出國報告（出國類別：其他：國際會議）

亞洲技職教育制度及發展趨勢

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報告日期：2014 年 11 月 17 日
出國時間：2014 年 10 月 17-19 日

摘要

亞洲技職教育研討會是由 AASVET(Asia Academic Society of Vocational Education and Training,亞洲職業教育訓練學會)所主辦，主辦國是由各會員國輪流舉辦，包括日本、韓國、台灣、大陸、馬來西亞、及印尼等會員國。今年本研討會爲第 10 屆學術會議及會員年會，在日本東京舉辦。本研討會是由今年的主辦國日本籌組，自今年 8 月即開始由大會發出徵稿訊息，並陸續決定各項論文摘要送件與全文截稿於 9 月底，大會舉辦日期於 10 月 17-19 日等重要期程。10 月 17 日爲大會註冊與開幕儀式，本研討會並且邀集 JAVET(日本職業教育訓練學會)共同舉辦會議，與會者共近百名。10 月 18 日爲大會開幕 Symposium，由大陸、日、韓、美國、馬來西亞各國引言人介紹各國二年制技職學院即"二技"受到政府與產業界重視，顯現重新復興之發展態勢。此現象是基於二技比四年制大學教育成本更低廉，且畢業生更受到產業界所歡迎，就業機會更高所致。與會人員共計發表 36 篇論文，各自代表各國在技職教育與教育訓練的研究成果。

目次

一、目的

亞洲技職教育研討會緣由是 AASVET(Asia Academic Society of Vocational Education and Training,亞洲職業教育訓練學會)所主辦，主辦國是由各會員國輪流舉辦，包括日本、韓國、台灣、大陸、馬來西亞、及印尼等會員國。今年本研討會爲第 10 屆學術會議及會員年會，在日本東京舉辦。並且結合日本技職教育學會(Japan Vocational and Education and Training,JVET)，在日本東京的大東文化大學學辦會議。

此跨亞洲國家的技職教育學術會議團體與台灣的淵源極爲深厚，曾在高雄學辦過第二屆年會，以及曾在雲科大學辦過第六屆年會。當時本人亦正任職技職教育研究所所長，期間負責承辦本研討會以及擔任大會共同主席，當時一曾經邀請時任教育部政務次長的林聰明次長與會主持開幕典禮。多達近 40 名各國會員參與。

本會議的目的在於促進亞洲國家的技職教育專家學者與相關人員的學術與經驗交流，以增進各國技職教育與訓練專業人員的合作機會。提升各國技職教育的推動與發展。

二、過程

本研討會是由今年的主辦國日本籌組，自今年 8 月即開始由大會發出徵稿訊息，並陸續決定各項論文摘要送件與全文截稿於 9 月底，大會舉辦日期於 10 月 17-18 日等重要期程。

本次舉辦會議的地點是在東京的大東文化大學，本校是日本歷史悠久的大學，大學中有多位教授也長期參與本學術團體，故對於舉辦此次大會可以說是非常順利。

10 月 17 日爲大會註冊與開幕儀式，本研討會並且邀集 JAVET(日本職業教育訓練學會)共同舉辦會議，與會者共近百名。來自亞洲各個國家。

10 月 18 日爲大會開幕 Symposium，由大陸的華東師範大學石偉平所長、日本的寺田盛紀教授(前任學會主席)、韓國的崔完值教授同時也是現任主席、美國的 Prof. Chris Zirkle; Jack Popovich、馬來西亞的 Prof. Mastafa, Ramlee 等各國引言人介紹各國二年制技職學院，即"二技"受到政府與產業界重視，顯現重新復興之發展態勢。此現象是基於二技比四年制大學教育成本更低廉，且畢業生更受到產業界所歡迎，就業機會更高所致。

