in to the group. Students were asked to post their doubts/questions freely. The faculty were participating in the discussion and resolving the doubts of students even beyond the class room hours. After the end of study period the students were asked to fill the feedback form consisting of a pre validated questionnaire. The responses were measured on a scale of 1 to 5 with 1- strongly disagree, 2- disagree, 3 - neutral , 4 - agree, 5- strongly agree. To evaluate the outcome of whats app based learning a comparison of internal assessment marks obtained in two consecutive internal assessments was done. First one ( II nd internal assessment) was before joining whats app group and the other (IIIrd internal assessment) was after five months of joining whats app group .

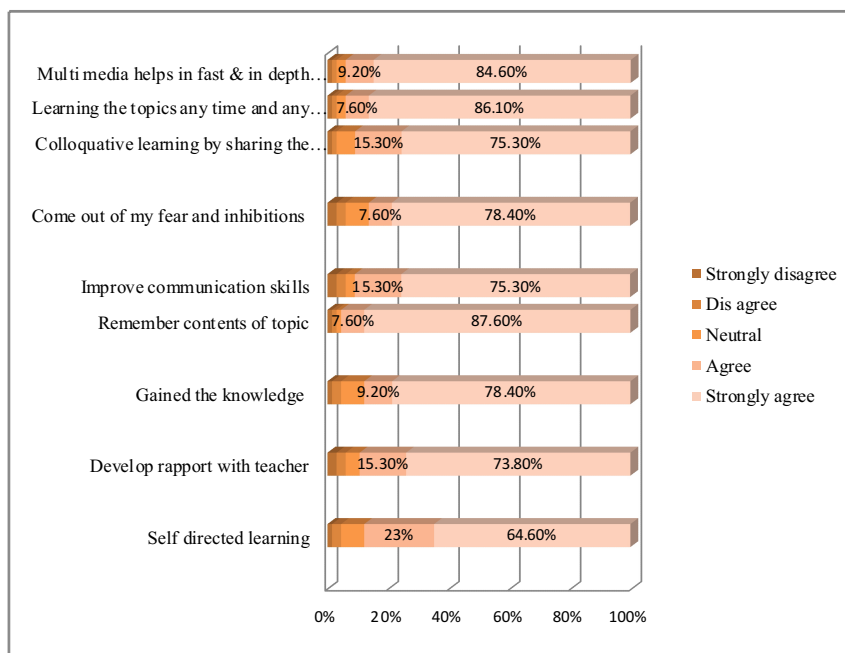
**Results:**

Fifty seven students (87.6%) out of sixty five students agreed that this method helped them in self directed learning where as five students (7.6%) were neutral in this regard. Fifty eight students (89.2%) agreed that this method helped to develop rappaport with the teacher where as three students (4.6%) were neutral in this regard. Fifty one students (78.4%)

strongly agreed that participation in the discussion enhanced their knowledge where as six students (9.2%) only agreed in this regard. Sixty two students (95.3%) agreed that this method helped them to remember the contents of the topic. Fifty nine students (90.7%) agreed that this method helped in improvement of their communication skills. Fifty six students (86.1%) agreed that this method of teaching helped them to come out of their fear and inhibitions. Fifty nine students (90.7%) agreed that sharing the study material through whats app was easy and it helped in their colloquative learning. Sixty one students (93.7%) agreed that learning any time any where was one of the greatest advantage in this T/L method. Sixty one (93.8%) students agreed that usage of Videos, audio, URL links helped in fast and in depth understanding of the topic (Graph1).

Table 1,2 & Graph 2,3 shows the effectiveness of whats app based discussions in their examination performance. The mean SD of the third internal assessment (24.2±6.07) was higher as compared to Second internal assessment (21.15±6.97). This difference in mean was statistically significant(p=0.0008). Within the whats app group when compared at an individual level 64.2% students showed an increase in performance in third internal as compared to second internal, 3.08% showed no difference between second & third internal assessment marks, 32.31% of students showed a decrease in third internal marks as compared to second internal.

