How the physical-education teachers use IT (barriers & solutions) of Ahwaz schools based on physical-education teachers’ attitudes

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Azam Bahrami, Golshan Norouzi Larki, Mahdi Asgari, Ali Toghiyany Khorasgany: How the physical-education teachers use IT (barriers & solutions) of Ahwaz schools based on physical-education teachers’ attitudes

ABSTRACT

Background: How the physical-education teachers use IT (barriers & solutions) of Ahwaz schools based on physical-education teachers’ attitudes. Methods The method of this research is descriptive method & for collecting the data are used survey data. The statistical population included all physical-education teachers in 4 area of Ahwaz, that worked formal & tuition and contracted in 2011-2012 in primary, guiding & high schools & they were about 437 persons (256 female & 181 male) in first area there were 103 persons, second area 123 persons, third area 119 persons & in fourth area were 94, based on Morgan sampling table, 204 persons were selected as statistical sample (120 female & male) & used cluster random sampling & the accumulating data were questionnaires which included 38 questions that studied on the methods of IT usages in physical-education teachers in Ahwaz in three gamut; potential, obstacles & solutions. For this designed 5-familiar questions & 6-questions about their thoughts to the IT & 10 questions about their level of IT usages. For analyzing the data more than using statistical indexes such as; frequency, percentage, standard deviation were used single sample t-test & Pearson coefficient correlation test. Results The methods of increasing IT usage of men teachers in Ahwaz schools were; service education 4.720, computer installation 4.676, high speed internet installation 4.661 and encouraging teachers 4.622, increasing special fund 4.593 & annual competition 4.464 strategies to increasing utilization in Ahwaz schools from physical-education women teachers points of views; holding classes when they trained 4.775, computer installation 4.691, increasing special fund 4.633, encouraging teachers 4.625 & annual competition 4.60. Conclusions Holding services education, computer installation, high speed internet installation, encouraging teachers, increasing special fund & annual competition. The strategies in solving the issues were; holding service education, computer installation, high speed internet installation & encouraging teachers.

Key words: physical-education teachers, IT, barriers & solutions

Introduction

Sustainable development is one of the human goals lives & it is based on knowledge & creativity & the best & only benefits of nationals on digital ages. IT makes speed & accuracy & different devices for people. IT & sciences magazine, general favorite resource, entertainments, educational resources & virtual educations & weblogs are produced in each 40 seconds average & can be imagined many works for these technology [4], so education has most important role & increasing these changes are based on more attention to the educational issues. In recent ages, education is one of the inevitable needs of human. Education & increasing the skills change to the essential abilities & tools for facing to the world issues & changes education is the first essential needs of civilized society [10].

The most important development scales today, technology & education modulation. The society which its’ goal is development based on knowledge & technology, at first, it must change its’ education system & for obtaining to them must be used educational technology; means planning, implantation & evaluating planned practical & foundational projects [12].

Developed countries invest on using the different applied technology based on technological & also cultural such as; electronic state, electronic health, electronic learning, electronic commerce, electronic banking, electronic agriculture, electronic
The role of teachers in using IT:

ICT forms the basic changes in training & management system & organizations increasingly, depends to the new technology. Around of the world, IT is on a new revolutionary that it is same as industrial revolution. IT development in society, caused to the better lives with better facilitation. Familiar with practical & IT factors are essential for better live in community-based information, internet, extranet, Email, e-learning, virtual school, on-line university, electronic state & organization are the sample of benefits of applied IT [2]

Ebadi (2003) considered the benefits of IT as speed in operation, accuracy & confident to them.