美國的 Jack Popovich 教授更是將目前美國企業喜歡任用二年制的大學生，因

此社區大學的二年制招生很受歡迎。此現象也與台灣近年來五專學制重新被提倡相似。

日本的 Keiichi Yoshimoto 教授(Kyushu University)也發表一篇論文：日本的第三教育體系的結構和改變。內容探討日本有過半學生進到傳統大學，但是大學已經面臨新的挑戰，主要是與就業力有關。因此一些專門訓練學校的社區高等學院，更多人去就讀。目前有多達五分之一的高中畢業生選擇專業的訓練學院(professional training college)，儘管這些社區學院的社會地位遠不及傳統大學。因此，改革之道在於：

1. 強化第三教育體系的功能。
2. 鼓勵提升第三教育與專門教育學校品質。
3. 政策上要思考將來第三教育系統與傳統大學系統的雙軌接軌。

韓國的 Prof. Won-Sik CHOI 教授也在引言中敘明韓國的高等職業社區學院在當前地位和新的政策改革。

1. 是確保職業學院畢業生具備實做的工作表現能力。
2. 其次是提升至少四種多樣性的高等職業學院，確保其專業的自主領域競爭力。
3. 第三是進行教育評鑑系統，評鑑教育的成果產出及較歷程。

至於馬來西亞的 Ramlee 教授也發表一篇有關馬來西亞女性，參與職業學校教育和訓練的必要，位女性在部分省區，爲欠缺職業能力無法參與職業勞動，不被雇用。若能給予是當的職業教育訓練，將能改善他們的經濟生活。尤其是在一些土著的偏遠地區居住的女性國民。因馬來西亞正在積極設立這些職訓單位來提升女性的職業技能(vocational skill)。

此外，中國大陸的技職教育發展趨勢也朝向高等職業學院轉型，將單一水準的教育型態轉成多水準的型態。

1. 將好的職業學院升級爲應用型大學。
2. 將現存的大學轉成應用型大學。
3. 提供專業的學位學程，鼓勵高階的職業教育。
4. 設立多水平的高等職業教育系統，包含：職業學院、應用大學、學士後的專門學位學程。
5. 仍有爭議的是將 600 所新成立的四年制大學轉型爲應用大學。

10 月 19 日爲日本技職教育訓練中心的參訪，此位於東京市區的大型職訓中心，負責日本的產業專業人力培訓，奠定日本的職業訓教練模式與研發各種訓練

課程，可以與台灣的職訓中心比擬，對於訓練課程逐漸委外的台灣職訓中心，相當有啓示。

日本當時爲了振興經濟，採取退稅的政策活絡經濟，果然吸引大量的觀光客前往消費，特別是在新宿、銀座等地區，可以說是相當活絡的消費市場。尤其是大陸的觀光客，趁此波優勢，大量購置商品。此舉也間接帶動各種行業的景氣。

三、心得

(一)具體事實

本次會議舉辦時間爲 2014 年 10 月 17-19 日，爲期三天。活動地點在日本東京都的大東文化大學。藉此學會平台邀請各國會員蒞臨與會，增加該校的知名度。本校雲科大應該多效法。就像 99 年時，本人舉辦國際研討會的模式經驗。台灣漸漸被韓國與馬來西亞和印尼排擠而邊緣化，連在學術領域也有此情形，不可不慎。

觀察中國、日、韓、東南亞國家的學界，都非常積極爭取主導地位，反之台灣的地位似乎日益蕭條，參與人數也不多，不積極。實爲警訊，當局應該多鼓勵台灣學者出國交流，並爭取國際的活動在台灣舉辦。

而這些活動的參加都是以英語爲發表和溝通的語言，可見英語的鍛鍊是基本功夫，國內學者和學生，無論如何必須盡量尋求熟悉英語的溝通。也要練習以英文爲發表論文。此次 36 篇論文都是以英文撰寫，顯示亞洲各國也都重視參與英語的學術活動。但是國內仍有老師和學生，以中文爲熟悉的語言，怯於面對語言環境，這是不利於國際環境的發展及參與。

