

A Study on Adaptive Learning Technologies and Ethics

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Abstract: The use of technology in teaching and learning has changed the whole face of education and has created more of educational opportunities. The use of technology in education has benefited both the educators and the students, the teachers have learnt how to put forward the technologies and the students are more interested in learning with those technologies. Rapid change of technology has been running in fast phase, that is been awaited in all areas. Therefore, technology has also made its own way of input in education system. Keeping the study in mind the following objectives are framed on how the existing integration of technology that helps in knowing the challenges and opportunities that they face when technology is being put into learning. The methodology used is the descriptive study where data is collected from both primary and secondary sources and the sample size consists of 100 students for the study and the sample design used in the study is the convenience sampling. Technology in teaching and learning has made a great impact on the students; most of the instructors prefer using technology because it helps in better understanding through visual presentation and also easier to adapt what is being displayed. Most of the respondents are female who are at the PG level and majority feel that technology plays an important role in teaching and learning process and few find it difficult to understand the concept, because they feel raising of doubts during the presentation would be an issue. Technology provides a positive surrounding and also creates interest in peoples mind, for they find it very convenient when presentations are based on slides with creative images that help in effective learning, the use of technology helps in keeping the concept in the minds of the people for a very long period of time.

Keywords: Adaptive Learning Technologies, Ethics

1. Introduction

Technology in learning and teaching is both material tool and theoretical tool which is used for supporting learning as well as teaching. The use of technology in teaching and learning has changed the whole face of education and has created more of educational opportunities. The use of technology in education has benefited both the educators and the students, the teachers have learnt how to put forward the Technologies and the students are more interested in learning with those technologies. Advancement in educational Technologies has had a positive impact on the educational sector of our country. Numerous tools are being used by teachers in order to enhance student learning. Technologies have digitalised classroom through different digital learning tools such as, smart digital whiteboard,

I pads, smartphones, computers; this has increased the interest of students towards learning.

Technologies have a positive impact on the growth of long distance learning and mobile learning. The Technologies have helped the teachers to reach out to students across borders and also students to reach out to teachers. Technologies are also being used by students from developing countries to subscribe and take up online courses; this is done by creating a virtual classroom.

Technologies can empower students by providing them ownership of how they indulge in the process of learning, making education part of the digital life and it also helps them to prepare themselves for the future. Technologies in learning and teaching have helped in empowering the educator to use different technologies and access data to convey information in effective way. It also prepares the Student of 21st century to become collaborators, critical thinkers, problem solvers and creators.

2. Review of literature

G.O.M. Leith: "Educational Technology is the systematic application of scientific knowledge about teaching-learning and conditions of learning to improve the efficiency of teaching and training (Leith, 1967)."

Shiv K. Mitra: "Educational Technology can be conceived as a science of techniques and methods by which educational goals could be realized (Mitra, 1968:4)."

S.S. Kulkarni: "Educational Technology can be defined as the application of the laws as well as recent discoveries of science and technology to the process of education (Kulkarni, 1969)."

D. Unwin: "Educational Technology is concerned with the application of modern skill and techniques to requirements of educational training. This includes facilitation of learning by manipulation of media and methods, and the control of environment is so far as this reflects on learning (Unwin, 1969)."

W. Kenneth Richmond: "Educational Technology is concerned with providing appropriately designed learning situations which, holding the view of objectives of teaching or training, bring to bear the best means of instruction (Richmond, 1979)."

I.K. Davies: “Educational Technology is concerned with problems of education and training context and it is characterized by the disciplined and systematic approach to the organization of resources for learning (Davies, 1971).”

J.R. Gases: “Educational Technology has to be seen as a part of a persistence and complex endeavour of bringing pupils, teachers and technical means together is an effective way (Ford Foundation Team, 1971).”

US President Commission of Enquiry: “Educational Technology may be defined as a systematic way of designing, carrying out and evaluating a total process of teaching and learning in terms of specific objectives based on findings from research in human learning and communication (cited in, tucker, 1979:159).”

Scottish Council for Educational Technology: “Educational technology is a systematic approach to designing and evaluating learning and teaching methods and methodologies and to the application and exploiting of media and current knowledge of communication techniques in education, both formal and informal (cited in, Tucker, 1979:160).”

