Original Research Article

Constructing a Bilingual-Education Internship Management Platform to Explore Factors Influencing College Students' Internship Outcome

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Abstract

The gap between knowledge and application has long been a widely-discussed topic in Taiwan, and finding solutions thus remains critical in the academic field. With the educational experiment on the upswing, integrating internships into regular college courses has demonstrated itself to be an effective way of closing that gap. With 37 participants taking an internship course called Bilingual Education in a local university in Taiwan, this empirical study covered a 20-week class experiments under the monitoring of action research in 2017. Surveys are administered to elicit the information about the relationships between the implementation of the internship management platform and the students' reactions. The result shows that 3 out of the 5 paths calculated by the statistic tool are significant (*** 0.001). Students' self-concept toward the subject, the implementation of the internship management platform, and internship outcome positively affect each other, but students' English learning emotions, self-concept toward the subject, and internship outcome do not significantly affect each other. It suggests that the internship management platform plays an essential role in promoting students' self-concept toward the subject and internship outcome. This study provides a new perspective on how college internships can be used as highly credible indicators of student's learning outcome.
Keywords: Course design, internship management-platform, self-concept toward the subject, internship outcome, bilingual education, flipped learning.

INTRODUCTION

Purpose of the Study

The gap between knowledge and application has been a widely-discussed issue while the question of how to bridge the gap remains critical in the Taiwanese academic field. The trend is spreading [1-3], and the Ministry of Education in Taiwan noticed the importance of knowledge-application integration and is calling for support from schools, enterprises, and educators [4].

Internship experiences allow students to apply course knowledge and skills, and stimulate supplementary learning that further aids in students' career development [5, 6]. By the same token, for the department of Teaching Chinese as a Second Language (TCSL), where the author of this paper works, has set up off-campus internship as a graduation requirement. Since 2013, the author of this paper has blended the required internships with the course Bilingual Education taught in each of the fall semesters. A brief survey was conducted to the 186 students in 2013-2017. The 125 out of the 186 registered students claimed the course benefited them in terms of the organized schedules, the challenging BUT rewarding internship contents, and the step-by-step subject-matter learning.

Acting on the premise that student performances can be improved when the internship is part of the accredited process, the purpose of the study is to investigate the efficacy of the existing course model designed by the author of this study, and to examine the relations between a new course element and the students' reactions.

The new course element in this study is an internship management platform built up by the author. After teaching the course Bilingual Education for more than 8 years, the author modified the course into an online type in 2017. The purpose of constructing an online learning-management platform is to break the nature of the conventional face-to-face class-hours, and help students gain more experiential-learning in relation to course design, evaluation, and feedback.

Research Questions

This study examines if an internship management platform integrating the experiential learning can promote the knowledge-application integration for a group of humanity-majored students. In order to take a closer look, students' English

learning emotions, self-concept toward the subject, and internship outcome are set up as variables.

Thus the research questions are:
- Is there any mutual influence among the variables in the internship management platform?
- Which variable(s) significantly affect the students' self-concept toward the subject?
- Which variable(s) significantly affect the students' English learning-emotions?
- Which variable(s) significantly affect the students' internship outcome?

Theoretical Framework

This study examines if a flipped-learning approach can promote the knowledge-application integration mentioned in the introduction section. Two major studies were used to support the development of the theoretical framework of this study. The first study addresses the flipped learning, and the second study addresses the positive integration of internship into regular accredited courses. The former one has been widely-discussed its applications [7-9]. Moreover [10], proposed a FLIPPED model to provide a better common ground when talking about how to "flip" a class for university graduate students. Modified from the FLIPPED model [11, 12], who is the author of this paper, proposed a FLIPPED-ACTION model to identify this kind of course design can be well-applied in an under-graduate course. The latter one is also drawing attention, cases like the internship inventory proposed by [13] in Canada and the internship supervisions proposed by [6] in the U.S. provides a better common

ground when talking about how to instruct an internship course for university/college students. Inspired by the two studies addressing the learner body comprised of college students in western society, the author of this study developed an online learning platform to test if a similar internship-management schema can be applied in an under-graduate course in Taiwan.

METHODOLOGY
Course Design

The entire course design is geared to preparing the students to fulfill their internship task required by the hosting school. The researcher of this study applied a flipped-learning approach as a pedagogical framework to support the basis of constructivism for the students who take Bilingual Education, a class focusing on the introduction of Bilingual-Education theories, the development of the students' English and Chinese bilingual proficiency, and the internship-training in communicative compatence, and teaching-demonstration skills.