此次自己的英語溝通能力又比先前更加流利，簡報檔的製作與英語論文的撰寫，都可以自己完成，不必透過中英語的翻譯了。會前亦是自行前往日本東京大東大學，不似以往必須隨群前往，可見個人之國際移動力，又比以前更好，信心也更高了。

另外，此次會後有機會在東京考察日本首都的生活方式，在都市地點間穿梭，可以看見日本人的生活方式確實很有秩序，也都互相尊重，友善接待外國賓客。唯獨英語的普及情形仍然有待加強。

回程期間，途經日本秋葉原，看到日本的動漫與機器人玩具產業蓬勃發展。可見日本的專業職業學校在遊戲方面的成功，也有很具體的創意產品生產。並且影響國際上的遊戲文化與玩具文化。專業學校與創意產業必須列爲國家政策改革

推動方能成功。

(二)質化成效

此次活動帶給參與者實際的收穫與幫助很巨大，本次會議除了學習分享各國技職教育的現況與發展趨勢之外，並且有下列三件具體質化成效：

1.本人發表"腦波儀在各種職業工作表現差異與影響的分析"引發熱烈討論與迴響。印尼、馬來西亞與韓國的學者都認為將職業教育訓練導入生理儀器回饋，是一件有願景的途徑。未來有機會和印尼與馬來西亞的學者共同合作探究本項工具。(論文如附件所示。)

2.本人獲得 AASVET 大會推薦擔任 2015-2017 年秘書長(General Secretary)。

如同前述，本人已經參與連續六年的年會，與各國夥伴建立深厚友誼。因此，增加緊密互動的機會，能力也漸被肯定。所以今年獲推選為學會的秘書長，負責與主席辦理三年任期的學會發展。這三年期間還將有更多機會促進台灣與各國的技職教育交流機會。

3.確認台灣舉辦 2016 年第 12 屆 AASVET 國際研討會與年會。

很榮幸的，台灣也將輪辦第 2016 年的 AASVET 年會與研討會，屆時雲科大將再次有機會邀請各國專家到台灣聚會研究。.盼屆時能再次獲得國科會與教育部的經費補助，將活動與學校聲望推向亞洲和各國。

四、建議事項

(一)本 AASVET 學會規模並不大，但是會員之間交流密切，值得加入成為夥伴，以累積國際互動經驗。

主要核心會員在 50 人左右，因此彼此之間互動緊密，是真正有密切交流，彼此熟識的國際學會。有別於歐美動輒千人以上的大學會。雖然熱鬧，但是卻很疏離。

像這樣的學會，反而有深耕的價值，不可忽視。

(二)未來 2016 年台灣主辦 AASVET 會議時，歡迎技職教育界的專家學者踴躍參加。

觀乎韓國與印尼及馬來西亞，還有日本，都是師生團體與會，而且是很大的團體。

但是台灣似乎很零散，只有少數人零落個別參加，不只有本會，個人以前參加的歐美學會也是類似情形，此點可在下次 2016 台灣舉辦會議時，廣邀團體參加。

(三)本次本人獲推選爲學會秘書長(General Secretary)，將來可以繼續推動台灣學界夥伴深入參與國際組織的機會。

這是個人的難得機會，盼能藉此機會，擴大台灣技職教育領域的專家多多參與類似活動和國際組織。

附錄

附件一

1.議程

大會 Agenda 如下

Annex II

■Timetable

Saturday 18th October (At Itabashi campus of Daito Bunnka University)

16:00-17:00 Registration
17:00-18:00 Opening speech, Briefing
18:00-19:30 Welcome party

Sunday 19th October (At Daito Bunka Kaikan)

(9:00-10:00 Registration)
10:00-12:00 Symposium
12:00-13:00 Lunch
13:00-14:20 Individual research presentations (A)
14:30-15:50 Individual research presentations (B)
16:00-17:00 Individual research presentations (C)
17:10-18:10 General meeting
18:30-20:00 Farewell party