Gasemi (2003) considered IT benefits as justice development, Abling (2002) considered it as making spaces & continuum education. IT allows the human developed by many changes & alongwith training, schools & educational films caused to imagine media can be instead of teachers in classrooms & these things caused to the teachers object to innovative education & then not only the machines cannot take the role of teachers but also, caused to the role of them will be effected than before. Billgates, manger of Microsoft, said that “Microsoft company creates new & best one software but cannot take the role of teacher” regarding to the training teachers are increased every time for efficient use of IT & for obtaining these features of IT proposed no lessons in developing countries that one of them is “novitiate, novitiate & novitiate” (same resource)

IT usage in physical-education schools:

Sport sciences are so wide & variety that its application & function cannot possible except using IT because the numbers of students who use Internet & computer & learned it are so many & also increased its importance IT & its dimensions are the real things of recent life, this effective phenomenon ease many works but make some limitations & issues & because of its attractions, people attention to them & hide their negative effects. If they have special accuracy view to physical-education can understand the specific level of it finally, if we have ability of using IT, can control the strategic IT utilization. The basic education is transferring the knowledge that means transfer the information; formal training is done by teachers in the first step, but in the recent methods are used self-study; writing education & audiovisual methods such as radio, television, computer, internet &…for strengthen the traditional education system that it is caused to the more paying attention to the importance of data in education. In other hands, education helped to the person to become equipped for doing his/her work that it is information transfer & skills in doing it in education. Physical-education in schools means asset of movements, activities & regular exercises, activities & regular exercises as audio, writing, graphic,
picture &... used computer & telecommunications devices such as playing chess.

This subject caused to the teachers & coachers tried to update their data & participated in the virtual schools, health & sport education & the education department supported them & the IT must classify the information based on physical-education in school, to increasing the findings & then increase the benefits (A.P. Web, third area in Isfahan).

Orfnezhad (2002) studied on the level of using IT graduate of Shiraz University, among 1653, are selected 385 randomly for sampling & for accumulating the data are used surveying methods & questionnaire. The findings showed that the most important reasons of any IT using are; lack of information, lack of equipments (hardware & software), slow recovery, network outages, education needs for using IT & time limits in using them.

Fathi Vajargah (2005) studied on feasibility study of IT usage of ICT in curriculum in higher education of Shahid Beheshri University & the results showed that, in most cases, regarding to solving barriers & using facility factors.

Suzan (2005) studied on surveying on the level of teachers’ using ICT (FAVA) in schools in Isfahan in 2005 & showed that teachers used 50 percent in hardware & a viability by software is 30.9 percent & 78.3 percent of them don’t have any kinds of software (with by education subjects) & 66.7 percent of them said that pre-service don’t have any training about computer.

Shajee & Gholamian (2007) studied on 297 students of Ferdusi University on their thoughts, tends 7 skills than IT & he found that, 78.4 percent of physical-education students & had personal computers & the mean of IT than physical-education students’ skill is 4.13 & for other of them is 5.06. The main barrier for physical-education students are because of lack of their skills that expressed by 47.7 percent of them & also found that IT caused to the better function (in 53.9.0 percent of physical-education students).

Saadat Ralab (2009) studied on ICT usages in high school (in Tehran) & did it in 2009 on 362 high school teachers whom are selected by cluster sampling- multi- stage & found that they accepted ICT & believed that the terms & facilities for using them were so low they accepted the barriers & facilities factors in using ICT.

Thomas & Stratton (2006) studied on “what are we really doing with ICT in physical-education (a national audit of equipment, use, teacher attitudes, support & training) that did on 500 physical-education teachers in UK schools & showed that the teachers considered IT as best & valuable tools for training & in all the parts of UK the benefits of them were not equally.

Azad (2008) studied on the level of using IT of physical-education teachers among 110 physical-education teachers in Ilam & found following results;

1-The level of using computer & Internet of physical-education teachers for obtaining specific data in low level.
2- There was not ability in specialized utilize among physical-education teachers in Ilam.
3-They didn’t believe that the using Internet had benefits.
4-They didn’t have high speed internet in schools.