3. Statement of problem

Rapid change of technology has been running in fast phase, that is been awaited in all areas. Therefore, technology has also made its own way of input in education system. It refers to what kind of impact it has on the education system. Technology can either be positive or negative. Hence, technology is restricted in the area of classrooms only. Therefore, the researcher has taken up the study.

4. Objectives of the study

1. To study the existing integration of technology in teaching process
2. To study the challenges and opportunities that exist in technology adapted learning

5. Scope of the study

1. The study is conducted at Bangalore amongst students of higher education, restricted to commerce students.
2. The technology is used in the classroom as the way of imparting knowledge and information to the students. It excludes all other forms of technology which are useful but cannot be used in the education sector.

6. Methodology

This is a descriptive study where data are collected both from primary and secondary sources. The students include students from higher education institute. The data is tabulated and analysed, findings are summarised and suggestions are made.

A. Limitations

1. The responses of the students could be biased and it would reflect in the analysis.

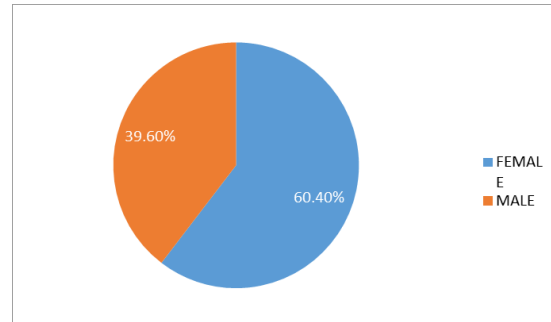
2. The findings of the study cannot be generalised, it can only be applied to institutes of higher education.

B. Sample size

1. Sample size of our research consists of 100 students.
2. Sample design used is convenience sampling technique.

7. Questionnaire

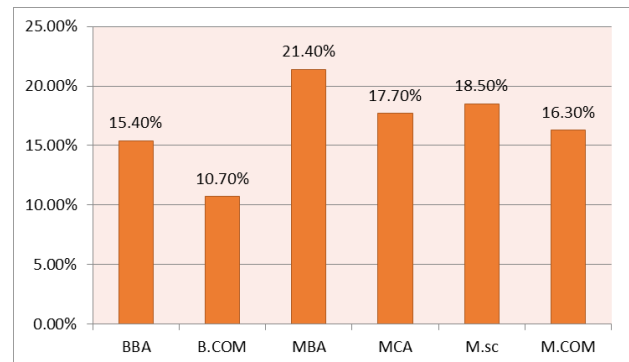
A. Gender



Analysis and interpretation

From the above chart it can be seen that 60.4% of the respondents are female and 39.6% of the respondents are male. Therefore, it can be inferred that most of the respondents are female.

B. Course



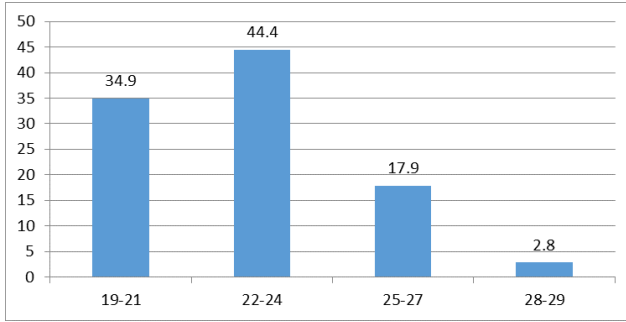
Analysis and interpretation

From the above graph it can see that most of the respondents are from MBA, MCA, M.sc and M.com. Therefore, indicating that most of the respondents are PG level students.

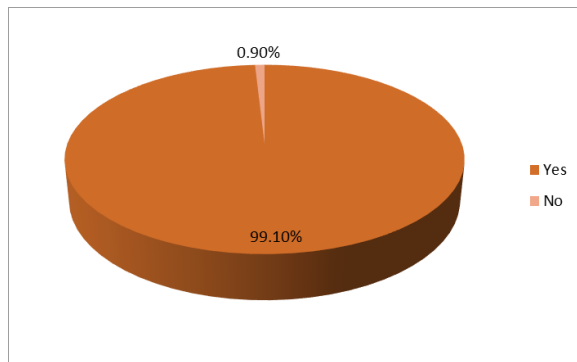
C. Age

Analysis and Interpretation

From the above graph it can seen that most of the respondents are in the age group of 22-24 years. Therefore, it can be inferred that most of them are young adults.