Monday 20th October (Option)

10:00-12:00 Study tour (Visit to Tokyo Metropolitan vocational training center)
13:00-17:00 Sightseeing tour in Tokyo

■Symposium

Theme: Vocational education of higher education stage
Coordinator: Dr. TERADA, Moriki (Professor, Nagoya University)
Speaker: (Being adjusted)

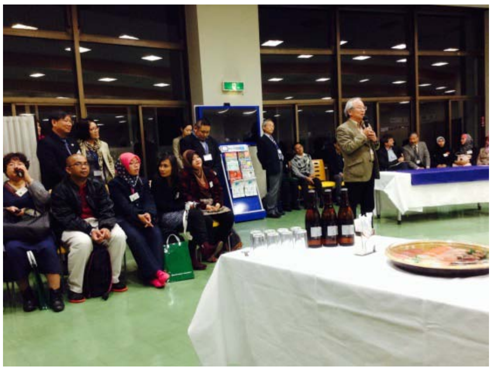
■Access to the venue

http://www.daito.ac.jp/english/access/index.html (←See "Itabashi campus")

1. Tobu Tojo Line Disembark at Tobu Nerima Station, North Exit. Board the free school bus (approx. 7min. ride).

2. Toei Mita Line Disembark at Nishidai Station, West Exit, walk about 10 min.

2.活動照片 3 張



大會開幕式晚會

與美國 OSU 教授 Poovich 及韓國教授 Choi

與瑞典教授合影

3.發表論文

HOW DO OUR MIND OPERATE DURING THE PROCESS OF WORK PERFORMANCE?--NEW EVIDENCES FROM MIND-WAVE MEASURMENT

LIU, Wei-Te1;LYAU,Nyan-Myau2; LIU, Li-Chen3

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ABSTRACT

This study aimed to evaluate the implicit mind process of different work performancesfrom the neuro-science approach. NeuroSky’s Mindset headset was taken as a minimally invasive method to measure the attention, meditation, pressure, and fatigue levels of some subjects' mind-wave during doing various work performances such as relaxing, playing flute and writing calligraphy. Various mind-wave data were measured as electroencephalogram (EEG), included α wave, β wave, γ wave, and δ wave. According to the main findings, an expert demonstrated higher meditation and lower pressure compared with a novice. Visual work performances ,like calligraphy writing, tended to significantly need more attention than audio performance, like flute playing, do. Some recommendations were given to improve the work performance.

Keyword: EEG, brainwave, work performance, NeuroSky’s Mindset

1. Introduction

Traditionally, vocational education emphasize work behavior from the work competence. Usually, taking examination to test learners' knowledge and requiring work performance assessment to identify their solid work skill.In addition, sometimes observing learners' work motivation by way of questionnaire survey. However, we perhaps neglect the body information, such as attention, meditation, pressure, and fatigue of the workforces. Probably, to evaluate these body-information ,for instance electroencephalogram (EGG, in briefing) during various work performances are essential and interesting.

During the last decade of the 20th century, NeuroSky have developed a non-invasive, dry, bio sensorto read electrical activity in the brain to determine states ofattention and relaxation. NeuroSky is a low-cost, easy to useElectro Encephalogram (EEG) developed for leisure. Itcaptures neural activity using three dry electrodes (locations:beneath the ears and the forehead) and decodes them byapplying algorithms. NeuroSky provides information on auser's Delta, Theta, Alpha, Beta, and Gamma brainwaveband power levels(Lutsyuk, et al., 2006).

