

How to Improve the English-Material-Reporting Method in Teaching Foreign Patent Laws?

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Abstract: In the past, when teaching foreign law in graduate school classes, teachers would assign foreign (English) legal material to students, asking them to read and prepare at home by themselves without any help and to then make a presentation in class. The teacher would comment and offer some supplementary explanation. Due to the lower birth rate in Taiwan, the knowledge and level of English language for graduate students are getting worse. If the teacher does not help students with some Chinese material for reference, then the students will feel frustrated in the process of preparation. After the class presentation, students will vehemently reject learning more about foreign law and related topics. This study uses the Action Research method. First, the researcher assigns cases and delivers English material about foreign patent law to students. Second, Chinese supporting materials are offered. When the students make a presentation in class, their performances are observed and recorded. At the end of this experiment, the students are asked whether the improved method of teaching foreign law raised their learning interests in foreign patent law. The students seem to be more interested in foreign patent law when using this method.

1 RESEARCH MOTIVES

Since the mid-1990s, Europe, USA, Japan and China, has been the main innovation centres for Industry 4.0 technologies. The patents relating Industry 4.0 technologies are focused on the manufacturing process, such as prediction of energy consumption via smart energy systems, improved product lifecycle management, including recycling, reducing greenhouse gas emissions.

Any manufacturers who want to expand its manufacturing capacities to other countries need to master related patents system in these countries. For a student who wants to be an international legal and patent professional personnel in the 21st century, he must have the passions and ability to learn the patent laws of other countries. Furthermore, for driving Industry 4.0 sustainably, research institutes and universities must provide adequate support for infrastructure development. Transfer of university created intellectual property such as patents to industries also enable sustainable Industry 4.0 implementation. These kinds of cooperation and technology transfer need the professional personnel

who specialized at laws (especially patent laws) of different countries.

However, against this background, due to the lower birth rate in Taiwan, the knowledge and level of English language for graduate students are getting worse. What the teaching method the teacher could use to improve the passions and ability of these students in learning other countries patent laws becomes critical issues.

1.1 Traditional Teaching of Foreign Law

Law schools in Taiwan focus on comparative studies, especially comparisons among German, Japanese, and American law. As the laws of these countries are frequently taken into consideration in the speculation, modification, and application of Taiwan's own laws, great emphasis is placed on analyzing them during instruction at the country's law schools.

For comparative teaching, instruction at private law schools runs something along the lines of (1) the teacher gives lectures (for the first one-third or first one-half of the semester); and (2) the students write a

report on designated foreign court's judgments or legislative materials (for the remaining two-thirds or second-half of the semester). The teacher prepares foreign court's judgments or materials in advance and asks the students to read them and make a presentation—the teacher then comments on the presentation or offers supplementary explanations.

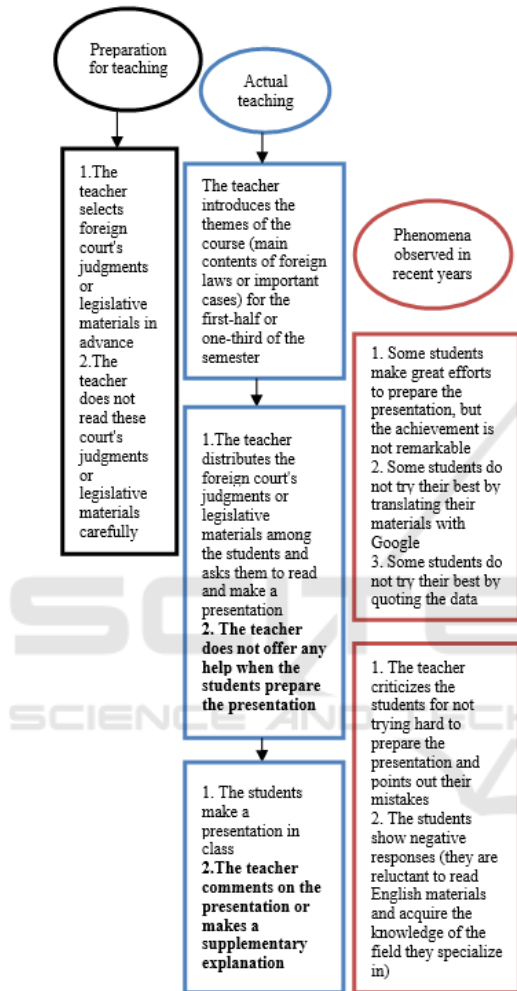


Figure 1: Traditional Teaching of Foreign Laws in Taiwan

1.2 The Students Become Less Academically Competent, Are Reluctant to Read English Materials and Refuse to Acquire the Knowledge of Relevant Fields Due to a Negative Feeling in Class

Because of the low birth rate in recent years in Taiwan, the number of Taiwanese students is gradually dropping. Taiwanese graduates have also become less academically competent and are

reluctant to read English materials. They put forth less effort on writing a report on books about foreign law. The researcher has found that some students use Google to translate their reports when they are asked to make a presentation on the designated English books in class. These reports are of low quality.