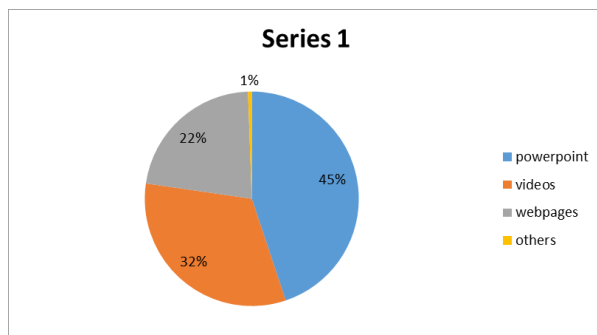
D. Use technology in teaching



Analysis and Interpretation

From the above chart it can be seen that 99.1% of the instructors use technology for teaching. Therefore, majority of the instructors use different kinds of technology for teaching.

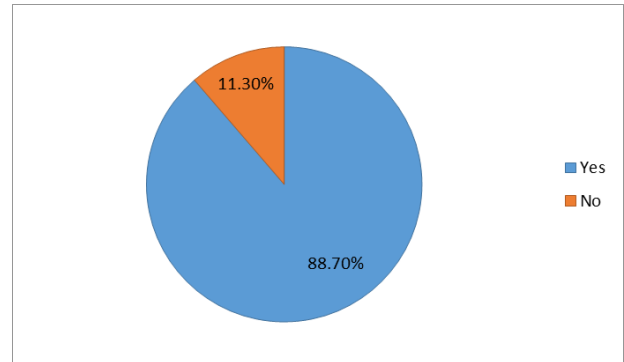
E. Type of technology that is being used



Analysis and Interpretation

The above graph represents the kinds of technology instructor's use for teaching. 79% of the instructors use PowerPoint, 57.10% use videos, 39% use webpages and 1% use other sources. Therefore, it is inferred that majority of the instructors use PowerPoint and videos in teaching-learning process.

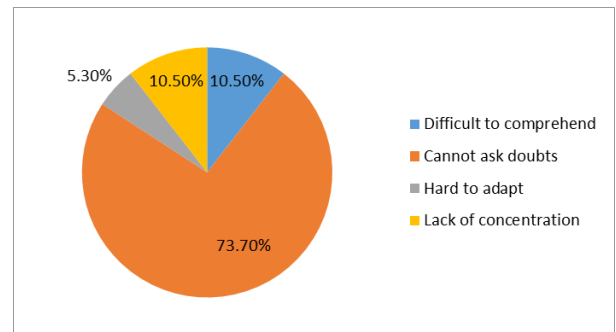
F. Is the concept understood when the technology is used?



Analysis and Interpretation

From the above chart, it can be seen that 87% of the respondents understand the concept when instructors use technology. Therefore, majority of the respondents believe that they can understand that concepts better when instructors use technology.

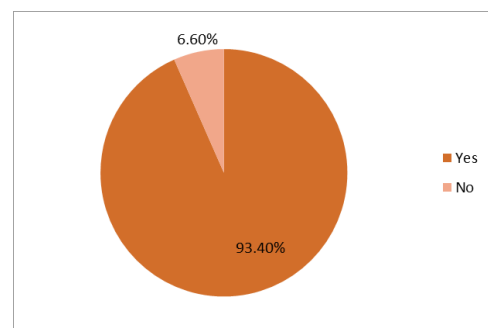
G. Reasons for which they don't understand the concept



Analysis and Interpretation

From the above chart, it can be seen that 73.70% respondents don't understand the concept because they find it difficult to ask doubts. Therefore, it is inferred that majority of the respondents find it difficult to ask doubts and the remaining few find it difficult to comprehend, hard to adapt to the technology and lack of concentration.

