

The study of primary school teachers using PDA to support instruction

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Abstract: □ That the advantage and restriction of using PDA to support teaching. Meanwhile, it probes into the cognitive will of teachers in Kaohsiung using PDA to support teaching. At first, developing the investigation meter of using cognitive will in PDA supporting teaching. The teachers in Kaohsiung information seed schools assist to investigate. There are 374 samples which are all effective samples. There is no invalid sample and returns-ratio 100%. Therefore, using One-way ANOVA analyses this effective questionnaire. The result of analysis will display teacher's experience period of service with PDA supporting teaching, and the difference of using will in network experience period of service. It shows: (1) □ Perceived Usefulness □ is the biggest influence factor of □ using will □ in this research to the PDA supporting teaching. Next is □ Perceived Easy of Use □. (2) □ Technical support □ is also the direct influence factor of □ using will □. As regards this research sample, there are still 86.1% survey responders who have not used PDA supporting teaching yet. Therefore, when users initially use the PDA supporting teaching system environment, they will have intensely the demand of “technical support” in the new technical installment, development and the use way. This is also a key point which the primary users are concerned. (3) The user, who has PDA support teaching experience, has stronger □ using will □. (4) The user, whose network or computer period of service is longer, also has stronger □ using will □. This research infers that PDA supporting teaching has brought more forward benefit.

Keywords: - PDA, Support Teaching, The Cognitive Will of Teaching

1 Introduction

1.1 The background and motive of Research

With the development of science and technology, The future network is studied to study and change from the present network. With the pushing of educational reform, in Taiwan, they are positive to push study of network and information to educate the relevant policies for education. Because the wireless communication has increased the taking action. It is a new trend of learning aid in the future that it combines the action communication of the wireless communication and studies[1] [5] PDA, the scientific and technological product, combines advantages of PC and mobile phone. We can apply it

to the discipline teaching activity, offer another kind of teaching handling tool to the educator, strengthen student's pluralistic contact and application of science and technology[6]. Students not only can study discipline knowledge, but also can practice ABC and skill of information science and technology[8]. Let students carry on the network and learn to break away from the hedge of the classroom.

1.2 Study the purpose

Various scientific and technological teaching media are used to assist teaching, and can help students study through the multiple sense organ. PDA surely supports teaching. So, this research takes primary schools in Kaohsiung as examples.

According to research background and motive described above, the main purposes of this research are as follows:

1.2.1 Analyze that teacher's action communication supports the cognitive will of teaching.

1.2.2 Put forward the suggestion of supporting the teaching future thrust to PDA.

2 Literature discussion

2.1 Role and developing the present situation of the action communication

The ' action communication ' refers to both sides of communication. One party is at least to carry on information exchange while moving. For example: Fixing point and moving physically, and person and people of the activity when or move body, and communicating while moving of people and people, Belong to the category of communication of action. The communication system of the action is generally by the action platform (MS) , platform on the base (BS) , the action exchanges the centre (MSC) And with the local call network (PSTN) Junction line linking,etc. makes up[3] [4] [9].

2.1.1 Brief introduction of PDA

Individual is a several assistants device (Personal Digital Assistant), abbreviated as PDA. PDA combines 3C products, like the computer (Computer) , the communication (Communication) , the consuming electron (Consumer electronics) .

PDA can assist students to study knowledge, do analysis and compare, and cultivate the ability to students create, analyze and transform information to appear [11].

2.2.2 PDA supports the role of teaching

With the popularization of the communication system of action and wireless regional network, the internet network of the action will definitely become the important field of the telecommunication service industry in the future, [2] .PDA is light, thin, small, easy to carry, and has strong function. In development of the wireless communication, let users offer higher degree of freedom and convenience in installing and safeguarding. In recent years, every domestic and international universities all set up the wireless network environment of the campus actively, for example Carnegie Mellon University, set up the wireless regional network [10] in the campus in 1994 .

2.2.3 The future of PDA

PDA has the characteristics of PC. However, its volume is extremely small, exquisite and light, and can put in the pocket, and can use one or two days. Occupation mode that " can use whenever and wherever possible if necessary " that can be offered [1]. And its another function can be combined with the PC. It can import materials to PC with keyboard first, make way that materials move ahead simultaneously come, input a large number of characters into with computer and then. Because PDA has the function of installing the application software by oneself. PDA can also be originally regarded as the e-book, looks the game machine. The future, the fast development of internet network, action communication, PDA has already moved towards and combined life information and can develop in the direction of teaching of resource.

2.3 PDA supports the meaning of teaching

Because of the popularization of the action communication and internet network technology. PDA has already become teacher's teaching. It not only can reduce the time that a teacher prepare the teaching material by the application of PDA, but also promote the interdynamic among teachers and students. In sum, the teacher can lead students to experience the ecological growth environment of campus in the campus in person, utilize PDA and wireless regional network to surf the Net and look for relevant materials at the same time. Such study way can let student study, use information science and technology to carry on standard research of subject[6] [7] [9], and reach the efficiency that video-information unifies.