This paper tests a various of work performances and subjects from as close to the brain as non-invasively possible: electroencephalogram (EEG).The EEG signal is a voltage signal that can be measured on the surface of the scalp, arising from large areas of coordinated neural activity. This neural activity varies as a function of performance, mental state, and cognitive activity. Noteworthily, the EEG signal can measurably detect such variation. For example, rhythmic fluctuations in the EEG signal occur within several particular frequency bands, and the relative level of activity within each frequency band has been associated with brain states such as focused attention processing, relaxed meditation, stressed engagement, and frustration(Baker, et al., 2010), which casually are important for outcome of vocational learning(Berka, et al.,2007).

The ability to record longitudinal EEG data in authentic school settings is important for several reasons. First, we can analyze the brainwave of the same work performance conducted by expert or novice learner.. Second, we can study brainwave data generated by different work performances from the same learner. Third, we can explore the inter-correlation or the causality between various work performances such as visual or audio job. Third, we can get enough EEG data over a long enough time from enough learners with the statistical power of "big data," thereby promote us to analyze the effects of different forms of instruction and practice on students learning and moment-to-moment engagement. Finally, perhaps longitudinal recording of

EEG data on a school-based training program offers the opportunity to make student-specific models actually useful, by obtaining enough data over time to effective training models, and applying them to improve better student learning.

To assess the feasibility of collecting useful information about cognitive processing and mental state with a portable EEG monitoring device, the researcher conducted a pilot study in which participants wore a NeuroSky Mindset while doing different performances. These EEG data were linked and collected by user ID and timestamp for each second. This study aims to explore if MindSet data can distinguish mental states among workforces relevant to various work performances. More specifically:

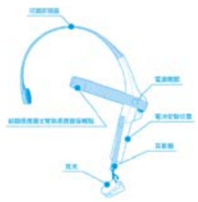
1. Can EEG detect various performances for the same subject? So this study presented brainwave data of audio and visual tasks from the same subject..

2. Can EEG detect different subjects over the same performance features? So this study showed isolated brainwave data varied by expert-novice subjects from the same task.

3. What are the EEG causality or inter-correlation between various performance processes? So this study analyzed the correlationof these tasks.

2. Method

2.1. Research instrument



The recent availability of simple, low-cost, portable EEG monitoring devices suddenly makes it feasible to take this technology from the lab into schools. The NeuroSky “MindSet,” for example, is an audio headset equipped with a single-channel EEG sensor. It measures the voltage between an electrode that rests on the forehead and electrodes in contact with the ear. Unlike the multi-channel electrode nets worn in labs, the sensor requires no gel or saline for recording, and requires no expertise to wear. Even with the limitations of recording from only a single sensor and working with untrained users, the MindSet distinguished two fairly similar mental states (neutral and attentive) with 86% accuracy(NeuroSky, 2009).

2.2. Subjects

There were 6 subjects participated in this study, included expert-novice in calligraphy, adolescence, college students and adults.

2.3 Research design

All subjects were informed consent to participate the experiment in the beginning. Usually, subjects attended 2-3 tasks for 3-5 minutes. Researcher collected the EEG data of brainwave measurement during the process of the tasks. Synchronously, researcher recorded the experimental process video as well. There was a software system set up in the computer simultaneously matched to recorded the EEG data by way of blue-teeth function. Subjects had to do specific task according to experimental activity, for example listening music, calligraphy writing, memory testing, or playing computer game for 3-5 minutes.

2.4. Data analysis

Primarily, descriptive statistics was used to analyze the EEG data included attention, meditation, pressure, and fatigue degree of mental condition from all of the research process.

3. Results and discussion

There were some interesting finding described as below:

3.1. Can EEG detect various performances for the same subject?

According to table 3.1.EEG record demonstration, obviously, almost all of the subjects showed difference of their Attention, Meditation, Pressure and Fatigue degree over various work performance. In general, playing computer game, taking memory test and writing calligraphy need higher attention. In contrast, relaxing music, playing flute and reading books seems express higher meditation. However, taking memory test, writing calligraphy by novice, playing computer game make subjects fell more pressed.