The most severe problem is that if the teacher does not offer assistance, the students find it extremely difficult to prepare the presentation and then have a negative feeling. If the teacher points out the mistakes in the presentation afterwards or criticizes the students for not trying their best, the students do not review what they have done, but instead, complain that they did not learn anything from the teacher. As a result, some students do not become more interested in the course or the field after finishing the course. Moreover, they become more reluctant to read books about foreign laws and try to evade teachers who specialize in foreign laws and their research methods by no longer taking their courses or not choosing them as a class instructor.

The low birth rate in Taiwan has led to lower quality and less foreign language proficiency of students. This trend will not change and will become increasingly severe. If the teacher (including the researcher) expects students to continue to show interest in foreign laws and law expertise, then he/she must change teaching methods and strategies. At the very least, he/she must ensure that the students will become interested in the course and foreign laws after teaching rather than becoming repulsive to them.

1.3 Apart from Assigning Foreign Books, the Teacher Should Offer Chinese Reference Materials

If a teacher continues to adopt the traditional teaching of foreign laws by assigning foreign books without offering supporting Chinese materials, then the students will feel seriously frustrated in their preparation of presentation and will not know where to find Chinese reference materials. They will have stronger negative feelings if they are criticized for their poor presentation. Consequently, they will not develop an interest in gaining such knowledge, but rather become strongly repulsive to it. In the future, they will try to avoid choosing similar courses or using foreign languages to finish theses, which will fail in transforming them into international professionals.

According to the researcher's experience, students are expected to read books about foreign laws. However, if they are provided with supporting Chinese materials, primarily ones are written or

collected by teachers, then their frustration in the preparation of their presentation will be reduced. Moreover, if the teacher decreases criticism and increases praise after the presentation, then the students will become more confident and interested in what is taught and even become eager to write a follow-up paper about relevant issues.

2 RESEARCH PURPOSE

2.1 How to Develop Students' Interest in the Knowledge of Foreign Laws in the Presentation

According to the above observation, the researcher believes that the traditional teaching of foreign law must be improved. For the teaching of U.S. patent laws, for instance, the teacher should not only assign the English version of the American Patent Law to underachievers but also volunteer to offer to support Chinese materials (written by others or by the teacher) to help the students prepare their presentation. In this way, the students would not feel too frustrated in the preparation or the process of presentation; instead, they can obtain a sense of achievement and become interested in relevant fields.

In this study, the researcher plans to assign designated English cases or theses about the patent laws of foreign countries (including the U.S. and some European countries) to students in the teaching of "Patent Laws" and "International Intellectual Property Right" in the Graduate School of Science and Technology Law at National Yunlin University of Science and Technology where the researcher works as a teacher. The students are required to make a presentation based on the designated materials. Moreover, the researcher will volunteer to provide the students with supporting Chinese materials that have been written or published and inform them of the sources of other supporting Chinese materials.

2.2 Observe the Performance and Reaction of the Students in the Preparation of Their Presentation and Their Attitude Afterwards

For the teaching aspect, the teacher will observe the students' preparation of their presentation and their performance and ask for their thoughts after the presentation, so as to see if such teaching has motivated them to become more interested in foreign law and become more willing to write theses about

relevant issues and even seek a job as a legal professional in a Taiwan-based foreign company like Southeast Asia Corporation.

3 LITERATURE REVIEW

3.1 Emphasis Is Placed on the Patent Laws of Taiwan, the U.S., and China in the Teaching of Intellectual Property Rights in Taiwan

Intellectual property rights institutes or scientific and technological law institutes have been established in university standard or a university of science and technology in Taiwan since 2004. According to the overall curricular planning, much focus is placed on the teaching and research of the patent laws of Taiwan and the U.S. (Chang and Yang, 2016).