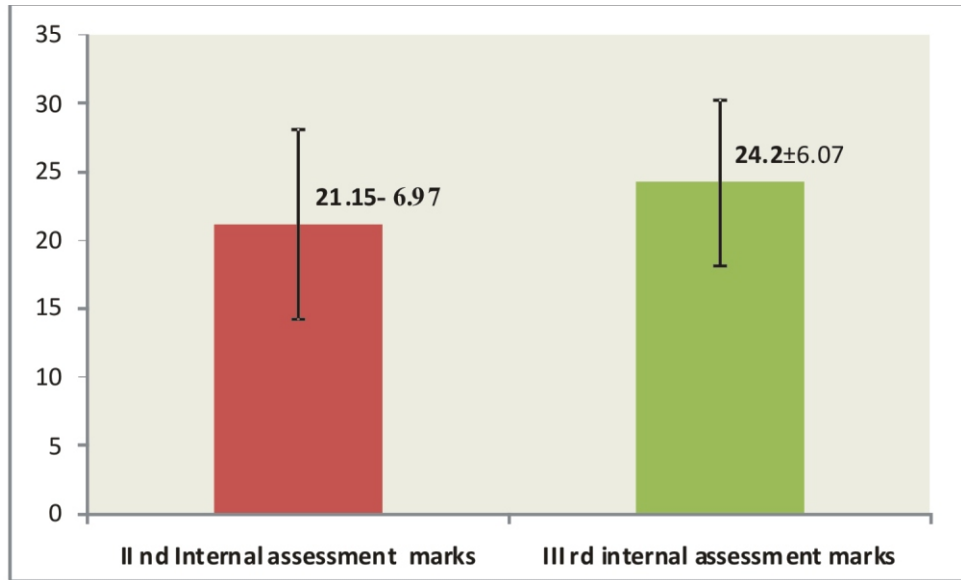
**Graph 1:** Graphical representation of Students perception about Whats app as a Teaching/ Learning tool at the end of the study.



**Table 1:** Table showing the comparison of marks obtained in two consecutive Internal assessments

Sl.no	Intervention	Mean±SD	P value
1.	II nd Internal assessment marks (before joining whatsapp group)	21.15±6.97	0.0008
2.	III rd Internal assessment marks (After five months of joining whats app group)	24.2±6.07	

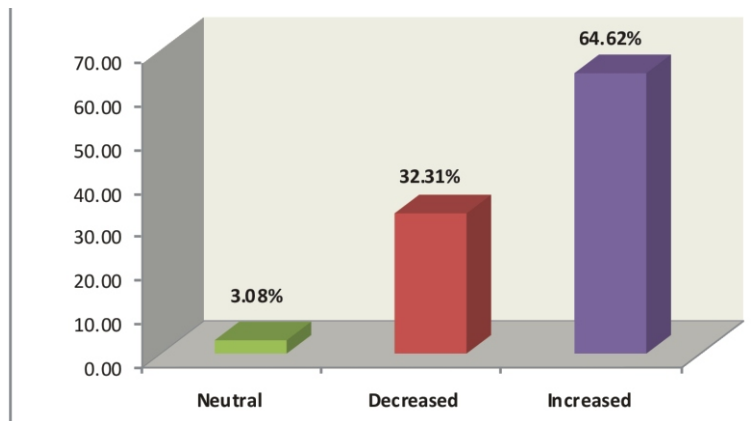
**Graph 2:** Graphical representation of Mean±S.D of marks obtained in IInd internal assessment(before joining Whats app group) and IIIrd internal assessment ( After five months of joining Whats app group)



**Table 2:** Table showing the comparison of marks in IInd & IIIrd internal assessments at an individual level

Sl.no		Percentage
1.	Increase in marks in IIIrd internal as compared to IInd internal assessment	64.2%
2.	Same marks in IIIrd and IInd internal assessments	3.08%
3.	Decrease in marks in IIIrd internal assessment as compared to IInd internal assessment	32.31%

**Graph 3:** Graph showing the performance of students of whats app group at an individual level in IIIrd internal as compared to IInd internal.



**Discussion:** In the recent days usage of whats app as a mode of communication is a new trend among the student community. Recent studies <sup>(3,4)</sup> emphasize the usage of Whats app as a supportive tool to enhance learning by the students. Here teacher can create a what's app group of the students on a voluntary basis which constitutes a simple social network for the class. Simple to use, low cost, privacy, ability to share information are the advantages of this network.

In the present study a whats app group of sixty five students ,five teachers was created and Teaching learning activity was done for a period of five months. Rambe and chipunza<sup>(5)</sup> observed that whats app based learning created a non restricted environment which enhanced learning. In our study we observed the same phenomenon with 86.1% agreeing that this method has helped them to come out of their fear and inhibitions. Similar observation was done by Bansal and joshi et al<sup>(6)</sup>.

Bouhnick & Deshan<sup>(3)</sup> in a similar study found that whats app could contribute to interpersonal relationship between teacher and students which enhanced the students learning process. In the present study 89.2% had agreed that this method of teaching enhanced their rapport with the teacher. More so 93.7% agreed that this method had a characteristic advantage of learning any time any where. This finding was in association with studies done by bansal and joshi et al , Bouhnick & Deshan. This helped their learning beyond class room hours also. Teachers availability and learning anytime any were are the major advantages with whats app learning.