Khosro Zadeh (2008) studied on level of physical-education teachers on IT & its effects on teachers’ training methods & students’ understanding in Kurdestan high schools among 85 physical-education teachers & the results showed that;

• Their knowledge to IT caused to change their thoughts & their trainings, in other words, if their knowledge be more the methods of traditional change to be better
• If they know more about computers, they use more training software & new IT.
• IT used in training places such as schools caused to innovative & creativity in training of physical-education teachers.

Materials and Methods

The method of this research is descriptive method & for collecting the data are used survey data. The statistical population included all physical-education teachers in 4 area of Ahwaz, that worked formal and tuition and contracted in 2011-2012 in primary, guiding & high schools & they were about 437 persons (256 female & 181 male) in first area there were 103 persons, second are 123 persons, third area 119 persons & in fourth are were 94,based on Morgan sampling table, 204 persons were selected as statistical sample (120 female & male) & used cluster random sampling & the accumulating data were questionnaires which included 38 questions that studied on the methods of IT usages in physical-education teachers in Ahwaz in three gamut; potential, obstacles & solutions. For this designed 5-familiar questions & 6-questions about their thoughts to the IT & 10 questions about their level of IT usages.

The questionnaire is an anonymous kind & its questions have closed responses & regulated based on 5 rates Likert & included 5 scopes (very much, much, average, low & very low) that the scores were from 5-1. The reliability coefficient of questionnaire was 0.81 so the reliability tools were in high rates, for measuring the justifiability was used face & content validity.

For analyzing the data more than using statistical indexes such as; frequency, percentage, standard deviation were used single sample t-test & Pearson coefficient correlation test & analyzing descriptive findings were used (SPSS19) software (the meaningful level was p≤0.05)
Results:

What are teachers' points of view about solutions of increasing the benefits of IT in schools in Ahwaz?

A) What were the man teachers' points of view about increasing the IT usage in Ahwaz schools?

B) What were the woman teachers' points of view about increasing the IT usage in Ahwaz schools?

Table 1: Deductive variables

<table>
<thead>
<tr>
<th>Factor</th>
<th>Criterion amount</th>
<th>T</th>
<th>Freedom level</th>
<th>Meaningful level</th>
<th>Means difference</th>
<th>Confidence interval of the difference 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44.873</td>
<td>203</td>
<td>0.000*</td>
<td>9.779</td>
<td>9.368 to 10.229</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>22.609</td>
<td>83</td>
<td>0.000*</td>
<td>9.500</td>
<td>8.732 to 10.267</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>39.367</td>
<td>119</td>
<td>0.000*</td>
<td>10.008</td>
<td>9.504 to 10.511</td>
</tr>
</tbody>
</table>

The meaningful level is 0.05.

Table 2: Deductive variables

<table>
<thead>
<tr>
<th>Factors</th>
<th>Criterion amount</th>
<th>Confidence interval of the difference 95%</th>
<th>Means difference</th>
<th>Freedom rate</th>
<th>t</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>higher</td>
<td>Lower</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The annual tournament</td>
<td>Total</td>
<td>1.628</td>
<td>1.420</td>
<td>1.524</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>1.640</td>
<td>1.287</td>
<td>1.464</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>1.703</td>
<td>1.496</td>
<td>1.60</td>
<td>0.000*</td>
</tr>
<tr>
<td>Increase funding for specifics</td>
<td>Total</td>
<td>1.681</td>
<td>1.504</td>
<td>1.593</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>1.690</td>
<td>1.357</td>
<td>1.523</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>1.729</td>
<td>1.536</td>
<td>1.633</td>
<td>0.000*</td>
</tr>
<tr>
<td>Encouraging the teachers</td>
<td>Total</td>
<td>1.702</td>
<td>1.542</td>
<td>1.622</td>
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</tr>
<tr>
<td></td>
<td>Men</td>
<td>1.717</td>
<td>1.377</td>
<td>1.547</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>1.737</td>
<td>1.512</td>
<td>1.625</td>
<td>0.000*</td>
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<tr>
<td>Computer installation</td>
<td>Total</td>
<td>1.754</td>
<td>1.598</td>
<td>1.676</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>1.765</td>
<td>1.449</td>
<td>1.607</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>1.801</td>
<td>1.582</td>
<td>1.691</td>
<td>0.000*</td>
</tr>
<tr>
<td>High speed Internet installation</td>
<td>Total</td>
<td>1.776</td>
<td>1.461</td>
<td>1.619</td>
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</tr>
<tr>
<td></td>
<td>Men</td>
<td>1.779</td>
<td>1.553</td>
<td>1.666</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>1.779</td>
<td>1.631</td>
<td>1.720</td>
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</tr>
<tr>
<td>Service education</td>
<td>Total</td>
<td>1.810</td>
<td>1.631</td>
<td>1.720</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Men</td>
<td>1.790</td>
<td>1.447</td>
<td>1.619</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>Women</td>
<td>1.881</td>
<td>1.669</td>
<td>1.775</td>
<td>0.000*</td>
</tr>
</tbody>
</table>