As Taiwanese companies of science and technology often apply for patents in the U.S. or sometimes are accused of patent infringement by big companies in the U.S., much attention is paid to the teaching and research of American patent laws in the education on scientific and technological laws in Taiwan. In addition, many research achievements have been attained, such as *Transnational Patent Infringement Litigation (Volume 2: American Patent Litigation)* compiled by the Intellectual Property Institute of National Chengchi University (Chen, Chou, Wang, and Teng, 2008), *American Patent Law and Important Cases* by Chih-Chieh Yang, Graduate School of Science and Technology Law at National Yunlin University of Science and Technology (Yang ed., 2015), and *The Scientific and Technological Industries in Taiwan: A Review on American Patent Litigations over the Past 30 Years* by several teachers from School of Law, National Chiao Tung University (Liu and Chen eds., 2017). The publication of these textbooks demonstrates that emphasis was placed on the education of American patent laws in the teaching of foreign law in the Taiwanese education system on scientific and technological patent laws due to the influence of scientific and technological entrepreneurs.

Over the past two decades, many Taiwanese entrepreneurs have established manufacturing factories in Mainland China, but since 2005, Mainland China has become increasingly international in terms of patent laws, and so these Taiwanese entrepreneurs have also patented their products there. This has contributed to the increasing

number of patent applications and litigation cases there. The development of law in Taiwan started earlier than that in Mainland China, and the wording and system of patent laws in Mainland China were influenced by Taiwanese laws; therefore, it is believed that because the patent laws in Taiwan are well taught, the students will be able to study the patent laws of Mainland China all by themselves. Thus, no particular attention has been paid to the research and teaching of the patent laws of Mainland China, and as a result textbooks about the patent laws of Mainland China are small in number in Taiwan. Despite this, some research and teaching achievements about the patent laws of Mainland China have been published, including *Transnational Patent Infringement Litigation (Volume 3: Chinese Patent Litigation)* by the Graduate Institute of Technology & Innovation Management, National Chengchi University (Chen, Chou, Wang, and Teng, 2008). The number is still much smaller than that of American patent laws.

As the resources about American patent laws have become increasingly abundant, it has now easier for the students of the institute to collect relevant Chinese materials when they are required to make a presentation about American patent court's judgments or related legal materials. The teacher sometimes even provides them with supporting Chinese materials to help them with the presentation.

3.2 Curricular Planning Is Underlined in Education for Intellectual Property Talents

As for the education of patents and intellectual property talents in Taiwan, the Ministry of Education has verified the establishment of four scientific and technological law departments since 2004. In addition, the Ministry of Economic Affairs founded the Intellectual Property Training Academy in 2005. However, over 2004-2015 when the education for patent talents was initiated and developed, there were no academic papers about the education for intellectual property or patent talents in Taiwan.

It was not until 2015 that the Technological and Vocational Division of the Ministry of Education decided to make an overall evaluation of the work in this aspect over the past ten years. It authorized the Graduate School of Science and Technology Law at National Yunlin University of Science and Technology to conduct a thorough study of the curricular designs and plans of Taiwanese educational institutions of intellectual property and patents, including the education for patent talents in

the technological and vocational system. The study was supported by the research program of "Intellectual Property and Patent Management Education Training Curriculum (Forum) of Technological and Vocational Schools" co-chaired by the applicant, Chih-Chieh Yang (Chang and Yang, 2016).

With the support of the research program, an overall evaluation of the curricular planning and faculties of the intellectual property department, the patent department, and the science and technology department of four universities of science and technology (National Yunlin University of Science and Technology, National Kaohsiung University of Science and Technology (First Campus), National Taiwan University of Science and Technology, and National Taipei University of Technology) was conducted. According to the findings of the evaluation, the emphasis is placed on Taiwanese patent laws and regulations, patent application review practices, and patent infringement settlements in the courses for patent students. Particular attention should be paid to education on the patent laws of European countries, the U.S., and Japan. Nearly all the universities offer courses about the patent laws of these three, but the courses about American patent laws account for the largest proportion.

The research program called on many scholars to explore and compare foreign teaching and training of patent students, but as the focus was put on the patent markets in Europe, the U.S., and Japan, the research program merely delved into the training of patent students in these countries. Relevant academic materials include the "Qualification Limitation Examination for American Patent Practitioners" by Meng-che Tien (Chang and Yang, 2016; 128-140), the "Patent Talent Examination and Intellectual Property Education in Japan" co-authored by Chih-Chieh Yang and Yasuto Shirae (Yang and Shirae, 2016: 27-57), and the "Current Training of E.U. Patent Agents and Patent Legal Workers and Norms on Transnational Practice" by Li-Chun Chen (Chen, 2015: 115-130).

4 RESEARCH METHOD

4.1 Description of the Research

This program reviews the researcher's teaching in two courses in the institute, including "Patent Law" in the autumn semester of 2018 and "International Intellectual Property Right" in the spring semester of

2019. These two courses will be taken for the research contrast.

In the course of "Patent Law" in the autumn semester of 2018, the teacher offered the English cases of foreign patent laws and the Chinese introductory materials that are written in advance to help the students with the presentation. The students were informed of the sources of other supporting Chinese materials. The students' academic performance in the preparation and their thoughts and attitudes in the presentation were also observed.