Bansal and Joshi et al<sup>(6)</sup> in a similar study found that Whats app based learning has educational benefits such as deeper clarity on issues, revision of learned topic, learning from others problems. In the present study also 87.6% have strongly agreed that participation in discussions enhanced their knowledge & understanding regarding a topic, 95.3% have agreed that such discussions helped to remember the contents of the topic. This was a similar observation by Sonia gon and Alka rawekar et al<sup>(4)</sup>.

In the present study we observed that 90.7% students agreed that this method helped in improvisation of their communication skills & 87.6% students agreed that this method enhanced their self directed learning. Shuler C et al, Goodwin et al<sup>(7,8)</sup> suggested that these apps have a role in supporting the learning process & encourage self directed learning. In the present study 90.7% students agreed that sharing of the study material by whats app was easy & helped them in colloquative learning.

Bouhnick & Deshan found that whats app enables for easy & quick transfer of links to study materials which could be used by the other members of the group for a self directed learning. They also found that students were helping each other in answering the questionnaire which potentiated a peer group learning.

In the present study 93.8% students opined that usage of multi media in the form of videos, audio, URL links fastened their learning process and gave them an in depth understanding of the topic. Similar observation was done by Sonia gon and Alka rawekar et al<sup>(4)</sup>.

Though the Whats app based learning had many advantages, there were some disadvantages by this method found in our study such as teachers being flooded up with too many messages, late night messages bothering the teacher, some irrelevant messages & videos distracting group attention, some students do not make an effort to read, instead look for ready made answers from the teacher.

In order to determine/quantify the effectiveness of whats app on the outcome in the examinations a comparative analysis of the second (before joining whats app) and third assessments (after joining whats app) was done which showed an increase in Mean values of third internal assessment ( $24.2 \pm 6.07$ ) as compared to second internal assessment ( $21.15 \pm 6.97$ ). This difference in mean was also statistically significant ( $p = 0.0008$ ). Similar observation was found in the study done by Sonia gon and Alka rawekar et al.

Within the whats app group we compared the marks at an individual level and found that 64.62% of students showed an increase in third internal marks as compared to second internal, 3.08% were neutral and 32.31% showed a decrease in the marks. This decrease in the marks might be due to their casualistic attitude , not adhering to teachers instructions properly.

**Conclusion:** Whats app is an instant messaging system which can be used as a T/L tool. In the present study we found that it helped the students in learning process such as learning any time any where, in depth understanding of the topic & increased rapport with teacher. Few disadvantages such as irrelevant messages & teacher to work beyond class room hours were observed. More so we could find a significant increase in performance in the examination. We conclude that the usage of this method as a T/L tool increases the learning process & also act as a support to routine class room teaching methods. Long term study involving more number of students, increased

duration might enhance our understanding regarding this new T/L methodology.

**References:**

1. Lenhart A, Madden M, Macgill A, Mith A. Teens and social media. York Press;2007.
2. Plana MGC, Escofet MIG, Fiueras IT, Gimeno A, Appel C, Hopkins J. learners reading skills through instant short messages: a sample study using WhatsApp. 4<sup>th</sup> World CALL Conference; Glasgow.2013 Jul 10-13.
3. Bouhmik D, Deshen H. WhatsApp goes to school: mobile instant messaging between teachers and students. J of Edu Tech Research; 2014: vol 13: page 217-231.
4. Sonia Gon and Alka Rawekar et al. Effectivity of E Learning through Whatsapp as a Teaching Learning Tool. MVP Journal of Medical Sciences, Vol4(1), 19-

25, January June 2017.

- 5.. Rambe P, Chipunza C. Using mobile devices to leverage student access to collaboratively generated resources: A case of WhatsApp instant messaging. South African University International Conference on Advanced Information and technology for Education;2013.
6. Bansal T, Joshi D. A study of students experiences of mobile learning. Global Journal of Human- Social science.2014;14(4).
7. Shuler C ,iLearn II: An analysis of the education category of the itunes app store. The Joan Ganz Cooney Center at sesame Workshop; New York.2012.
8. Goodwin et al. Use of tablet technology in the classroom . State of New South Wales( Australia):The NSW Curriculum and Learning Innovation Centre;2012.

How to Cite this article :

Sunanda V, DS Jagannadha Phaneendra. What's app - can it be an effective teaching learning tool ?. J. educ. res. med. Teach, 2017;5(1):10-14.

Funding: Declared none Conflict of interest: Declared none