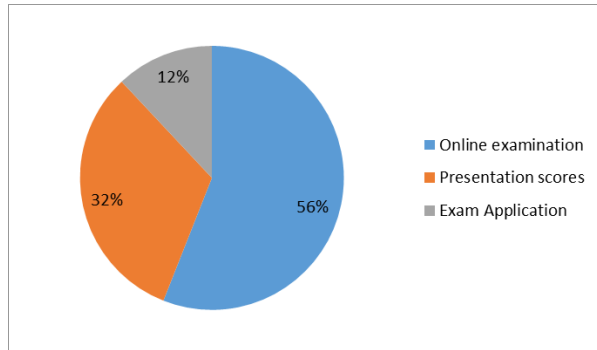
H. Use of technology in evaluation and assessment process



Analysis and Interpretation

The above chart represents, 93.40% agrees to it and the remaining disagrees to it. Therefore, it is inferred that most of them think technology can be used in evaluation and assessment.

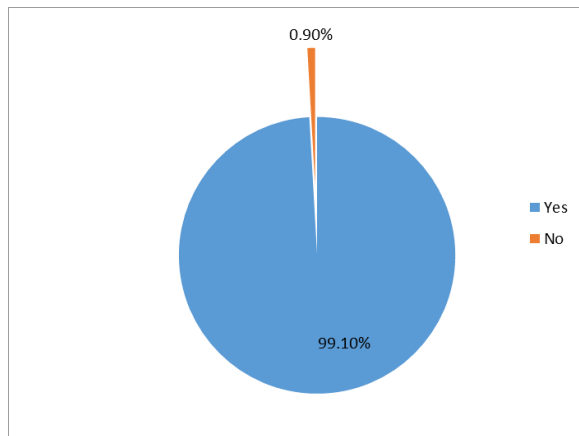
I. Technology in evaluation and assessment



Analysis and Interpretation

From the above chart, it can be seen that 56% of the respondents believe that technology can be used for online examination, 32% believe that it can be used for presentation and the remaining for exam application. Therefore, majority of the respondents believe that technology can be used for evaluation and assessment of online examination.

J. Technology creates a positive impact



Analysis and Interpretation

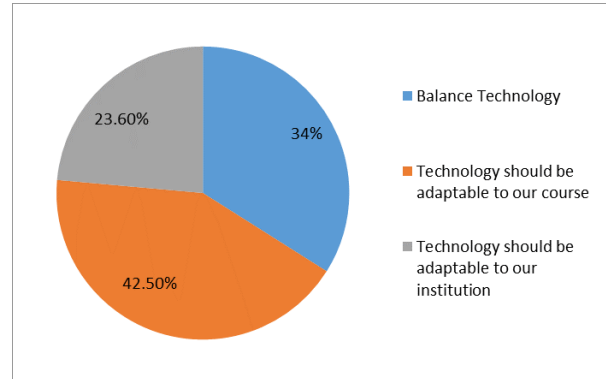
The above shows, 99.10% of the respondents feel that technology creates a positive impact in the teaching-learning process. Therefore, majority of the respondents find technology useful in the teaching-learning process.

K. Making the use of technology better

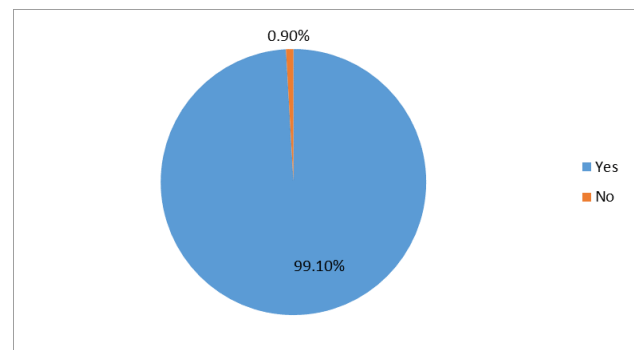
Analysis and Interpretation

From the above chart, it can be seen that 42.50% feel that technology should be adaptable to the course. Wherein, 34% of respondents feel that technology should be balanced and

23.60% respondents believe technology should be adaptable to the institution. Therefore, it can be inferred that technology is most likely beneficial when it is adaptable to the course and partially adaptable to the institution.