2.4 PDA supports the present situation of teaching and relevant research

Chen RuiZuo[3] has already combines and implements with the manufacturer in teaching. Students utilize PDA to deposit, withdraw and download course information via wireless. Synthesize the above, we can understand and utilize PDA to support teaching. PDA can improve student's interest of studying, promote student's high-level thinking, especially offer a cooperative study way to students. On-line network technology does not utilize PDA.

Students can utilize the resources of the network in outdoor.

3 Research procedure and method

3.1 Study the procedure

Divide into the procedure studying: (1) Literature discussion (2) Collect and analyze research (3) Work out half a structural formula interview outline (4) Carry on interview two times (5) Arrange analysis of the interview content (6) Compare analysis of file materials and interview result (7) The questionnaire is constructed and examined (including trying, retrieving, counting and testing in advance) (8) Analyze the statistics (9) Propose the result and suggestion.

4 Research approach

This research adopts the investigation method of the questionnaire, regarding teachers of seed schools in Kaohsiung as the main target.

4.1 Research object

This research probes into the cognitive will of use that the action communication supports teaching, regarding teachers of seed schools in Kaohsiung as the main target. Total collects samples and amounts to 374, 0 invalid samples, 374 effective samples, 100% of rate of recovery. So as effective questionnaire goes on analysis.

4.2 Study tools

4.2.1. Basic materials questionnaire: The test fills out and answers the topic about the cognitive will of use of supporting teaching.

4.2.2 The action communication supports the cognitive will scale of use of teaching: This scale mainly weighs users to the cognitive will of use of supporting teaching of news report of action.

4.2.3 In advance: The main purpose to try in advance is to verify letter degree of the questionnaire and result degree. Try the target and take a sample for the information seed school of Kaohsiung at random in advance (52 people). The committee invites him (her) to fill in by questionnaire. After trying on in advance, there are 4 effective samples in common, input the computer the questionnaire materials into, go on one degree of analysis of letter and event to analyze.

4.2.4. Analysis: This research adopts the paper to carry on analysis of the materials and work of treatment after this questionnaire collects the necessary materials.

5 Conclusion and suggestion

5.1 Conclusion

According to the result of every parameter statistical check, this research is via analyzing to know, " useful cognition ", It is " apt to use cognition ", Factors such as " technical support ", " elasticity ",etc. have apparent influence on " use the will ".

5.1.1 " useful cognition " supports teaching " use will ", has the most influence factor to action communication among research this.

5.1.2 Assay the result and reveal, " technical support " is also a direct factor of influencing " use the will ". Because the action communication of the campus supports teaching to be still at the stage when it is popularized and grown up. So the user, when exposed to using the action communication to support the environment of the tutoring system for the first time, for the installation establishment and occupation mode of new science and technology, have its strong " technical support " demand. This is a first user's focal point deeply concerned too.

5.1.3 There is action communication that will have the stronger one to support the user of teaching experience more than novices " Use the will " . This research, according to this inference, Support the development of teaching action communication, it lasts people action communication support use experience of teaching not to be been to benefit last negative influence. So the action communication of construction will support teaching to have its necessity and value in fact in the environment of the campus in the future.

5.1.4 Use the network or the deeper one of age and service seniority of computer, " will use " but also the getting stronger comparatively. On the contrary, and the the simpler one of age and service seniority, it " uses the will " relatively weak.

5.2 suggestion

5.2.1 Propose relevant apparatus implementing teaching

5.2.2 Propose PDA future development

5.2.2.1. Let the function of PDA be simple and clear, it is convenient to operate.

5.2.2.2. PDA should be promoted and distinguished word rate handwrittenly, and join the phonetic entry function. PDA except in build it is the handwritten input is it and not the handwritten distinguish by function.

5.2.2.3. Improve having a look around interfaces of PDA, in order to agree with the small screen of PDA.

5.2.2.4. PDA can increase it and link the function and add and set up the function which change the memory card in succession. In addition, if can set up the changing type memory card again, this has conveniences to the storing and carrying of materials even more, have taking action nature even more too.

5.2.2.5. Person who can please research and develop, manufacturer do to teaching with PDA function develop, in order to accord with teaching to use even more.

5.2.3 Support the suggestion of the teaching future thrust on PDA

5.2.3.1. PDA future development needs to set up appropriate study mechanism to study in order to support in addition, make teaching more convenient.

5.2.3.2. PDA price needs popularization

5.2.3.3. The teachers and students must all be familiar with the operation of PDA first. The majority of students did not contact this kind of new developing scientific and technological products. Most teachers are not familiar with the operation, use of PDA either. Must study on the function of PDA and operation mode first. Familiar with the occupation mode, reduce the study time of the real knowledge subject.

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