The reason for selecting the students enrolling the Bilingual-Education online internship course as the experiment sample is that as a subject, Bilingual Education follows unparalleled growth of language-learning industry worldwide, and it is still rapidly expanding and turning one of the prominent disciplines within applied linguistics [14-16]. Moreover, in terms of intergrading bilingual teaching with a flipped-learning approach, both [17-18] suggested that this kind of integration is very suitable in language education and for all learners.
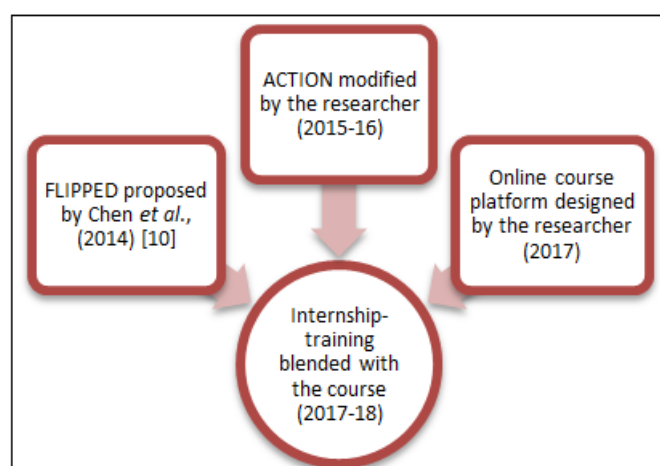

Fig-1: The development of the course design by the author

The FLIPPED model proposed by [10] is well-interpreted by pointing out the importance of the "E" --- engaging and effective learning experience (see Literature Review section), but the model and the whole experiment did not emphasize the essence of experience, which is "action"! The author of this paper works thus proposed the FLIPPED-ACTION model to

test if a flipped learning can articulate language education with students' internship better.

The FLIPPED-ACTION curriculum-design steps include the course framework, syllabus, weekly course instruction, utilization of apps on mobile devices, online assignments/activities supported by the

school learning management platform, and social-media/email communication, etc. Based on each of the steps, the researcher observed how the students react and what they had performed. In 2015-16, this curriculum-design was implemented as a blended-learning, which students checked the course materials via the learning management system (LMS in this case, MOODLE), and met up with the classmates and instructors once a week in a physical classroom for discussions and presentations. In 2017, the researcher modified the curriculum-design into an online-learning. This time everything is on MOODLE, Facebook, YouTube, and LINE, including the pre-recorded videos for course instruction and teaching materials, the related links as supplementary materials, the online forums, and the assigned apps such as Evernote, Google Survey, Power Director, and Video Show. These steps are particularly for the course elements of "flexible environment", so the students can have better flexibility to dedicate their time and energy to the internship. Figure-1 shows how the development evolved.

Research method

This is an empirical study covering a 20-week course experiment under the monitoring of action research in the fall semester, 2017. Surveys are administered to elicit the information about the relationships between the implementation of the FLIPPED-ACTION internship management platform and the students' reactions. The statistical software SPSS Version 18 was used to analyze which component(s) make a significant influence on students' self-concept toward the subject, English learning emotions, and internship outcome.

Referring to [19], the researcher, who is also the instructor of the course, conducted surveys to collect the quantitative and the qualitative data, and conducted action research to support or inspect the data. In this paper, only the quantitative data is discussed. The course participants and the research sample were 37 undergraduate students who took the course Bilingual Education of the Department of TCSL. All the enrolled students in the course were required to do their internships at the internship hosting school, where was a local elementary school located in New Taipei City, Taiwan. Based on the diverse backgrounds of the school kids, such as that of local-born, foreign-born, the New-Resident-born, and non-Taiwan-nationality, the interns' main jobs were to teach the 1st-to-6th graders either Chinese or English in the day shift. Moreover, since the elementary offers the New Residents in the neighborhood a regular weekly evening remedial-Chinese-class, some of the interns were assigned to teach Chinese in the evening class mixing with children, teenagers, and adults.