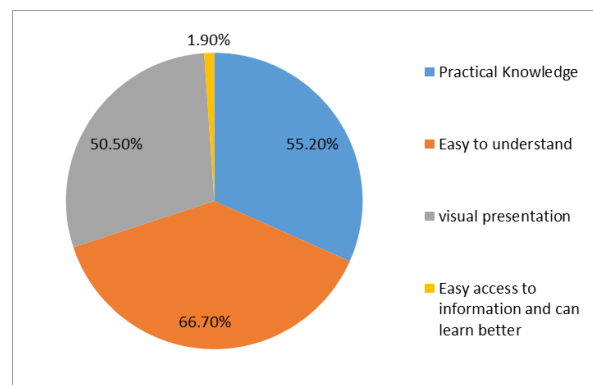
L. Is technology important in institution



Analysis and interpretation

From the above chart, it can be seen that 99.10% find technology to be an important aspect in the institution. Therefore, respondents find technology to be beneficial in the teaching-learning process.

M. Importance of technology in institution

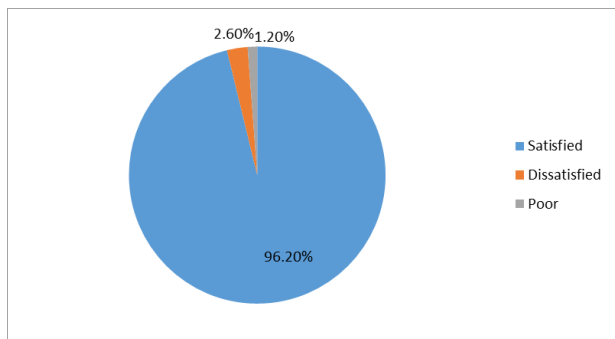


Analysis and interpretation

The above chart represents, 66.70% feel that technology

makes it easier for them to understand the concept, 52.20% and 50.50% feel that technology helps in having a practical knowledge and visual presentation. Therefore, it is inferred that 66.70% of the respondents find technology easier to understand.

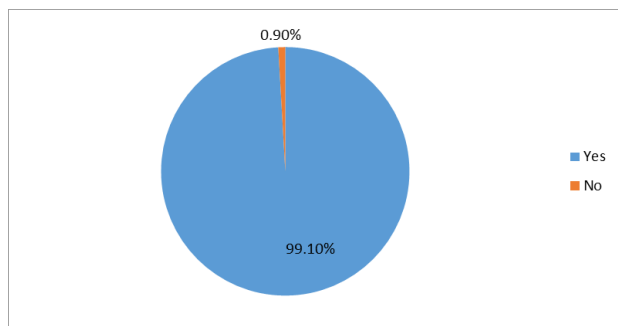
N. Technology in learning process



Analysis and interpretation

Form the above chart, it can be seen that majority are satisfied with technology in their teaching-learning process. Therefore, technology plays a very important role in the learning process.

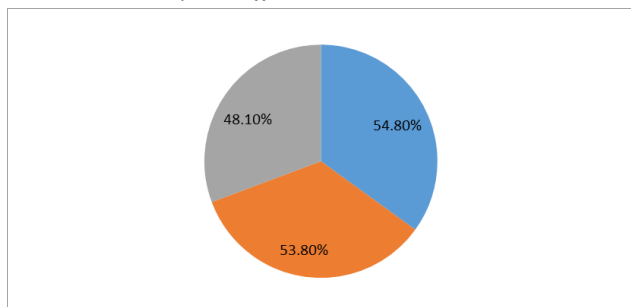
O. Better learning experience with the use of technology



Analysis and Interpretation

From the above chart, it can be seen that 99.10% of the respondents feel that technology gives them a better learning experience. Therefore, majority of the respondents prefer technology in their teaching-learning process.

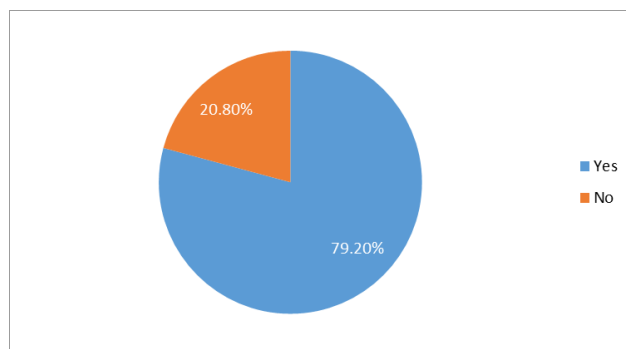
P. Reasons to why it is effective



Analysis and Interpretation

From the above chart, it can be seen that 54.80% find technology to be innovative, 53.80% find it to be creativity and 48.10% respondents believe in having better experience. Therefore, majority of the respondents feel that the use of technology helps in having a better learning experience.