The meaningful level is p<0.05.

The data of tables showed that total means, men means and women means are higher than 3 (expected means)

The methods of increasing IT usage of men teachers in Ahwaz schools were: service education 4.720, computer installation 4.676, high speed internet installation 4.661 and encouraging teachers 4.622, increasing special fund 4.593 & annual competition 4.464 strategies to increasing utilization in Ahwaz schools from physical-education women teachers points of views; holding classes when they trained 4.775, computer installation 4.691, increasing special fund 4.633, encouraging teachers 4.625 & annual competition 4.60.

How much the hardware & software factors & work force effaced on obstacles of IT in education based on physical-education teachers’ points of views.

A) How much the hardware & software factors & work force effaced on obstacles of IT in education based on male physical-education teachers’ points of views.

B) How much the hardware & software factors & work force effaced on obstacles of IT in education based on female physical-education teachers’ points of views.

- Based on table in hardware area, t (3.931), freedom rate (2.3) & meaningful level (0.000) that is so lower than permissive level & total , men & women means are higher than the critical 9 (expected mean), so can say; physical-education teachers, considered hardware factors as obstacles in using IT

- Based on table in software area t(-4.003) freedom level (2.3) meaningful (0.000) that it is so lower than permissive level & total mean (13.573) & female mean & man mean are lower than 15 (expected mean) so can say the physical-education teachers didn’t accept software factors as obstacles of obtaining IT.

- Based on table in workforces area t(-3.067), freedom rates (2.3) meaningful level (0.002) that were lower than permissive level & total mean
women & male mean were lower than critical 9 (expected mean) so can say the physical-education teachers considered the workforces as obstacles in obtaining IT.

Conclusion:

First question: based on results of table (2) about hardware, software & workforces can be resulted:

Based on table (2) in hardware & obtained t (t=30391) meaningful level (0.000) can say, the physical-education teachers in Ahwaz schools considered as obstacles in using IT.

Based on table (2) in software & obtained “t” (t=-4.033) meaningful level (0.000) so the physical-education teachers didn’t accept that software as obstacles in using IT.

Based on that table in workforces & obtained “t” (t=-3.036) & meaningful level (0.002) can say that the physical-education teachers considered workforces as obstacles for IT. Based on results these findings are not same as findings of [13, 14, 8, 7, 9].

Second question: based on obtained results of table (4025) & t (44.873) & meaningful level (0.000) the strategies increasing utilization of physical-education teachers in Ahwaz are same as following:

Holding services education, computer installation, high speed internet installation, encouraging teachers, increasing special fund & annual competition.

The findings of this research is same as [9, 4] & there is not any different study., means; noticed to the limitation & same obstacles in using IT.

The strategies in solving the issues were; holding service education, computer installation, high speed internet installation & encouraging teachers.

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teachers considered the workforces as an obstacles in obtaining IT.

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