There are two questionnaires containing 79 questions to elicit information regarding "self concept toward the subject (S), English learning emotions (E),

internship management platform based on FLIPPED-ACTION model (P), and internship outcome (O)". Each capital letter abbreviated in the parentheses above represents each construct in the dada analysis. All the respondents were asked to answer the questions in a self-administered manner on a five-point Likert scale (5 is the highest and 1 is the lowest) with the range "strongly agree, agree, neutral, disagree, and strongly disagree." Five hypotheses labeled as "H1, H2, …" are proposed to verify the effectiveness of the course design, and they are:

- H1: The perception of S is expected to influence E positively.
- H2: The perception of S is expected to influence O positively.
- H3: The perception of S is expected to influence P positively.
- H4: The perception of E is expected to influence O positively.
- H5: The perception of P is expected to influence O positively.

LITERATURE REVIEW

Internship Development in Tertiary Education

The Ministry of Education (MOE) in Taiwan has been promoting the policy of blending internship into curriculum and practicum [4], and the course experiment mentioned in this study serves as a real case. Successful internship support educators to apply empirical findings on learning in their practice, and help students incorporate knowledge with application to link established concepts to new situations [20].

Along with the problem of an unmet talent demand, a disparity has emerged between knowledge acquired by students in their higher-education and applications required by the related industries [21, 1, 3]. The MOE of course also noticed the importance of knowledge-application integration, so it is calling for promotions from schools, enterprises, and educators [4].

Internship involving practical training or service-learning is the most practical way to practice pedagogy [22, 23]. More and more schools are normalizing it by setting it up as part of the professional training for college students [24, 25]. Furthermore, blogs, one of the favorite social-networking tools for young people, can enhance the quality of internship when using appropriately [26, 27]. They suggested that social media can flip then bridge classroom instruction with internship, and in the mean time provide a platform for students to build their global portfolios [28]. Showed that internship serves as a transition for students to apply what they learn from formal education to work places, and the implementation of internship is one of the best approaches of realizing the higher-education contexts.

Educational technology and its application on flipped learning and LMS

Educational technology is a must-discuss topic for those who look forward to teaching in next generation learning spaces [29]. It inspires us to rethink the teaching and learning identities in such a digital era [30]. The advantages of learning through educational technology, according to [31], are to promote the learning efficacy and to build up knowledge through online social-networking. Recent studies incorporating educational technology with flipped learning models are quite trendy [32]. Examined how technology improved college students' learning strategies in a foreign language flipped classroom [33]. Elaborated that technology delivered in a flipped classroom brought up issues at organizational and individual levels [34]. Examined how a mobile technology-enhanced flipped classroom can boost students' learning strategies [35]. Suggested that four pillars should be incorporated into instructors' practices to engage in the flipped learning. The four pillars are: **F**lexible environment, **L**earning culture, **I**ntentional content, and **P**rofessional educators. By adding three more components, which are: **P**rogressive networking learning activities, **E**ngaging and effective learning experiences, and **D**iversified and seamless learning platform [10], thus developed a FLIPPED framework to strength the original widely-promoted FLIP model. Their study showed that applying the three modified components in the teaching process did gain more positive feedback from graduate students, and inspired by them [11, 12], applied FLIPPED-ACTION model to a few class experiments and also got positive feedback from college students.

In a so-much-to-see and so-much-to-learn world, "learning" needs to be managed, thus learning management system (LMS) has been developing non-stop to keep up with the changing world [36]. The stated philosophy of many learning management systems is rooted with a social-constructionist approach to education, emphasizing that learners, and not just teachers, can contribute to the educational experience [37]. LMS accompanying with learning analytics will fundamentally transform teaching and learning. One of the popular LMS is MOODLE, and it is the LMS used in this study [38]. Been used in 230 countries over these 16 years and has generated more than 10 million courses around the world [37], it is a pretty reliable platform for conducting LMS-related study.

Factor analysis regarding students' self-concept, learning-emotions, and academic achievement

Research about all kinds of relations between students' learning behavior and learning outcome has been a popular research topic around the world. Internal factors to name just a few, such as age, gender, students' learning attitude, self-concept or self-efficacy toward the subject(s) and/or major they study at schools, learning-emotions, learning anxiety, and academic achievement, contribute to debates about learners' cognitive and affective issues [39, 40].

Applying Bronfenbrenner's ecological system approach [41], found out Taiwanese students' English language achievement was influenced more by parental involvement, teachers' beliefs/attitudes, and parent–teacher interaction, and less by mass media/the Internet. Similarly [42, 43] all mentioned there's a mismatch between the English-learning ideology constantly promoted in the Taiwanese society and the Taiwanese college students' English proficiency levels. Their studies implied the English-learning ideology existing in Taiwan generally is not a "close-enough" factor motivating the Taiwanese college students.