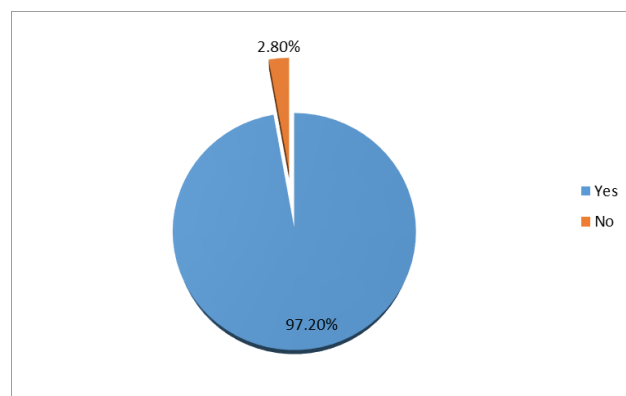
Q. Complications of using technology in classroom?



Analysis and Interpretation

From the above chart, it can be seen that 79.20% respondents feel that technology creates complication in the classroom. Therefore, it is assumed that there is a lot of complication in the classroom when technology is being used.

R. Access to technology becomes easier



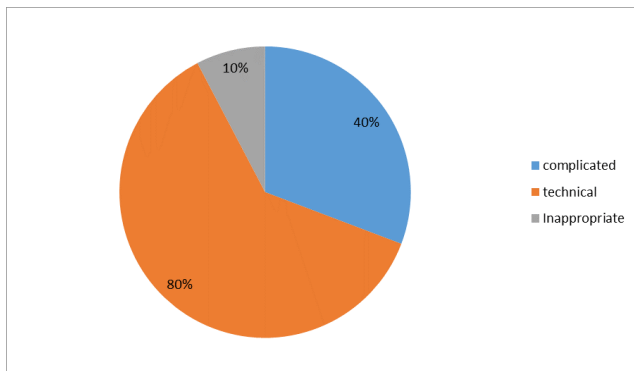
Analysis and Interpretation

From the above chart, it can be seen that 97.20% of the respondents agrees to the fact that technology can be easier to access. Therefore, technology is used much often in the teaching-learning process.

S. Reasons to which it is not easier to access

Analysis and Interpretation

From the above chart, it can be seen that 80% feel that technology cannot be easily accessed due to technical issues. Therefore, it is inferred that technical aspects of technology makes it difficult to access.



8. Findings

1. Majority of the respondents are female.
2. Majority of the respondents are PG level students.
3. Most of the respondents are in the age group of 22-24 years. Therefore, it can be inferred that most of them are young adults.
4. Majority of the instructors use technology.
5. Majority of the instructors use PowerPoint and videos in teaching-learning process.
6. Most of the respondents think that technology can be used in evaluation and assessment.
7. Respondents find technology useful in the teaching-learning process.
8. Technology is most likely beneficial when it is adaptable to the course and partially adaptable to the institution.
9. 99.10% find technology to be an important aspect in the institution. Therefore, respondents find technology to be beneficial in the teaching-learning process.
10. Majority are satisfied with technology in their teaching-learning process. Therefore, technology plays a very important role in the learning process.
11. Concepts are better understood when instructors use technology.

12. Technology has a positive impact on teaching-learning process.
13. Majority find technology to be useful in their institution.
14. Easier to access the information.

9. Suggestions

1. By the end of the class, 15 min has to be allotted for questions, as students find it difficult to interrupt and ask doubts during power point presentations.
2. Most of the respondents feel that technology cannot be easily accessed due to technical issues. Therefore, it is inferred that technical aspects of technology makes it difficult to access. Technical issues can be sorted by having a proper arrangement of technology.
3. Appropriate technology has to be used, in order to make the students understand the concept better. Instead of browsing webpages and displaying the concept on screen, instructors can use videos and slides.

10. Conclusion

Therefore, we have come up with the conclusion that, technology is important in every student's life. Because it helps in better understanding and also makes a vast difference in the teaching and learning process, unlike the traditional methods of teaching. The use of technology in education has benefited both the educators and the students, the teachers have learnt how to put forward the technologies and the students are more interested in learning with those technologies. Technology has provided a positive surrounding and has created interest in peoples mind, for they find it very convenient.

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