Table 3.1. Brainwave data of various work performance from the subjects

Subject	Work performance	Stat.	Attention	Meditation	Pressure	Fatigue
Liu	Playing flute	M	30.74178	77.60094	22.39906	1.553991
		SD	12.61079	18.6344	18.6344	4.49666
	Writing calligraphy	M	45.71591	61.60227	38.39773	4.176136
		SD	14.90001	17.94819	17.94819	5.13939
Liu*	Memo test after	M	45.8329	55.04961	44.95039	4.963446

	game					
		SD	10.89614	14.28946	14.28946	5.319009
Master	Writing(R) calligraphy	M	38.14375	54.8375	45.1625	6.5625
		SD	15.8891	9.635422	9.635422	7.826489
	Reading(R)	M	36.5848	60.21053	39.78947	6.263158
		SD	17.2418	14.31667	14.31667	6.499393
Liang	Relaxing	M	48.56291	85.59603	14.40397	0.397351
		SD	19.47839	12.75209	12.75209	1.007171
	Playing computer gaming	M	42.43333	36.25	63.75	4.116667
		SD	13.04081	14.64496	14.64496	4.124498
Annie	Relaxing	M	36.76111	52.55	47.45	3.188889
		SD	17.26862	27.14008	27.14008	4.655493
	Writing(2nd) calligraphy	M	44.24444	43.65556	56.34444	6.438889
		SD	15.33813	13.98056	13.98056	8.621244
Henry	Before play computer game	M	38.99363	56.21656	43.78344	5.764331
		SD	14.7384	16.32432	16.32432	6.904312
	Playing computer Game	M	61.92973	67.75135	32.24865	5.52973
		SD	12.65428	10.20352	10.20352	7.551305
	After game memo test	M	47.67281	57.2212	42.7788	5.182028
		SD	19.94099	14.55901	14.55901	6.390058
Enya	Relax reading	M	54.07222	53.51111	46.48889	4.266667
		SD	16.77889	13.48928	13.48928	4.244747
	On writing	M	59.83333	46.22222	53.77778	5.066667
		SD	15.21265	14.6846	14.6846	4.9586
	On Memory testing	M	59.64177	41.79626	58.20374	6.290323
		SD	15.09197	13.0755	13.0755	6.249266
Henry*	Assembling toy robot	M	35.05667	52.33333	47.66667	6.263333
		SD	17.87699	16.57274	16.57274	7.458373

	Assembling robot again	M	42.3	50.52	49.48	7.45
		SD	18.77223	16.62357	16.62357	8.896863
	Memory test After assembling	M	52.28488	54.11337	45.88663	5.409884
		SD	23.20461	16.59299	16.59299	6.371541

3.2. Can EEG detect different subjects over the same performance task?

Basically, this study showed isolated brainwave data varied by expert-novice subjects from the same task. According to Table 3.2., for the same subject doing various performance, such as writing calligraphy, taking memory test or playing computer game, express higher meditation and lower pressure for an expert. In contrast, a novice show lower meditation and higher pressure during working. However, sometimes a novice need higher attention than an expert do.

Table 3.2 Brainwave data of various subjects from the same task

Subject	Work performance	Stat.	Attention	Meditation	Pressure	Fatigue
Liu(mid expert)	Writing calligraphy	M	45.71591	61.60227	38.39773	4.176136
		SD	14.90001	17.94819	17.94819	5.13939
Master(expert)	Writing calligraphy	M	38.57778	55.4	44.6	6.605556
		SD	15.70181	9.561679	9.561679	8.760945
Annie(novice)	Writing(2nd) calligraphy	M	44.24444	43.65556	56.34444	6.438889
		SD	15.33813	13.98056	13.98056	8.621244
Enya(novice)	Writing calligraphy	M	59.83333	46.22222	53.77778	5.066667
		SD	15.21265	14.6846	14.6846	4.9586
Liu*(expert)	Memo test After game	M	45.8329	55.04961	44.95039	4.963446
		SD	10.89614	14.28946	14.28946	5.319009
Henry	Memo test after game	M	47.67281	57.2212	42.7788	5.182028
		SD	19.94099	14.55901	14.55901	6.390058
Enya(novice)	Memory testing	M	59.64177	41.79626	58.20374	6.290323