Learning emotions play an essential factor role affecting learning achievement [44, 45]. brought up the control-value theory the cognitive-motivational model to explain the impact of emotions on learning and achievement. In a broad sense, these emotions relate to attitude, self-concept, self-esteem, and learning strategies [46-48]. Similar studies were done to investigate how learning emotions affected college students when dealing with academic achievement, such as [49].

FINDINGS

Reliability

To verify the Reliability and Convergent Validity of the 79 close-ended items in the survey questionnaire, SPSS 18.0 was used as the analytical tool, and the verification of the measurement model was based on the following criteria: 1) For Reliability, the Cronbach's Alpha Value is better to be larger than 0.7. 2) For Construct Validity, all indicators loading need to be greater than 0.7., and the Average Variance Extracted (AVE) of construct is better to be greater than 0.5. 3) For Discrimination Validity: Construct's correlation should be lower than 0.85, and Cross Loading in group loading should be greater than between groups. Table-1 shows the correlations between constructs.

Table-1: Correlations between Contracts

		E	S	P	O
E	Pearson	1	.177	.079	.159
	Two-tailed test		.333	.668	.383
	Respondents	32	32	32	32
S	Pearson	.177	1	.612**	.366*
	Two-tailed	.333		.000	.039
	Respondents	32	32	32	32
P	Pearson	.079	.612**	1	.672**
	Two-tailed	.668	.000		.000
	Respondents	32	32	32	32
O	Pearson	.159	.366*	.672**	1
	Two-tailed	.383	.039	.000	
	Respondents	32	32	32	32

The Path Analysis of the Questionnaires

The path analysis was used to explore the possible causal relations among the constructs. Shown in Figure-2, the paths SO (H2), SP (H3), and PO (H5) calculated by the statistic tool are significant (* 0.05,** 0.01, *** 0.001), and the paths SE (H1) and EO (H4) are not significant. The structure model supports 3 out of the 5 hypotheses.

The 37 students are the survey respondents, and from the result of the 32 valid survey responses, the analysis reveals that in this course experiment first, the "self-concept toward the subject" positively correlates with "internship outcome (SO, $p < 0.453$). It indicates that the higher the self-concept toward the course subject regarding Bilingual Education, the better internship outcome can be. Second, the "self-concept toward the subject" positively correlates with "internship platform (SP, $p < 0.683$). It indicates that the higher the self-concept toward the course subject, the platform was used in a more efficient way. Third, the "internship platform" positively correlates with "internship outcome (PO, $p < 0.745$). It indicates that the platform intentionally providing a course overview, syllabus, and detailed information about how to complete each assignment in advance fortifies the internship outcome. In other words, the progressive activities designed by the instructor, such as a step-by-step guideline, the weekly pre-recorded materials and links, and the assigned small group collaboration activities, explain how solid the intentional content can be.

In this class experiment, the instructor applied educational technology (e-learning and m-learning), social media (Facebook, LINE, Evernote), diverse assessment (e.g. oral presentation, written test, discuss forum, and internship), and specific scoring standard to reach the learning objectives. In the questionnaire, the average Likert-point of the question "The teacher applied multi-faceted assessment to evaluate the students" (4.31), and "The teacher provided clear scoring standards for tests and assignments" (4.25), can be viewed as indicators of this positive result.

The positive path between SO also explained that the learner-center approach and a variety of progressive activities helped the students engage themselves in the learning process. This finding echoes with [13, 6]. Nevertheless, the engaging internship experiences among the students cannot be promoted well without a flexible learning environment. The positive correlation PO indicates that the flexible learning environment contributed by the online course makes a direct impact on the students' positive internship outcome. Thanks to the modern technology, all the participants in the class could exchange and update information, and upload/download documents via the learning management platform and the assigned social media anytime and anywhere. The flexibility in the learning environment no doubt promotes the participation and interaction among the teacher, the teaching assistant, and the students.