In the course of "International Intellectual Property Rights" in the spring semester of 2019, the teacher did not volunteer to help the students collect the English theses about foreign patent laws, but did lead them to seek out academic materials suitable for them. After the students obtained relevant materials, the teacher did not provide the Chinese introductory materials or the sources of these materials. The students' performance in the preparation and the presentation were then observed.

4.2 Research Procedure

4.2.1 Research Hypotheses

According to the researcher's experience in teaching, the applicant wants to add the knowledge of many European and American laws into the courses and ask students to read designated English materials (English theses or court's cases) to make a presentation, and the teacher is expected to make comments on the presentation. However, as the students from the universities of science and technology have become less academically competent in a second language like English, they will feel frustrated in the study if they are asked to read English materials without any supporting Chinese materials. As a result, they will be reluctant to prepare their presentation. Moreover, they will have negative feelings after the teacher makes comments on their presentation. This will stop them from comprehending the subject further or even becoming interested in foreign law.

This study, therefore, assumes that as long as the teacher offers more supporting Chinese materials, the students will not have negative feelings in the preparation of their presence even if they are asked to make a presentation about the cases (in English) of American or Southeastern Asian patent laws. They will then become interested in these laws.

4.2.2 Research Structure

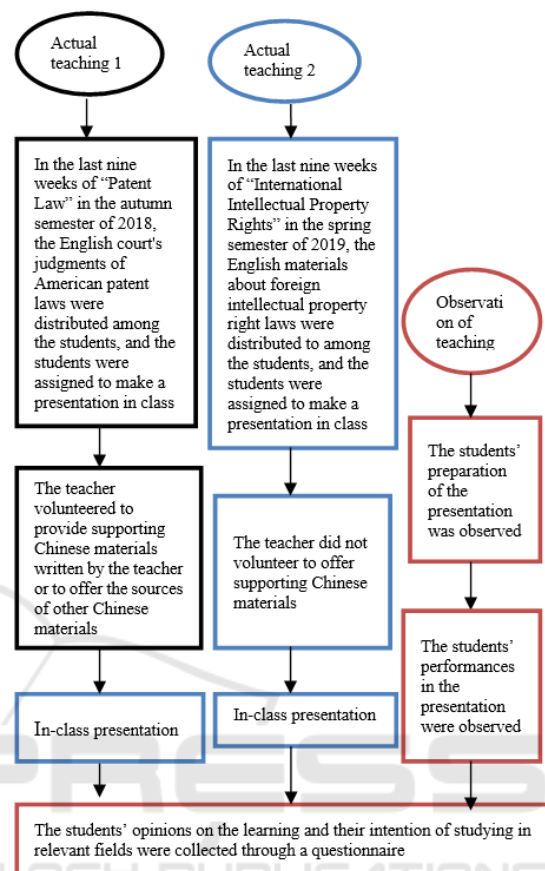


Figure 2: Research Structure.

4.2.3 Research Methods and Tools

Two research methods are adopted in this research program, including (1) participants' observations and (2) questionnaires.

Participants' Observations. Participants' observations are employed in this study. The researcher reviews the teaching designs and methods, the students' immediate feedback in teaching, and on-site observations.

Questionnaire. After the in-class presentations, the questionnaires are distributed among the students. The research also collects the students' feedback through after-class questionnaires or their opinions on teaching to find out if the teaching methods are valid and in order to make the necessary improvement.

5 RESEARCH RESULTS

5.1 Patent Law

In the course of "Patent Law" in the autumn semester of 2018, the teacher offered the English court's judgments of foreign patent laws and the Chinese introductory materials that are written in advance to help the students with their presentation. The students were informed of the sources of other supporting Chinese materials. The students' academic performance in the preparation and their thoughts and attitudes in the presentation were observed.

Of the 13 students who took the course, three had low English proficiency and thus chose to make a presentation about the cases of Chinese patent laws, while the remaining ten wanted to take the challenge of learning English judgments of foreign countries and thus chose English cases.

As for the supporting Chinese materials for the presentation, all of the ten students who chose English court's judgments agreed that the supporting Chinese materials were constructive for them (eight for "Strongly agree" and two for "Agree"). All of them (seven for "Strongly agree" and three for "Agree") said that they collected other supporting Chinese materials online and knew that these materials would help them understand the importance of English court's judgments.