	after writing					
		SD	15.09197	13.0755	13.0755	6.249266
Henry*	Memory test After assembling	M	52.28488	54.11337	45.88663	5.409884
		SD	23.20461	16.59299	16.59299	6.371541
Liang(novice)	Playing computer gaming	M	42.43333	36.25	63.75	4.116667
		SD	13.04081	14.64496	14.64496	4.124498
Henry(expert)	Playing computer Game	M	61.92973	67.75135	32.24865	5.52973
		SD	12.65428	10.20352	10.20352	7.551305

3.3. What are the EEG causality or inter-correlation between various performance processes?

This study analyzed the casual correlation of the EEG between or among these tasks.Table 3.3.implied the longer a subject work,the higher attention one became. Continuous performance could enhance the attention of the subject. In addition, the meditation getting decreasing along the consequent task performance.Gradually, the pressure and fatigue increasing.

Table 3.3 The casual correlation of the EEG between or amongperformance tasks

Subject	Work performance	Stat.	Attention	Meditation	Pressure	Fatigue
Enya	Relax reading	M	54.07222	53.51111	46.48889	4.266667
		SD	16.77889	13.48928	13.48928	4.244747
	On writing	M	59.83333	46.22222	53.77778	5.066667
		SD	15.21265	14.6846	14.6846	4.9586
	On Memory testing	M	59.64177	41.79626	58.20374	6.290323
		SD	15.09197	13.0755	13.0755	6.249266
Henry*	Assembling toy robot	M	35.05667	52.33333	47.66667	6.263333
		SD	17.87699	16.57274	16.57274	7.458373
	Assembling	M	42.3	50.52	49.48	7.45

	robot again					
		SD	18.77223	16.62357	16.62357	8.896863
	Memory test After assembling	M	52.28488	54.11337	45.88663	5.409884
		SD	23.20461	16.59299	16.59299	6.371541

4. Conclusion and recommendation

We showed that the EEG data from a single electrode portable recording device can discriminate the mental state included attention, meditation, pressure and fatigue between expert-novice subjects and among various work performances reliably. Further, this studylogically identified the EEG could occurred causality and correlation during inter-tasks, which suggests that EEG can detect transient changes in visual task, like calligraphy, demands or audio specific attributes of relaxing music.

Much work remains. Next stage need to detect additional mental states. Also, it is necessary to improve classifier accuracy by collecting more data and by using more sophisticated training methods. Besides manipulating stimuli experimentally, we can label training data based on observable events in longitudinal data, such as improved performance.

Nevertheless, the statistically reliable relationship between reading difficulty and relatively impoverished EEG data illustrates its potential to detect mental states relevant to work performances, such as comprehension, engagement, and learning.

At the level of longitudinal data aggregated across learner, such information could help generate and test hypotheses about learning, elucidate the interplay among emotion, cognition, and learning, and identify specific teaching behaviors to be more effective. In regard to the level of dynamic data about an individual learner, the trainer could adapt to the student, either by responding immediately to a detected mental state, or by adapting more slowly to a cumulative learner model updated over time.

In conclusion, this pilot study gives hope that a school-feasible EEG device can capture expectably relevant information.

Acknowledgments.

This work was supported by, Minister of Education, Taiwan. Graduate school of Technological and Vocational Education, through the Grants of MOOCs to National Yulin University of Science and Technology (YunTech).

The opinions expressed are those of the authors and do not necessarily represent the views of the relevant Institutes. We thank the subjects, educators, and Sheng-Hong Technology Company who helped generate, collect, and offer training, for stimuli, and the reviewers for helpful comments.

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