Finally, the "self-concept toward the subject" does not significantly correlates with the "English learning emotions" (SE, $p < 0.228$), and the "English learning emotions" does not significantly correlates with the "internship outcome" either (EO, $p < 0.153$). Though the finding is not positive, it echoes with [42] and [43], that English-learning ideology existing in Taiwan generally is not a "close-enough" factor motivating the Taiwanese college students.
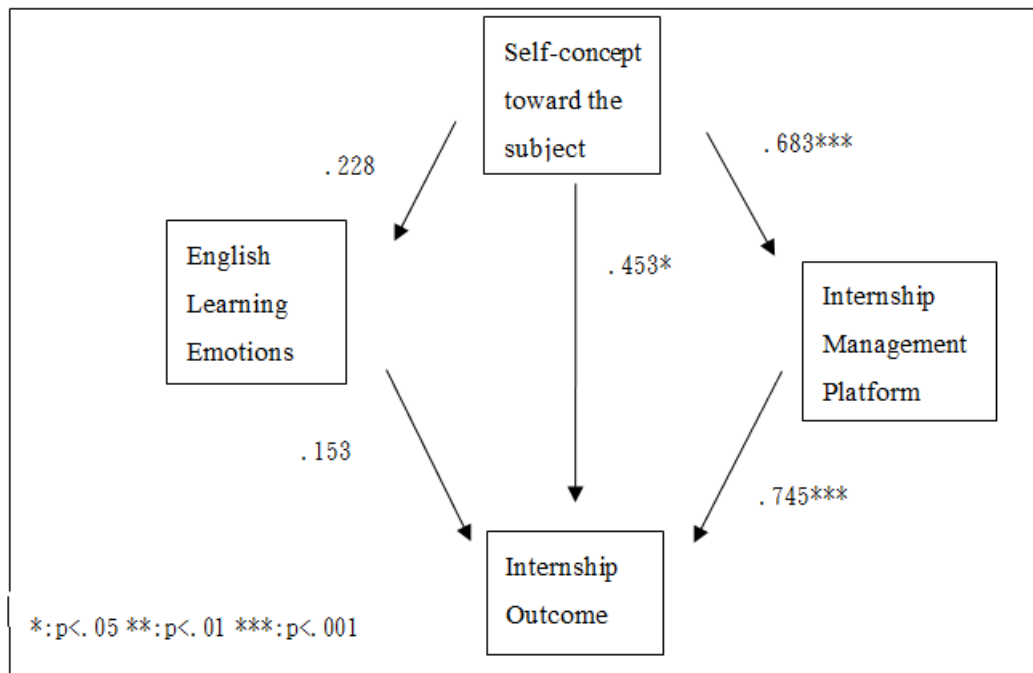
Fig-2: The structure model of the survey variables

DISCUSSIONS

Taking current higher-education learning patterns into account, the studies done by [13] in Canada and by [6] in the U.S. provides a better common ground when talking about how to instruct an internship course for university/college students. Those studies did not cover much about whether or not online learning platforms played important roles in terms of internship management. The author of this study added a new research element by constructing a new internship-management platform to test the same research schema also can be applied in an under-graduate course in Taiwan. The result shows that the internship-management platform supports the students' course learning and internship outcome.

For a department of Teaching Chinese as a Second Language, where on-site teaching demonstrations, presentation skills, and interpersonal skills are requirements for their internships, an internship program of this kind seems to have gone largely unexplored. Thus the author of this study applied her specialty in designing flipped-learning to transform the current internship course into more of an in-service training. The "real classrooms" were at those internship sites, and participating in the in-service training under a guidance of the online management platform made the internship more efficient.

As to the non-significant result of the variable "English learning emotions", it implies that the improvement of students' English proficiency levels need longer time and better planning. This shortcoming has larger and urgent implications that

must be addressed with an aggressive stance for what can be achieved at both institutional and instructional levels.

Limitations

Due to the small sample size of the survey, further investigations are expected to draw firmer conclusions. Moreover, what is presented in this paper is part of a mixed-method study combining both quantitative and qualitative data. The qualitative data making the whole interpretation better-rounded are not shown here. The results from the open-ended questions, interviews, and the instructor's observations will be discussed in another paper.

Recommendations

In this rapidly-changing world, a long-term and common challenge for the educational authorities, institutions of higher learning, and the industries is how to nurture undergraduates to meet the needs of their intended industries. Internship-related type of courses should involve internship-site supervisors in instructing the courses. Professionals from the related industries can be invited to jointly develop the curriculum for the courses, so university–industry alliance members and teachers together can prepare students in a more efficient way.

CONCLUSION

This study suggests that under solid course guidance, a student can develop a strong Bilingual-Education background training and really goes for a relevant teaching assignment. Furthermore, he/she will become part of the changing force of bilingual education in Taiwan, and naturally gives him/herself a

chance to develop the characteristics of a globally competent student mentioned by [50], such as having a diverse and knowledgeable worldview, comprehending international dimension of his/her major field of study, exhibiting cross-cultural sensitivity and adaptability, and carrying global competencies throughout life.

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