As for whether the students become more interested in the study of patent laws after the course, nine of the ten students who made an English presentation showed interest in patent laws. Despite that three students did not make an English presentation, all of the 13 students became interested in intellectual property laws after the course (four for "Strongly agree" and nine for "Agree"), and 11 of them were willing to read more English court's judgments and materials (four for "Strongly agree" and seven for "Agree") while the remaining two said they were reluctant to read more English materials.

5.2 International Intellectual Property Right

In the course of "International Intellectual Property Rights" in the spring semester of 2019, the teacher did not volunteer to help the students collect the English theses about foreign patent laws, but did lead them to seek educational materials suitable for them. After the students obtained relevant materials, the teacher did not provide the Chinese introductory materials or the sources of these materials. The

students' performances in their preparation and presentation were observed.

The number of students who took the course and filled out the questionnaire was 11. All of them made a presentation based on the English theses about foreign laws concerning intellectual property rights. The presentation was made either in pairs or individually.

As for the background of the students, only five of them admitted that it was hard for them to read English materials, while the remaining six said it was not difficult for them. Eight of them acknowledged that they utilized Google to facilitate their translation of the English materials. This indicates that the English proficiency of the students was not high.

As for the preparation of the presentation, eight of the students knew that they needed to collect supporting Chinese materials online, because they were not offered any Chinese materials by the teacher (two for "Strongly agree" and six for "Agree"), and seven of them hoped that the teacher would provide Chinese materials (two for "Strongly agree" and five for "Agree"). However, they did not show much passion for learning, and none of them turned to the teacher for help. Nine of them agreed that their presentation would have been better if the teacher had offered to support Chinese materials (three for "Strongly agree" and six for "Agree"). Ten of them found excitement in the preparation, but three felt frustrated.

As for whether the students became more interested in the study of intellectual property rights after the course, eleven students said that they did become interested in the topic (two for "Strongly agree" and nine for "Agree"). The so-called intellectual property rights were not international intellectual property rights, which involve foreign countries and the English language. Only eight of the students showed interest in intellectual property rights (three for "Strongly agree" and five for "Agree"). Three of them might not be interested in it. When it came to the intention of reading more English court's judgments or materials, nine of them said that they were willing to read more (two for "Strongly agree" and seven for "Agree").

5.3 Comparative Analysis

In the comparison of the two courses, the teacher volunteered to offer to support Chinese materials and the students knew that they would need to seek more Chinese materials all by themselves to expand their knowledge and to understand the English court's judgments for their presentation in the course of

"Patent Law". However, the teacher did not offer any supporting Chinese materials, and many of the students turned to Google for help and did not search for relevant Chinese materials by themselves in the course of "International Intellectual Property Rights". Despite that they expected help from the teacher, none of them turned to the teacher for help.

In terms of passion for learning after the course, most of the students who took the two courses said that they became interested in domestic and international patent laws and intellectual property rights. It seems that there was no difference between the two kinds of teaching. To see the detail, in the course of "Patent Law", four of the students strongly agreed that they had a passion for foreign patent laws"; comparatively, in the course of "International Intellectual Property Rights", only two students said that they would show a keen interest in foreign international intellectual property rights or English materials. In other words, different teaching methods influenced the students' enthusiasm for studying foreign patent laws.

6 CONCLUSIONS

According to the above results, the original assumption of this study is "The courses must not be taught in English and must be supported with corresponding Chinese textbooks to prevent the students from having any negative feeling and arouse their interest in foreign knowledge." After the implementation of the different types of teaching in the two courses, this assumption was supported. Due to low English proficiency and inadequate expertise, most of the students found it hard to read the designated materials about foreign patent laws or intellectual property rights and expected help from the teacher, primarily through supporting Chinese materials. Although the students were aware of the importance of supporting Chinese materials, they showed a passive attitude. In other words, when the teacher did not volunteer to provide supporting Chinese materials, they did not turn to the teacher for help and instead turned to Google for help in translation.

As for the enhancement of passion for learning, different kinds of teaching were adopted in these two courses. The after-course questionnaire showed that most of the students became interested in patent laws or intellectual property rights after the courses, but only a few of them showed keen interest. As the teacher offered help in the course of "Patent Law", four of the students showed keen interest. In contrast,

only two of the students showed a strong interest in the course of "International Intellectual Property Rights", where the teacher did not offer help.

It can, therefore, be concluded that if the teacher wants to arouse students' interest in the study of foreign patent laws or intellectual property rights, then the teacher should offer foreign materials and supporting Chinese materials and other kinds of help so that students would be able to gain a sense of achievement in the preparation of their presentation rather than having any negative feeling. Only in this way will students develop a more substantial interest in learning after the course ends.

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