



# ACCOUNTING STUDENTS PERCEPTION ON ONLINE HOMEWORK SOFTWARE

*Haslinah Muhamad,  
Mohammad Noor Hisham Osman,  
Hasri Mustafa,  
Abdul Razif Abdul Razak*

Faculty of Economics and  
Management, University Putra  
Malaysia, 43400 Serdang,  
Selangor, Malaysia

# OUTLINE OF PRESENTATION



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- Problem Statement
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# INTRODUCTION



In the past twenty years, the availability of internet-based technology provides unique opportunities for our day life activities.

Like other field, technology via internet has spurred the innovation in education as a learning and teaching tools.

These tools may have the potential to improve course, time management, improved teaching effectiveness as well as to provide students with more individualized learning opportunities [ Arasasingham, Martorell, McIntire, 2011; Wooten, Dillar-Eggers, 2013].

# PROBLEM STATEMENT



- One of the popular internet tool uses in the process of teaching and learning is an interactive learning teaching system. Humphrey and Beard (2014) call it as online homework system (OHS) and has been utilised as emerging trends in accounting education [Ng, 2011]
- In this study, OHS is defined as web-based accounting work completed by the student. Those OHS provided by book publishers. The work includes solving accounting problems and answering multiple choice questions. A student's work under OHS is immediately computer-graded. There are several OHS applied in accounting courses such as Wiley Plus, McGraw-Hill's connect and Pearson's My Accounting Lab. Textbook publishers are quick to claim students learn accounting better with OHS than without it.
- Since this is new in accounting education environment in Malaysia, students should be queried about the learning effectiveness, performance, and product satisfaction of OHS users [Humphrey and Beard, 2014]. This study is about to investigate the students' perceptions toward online homework software (OHS).



## Research Objective

The main objective of this study is to investigate the perception toward the uses of online homework software (OHS) among accounting students in University Putra Malaysia. This includes OHS utilization in accounting courses, the benefit of OHS and the users' concern on OHS

## Research Question

Below are the research questions which are develop to achieve the above objective:

- 1- How many percent that educators utilize OHS for assigned homework, quizzes and test?
- 2-What are the benefit of OHS?
- 3- What are the users' concern about OHS

# LITERATURE REVIEW



## Benefit of OHS to students and faculty

- can provide immediate homework feedback to each student [Smolira, Joseph, 2008; Richards-Babb, Drelick, Henry, Robertson-Honecker, 2011]
- increased student understanding of the course material [Cheng et al., 2004];
- better knowledge retention [[Burch and Kuo, 2010](#) ; Arora, Rho, and Masson, 2013]
- increase student effort and preparation outside of the classroom [[Bonham, Beichner, and Deardorff, 2001](#); Zerr, 2007]
- manage personalized homework efficiently [Arasasingham et al., 2011]
- improves student performance [[Gaffney, Ryan, and Wurst, 2010](#); [Burch and Kuo, 2010](#); [Arasasingham et al., 2011](#); [Richards-Babb et al., 2011](#); [Arora et al., 2013](#); [Wooten and Dillard-Eggers, 2013](#)]



## Benefit of OHS to faculty

[Cole and Todd \(2003\)](#) reported that using OHS saved faculty time by not having to grade homework problems for 200 students in a chemistry course.

[Arora et al. \(2013\)](#) pointed out that assigning unique problems to each student with OHS reduces, if not eliminates, student cheating by copying each other work.



## Student perception toward OHS

[Chamala et al. \(2006\)](#), [Richards-Babb et al. \(2011\)](#), [Arasasingham et al. \(2011\)](#) - students have positive attitude toward the online homework as long as it's well organised and integrated with the course material.

[Smolira \(2008\)](#) - students preferred online homework to traditional homework assignments in study finance course.

[Peng \(2009\)](#) and [Wooten and Dillard-Eggers \(2013\)](#) - a student's computer efficacy and less intrinsic motivation have a positive correlation with amount of use and beneficial view of OHS.

[Wooten and Dillard-Eggers \(2013\)](#) - both required and not-required users rated OHS favourably compared to traditional pen- paper homework (PPH)





## Faculty perception toward OHS

[Humphrey](#) and Beard (2014) published research in accounting field by comparing faculty who are OHS users, nonusers, and faculty who had discontinued the use of OHS. Faculty indicated the tool is helpful when teaching in the online format and that OHS saves faculty time by reducing the time spent grading and processing student work. Users of OHS raised concerns about whether and how the tool helps students learn, how the students view the tool, and the cost of OHS.

# LITERATURE REVIEW



## Mixed result on OHS benefit to students' performance

[Phillips and Johnson \(2011\)](#) - accounting principles students using ITS (intelligent tutoring systems) performed higher on transaction analysis than students that using OHS.

[Hahn, Fairchild, and Dowis \(2013\)](#) - no significant learning advantage was found with OHS or ITS in comparison to PPH (traditional pen-paper homework)

[Chamala et al. \(2006\)](#) ; [Halcrow & Dunnigan's \(2012\)](#) -little correlation between students' scores on OHS assignments and scores on examinations.

[Hall, Butler, Kestner, and Limbach \(2012\)](#) - found a correlation of completion of OHS assignments and performance on short term performance but failed to find a correlation of completion of OHS assignments on long term performance in an economics course

[Phillips and Johnson \(2011\)](#) - reveal that online homework packages have issues relating to accuracy

# METHODOLOGY



The survey was adopted from Roberta L., Humphrey and Deborah F. Beard (2014)

Likert Scale also used in relevant section where value 1 assigned to strongly disagree and highest value 7 assigned to strongly agree

The sample of this study is 400 undergraduate of bachelor of accountancy in University Putra Malaysia

100 accounting student response to the questionnaire which is 33.33%.

# STATISTICAL ANALYSIS



- Differences between users and non-users

	<b>Using OHS mean (Std Dev)</b>	<b>Not using OHS mean (Std Dev)</b>	<b>df between groups</b>	<b>df within groups</b>	<b>F</b>	<b>p</b>
<b>Performance (test one or midterm)</b>	78.1231 (9.29299)	64.5714 (9.24276)	2	98	48.560	< 0.001
<b>Hours spent to revision particular course</b>	7.8308 (2.12551)	9.7714 (1.92638)	2	95	20.218	< 0.001
<b>Current CGPA</b>	3.3596 (.28109)	3.2826 (.26136)	2	86	1.584	0.203



- OHS utilization

	Percentage Mean
What percentage graded homework was assigned using the OHS	57.5
What percentage of quizzes was assigned using OHS	68.67
What percentage of exam was assigned using OHS	0

# STATISTICAL ANALYSIS



- Perspective of OHS benefits by OHS users

	Mean	Std. Deviation
I believe OHS is a cost effectively learning tool for my learning	5.23	1.205
I believe the use of OHS in my courses has significantly improved my learning	5.15	1.226
I believe use of OHS in my courses has improved my course management by reducing the amount of time I spend	5.24	1.093
If I asked to learn an online courses I would definitely use OHS	4.91	1.055
I as a student recognize the benefit of using OHS in my courses	5.52	1.202
I like to use OHS in my courses	5.41	1.173

- OHS users concerns

Concerns	Percent (%)
No concerns	18
Concerned the cost is too high	5
Concerned use requires too much of time	29
Concerned whether use improves learning	46

# RESULT AND DISCUSSION



- The result shows that there are a positive correlation between short term performance and the hours spent for revision to the use of OHS. The result on short term performance is consistent with the finding from [Hall, Butler, Kestner, and Limbach \(2012\)](#). This result may related to utilisation of the use OHS which are more emphasis on homework assignment and quizzes
- Pashler, et al. (2007) suggest that many students experience an “illusion of knowing” in which they overestimate their mastery of new material they have studied. This illusion of knowing is reflected in the assertion that many students make they receive a poor grade as a whole.
- The study has reveal that no exam assigned by using OHS. Type of questions, nature of courses and assessment may contribute to the result. Final examination normally required higher level of thinking such as analysis, interpretation and decision making. It also normally conducted in very limited time, close book and out of discussion as well as communication.

# RESULT AND DISCUSSION



- Nature of courses may also explain why OHS is more adopted for some courses and not for others. Those type of courses requires essay or problem based learning type of questions, which are not available or hard to automatic graded by using OHS. In the previous literature also reveal that OHS were conducted in courses that needing heavy repetition only such as chemistry and heavy computation such as math, physics and finance.
- Even though respondent view that OHS can improved time management by reducing the amount of time spend in the course, cost effectively and believe the use of OHS has significantly improved their learning but still hold the idea to continue using the product OHS. This information suggests more research should be undertaken on whether OHS really helps student learn accounting content



# RESULT AND DISCUSSION



- The second most voiced concern by OHS users was requires too much of time. This may be due to the internet or technology problems since most of them (90%) using university internet. The speed of the internet getting slower if the number of user keep increasing. The opinion regarding the characteristic (such as user friendly) of OHS need to investigate.
- The result shows that respondents prefer to use McGraw Hill's connet higher than other type of OHS (65%). The factors that contribute to the result need to consider to make sure that the OHS have the characteristic such as high level of effectiveness , user friendly and comfortable to use

# CONCLUSION



This data indicates there is still space to make OHS more flexible, reliable, interactive and impactful.

All parties need to cooperate to optimize the uses of OHS as we know OHS bring a lot of benefits towards lecturers and students as well.

However, there is some point to improve internally by administrator, such as improve the internet facility. Educators also must consider certain factors such as nature of courses before make a decision to use OHS



THANK YOU!

With Knowledge We Serve