

Chapter #1

THE TEACHING EXCELLENCE PROJECT: A FRAMEWORK FOR LEADING INTEGRATIVE CHANGE AND QUALITY LEARNING IN TECHNOLOGICAL AND VOCATIONAL EDUCATION

Hua Hui Tseng

Music Department, Tainan University of Technology, Taiwan

ABSTRACT

The use of the Teaching Excellence framework developed in the UK Government Green Paper (2015) and the Taiwan Stage Two Teaching Excellence Project (TEP) implemented at the Tainan University of Technology (TUT), Taiwan, between 2009 to 2016 is documented in this narrative study. With the goal of improving domestic universities' teaching systems, the TEP framework includes effective teaching, support, assessment, and learning opportunities that lead to students becoming successful and responsible learners. Improvements in teaching quality were identified and implemented at the TUT based on this framework. The areas and practices involved using the framework to create university-wide commitment to comprehensive curriculum development. A general overview of the framework for leading integrative change is included and an explanation of how the dual objectives of the framework can be used as an index to measure the progress of change discussed. The case of the TUT provides insight into the implications of implementing the framework, one of which is excitement about teaching issues. The findings demonstrate that success involves creating a sustainable future that is realized by raising the quality of education, research, and development that supports the vision of collegial governance and academic freedom.

Keywords: teaching excellence framework, integrative change, quality learning.

1. INTRODUCTION

The TEP framework developed in the UK Government Green Paper (2015; Biggs, 1993; Gibbs, 2010; Graham, 2016; Havergal, 2016) and the Taiwan Stage Two Teaching Excellence Project (TEP; Ministry of Education, Taiwan, 2010) includes three dimensions of quality within education: presage, process, and product, which are better known as the 3Ps. The framework is used to gain a more accurate picture of an institution's educational provision. Implementation of the framework over a decade has resulted in the emergence of higher education models of change that have influenced educational organizations in the 21st century. However, researchers in the field still argue that the development of the 3Ps has not been tested over time and that the framework is still a loosely coupled structure (Dearing & Great Britain National Committee of Inquiry into Higher Education, 1997; Graham, 2016).

The 3P model, developed in 1993 by Harvey and Green, was applied at the Tainan University of Technology (TUT) as the TEP theoretical framework. Implementation of the model was expected to increase participants' enthusiasm and willingness to commit to change. The purpose of the exercise was to understand the learning process from the point of view of both students and faculty with respect to the dual objectives for implementing

the TEP framework with respect students and faculty to internal (university decision-making) and external (university mission) audiences. The TEP framework outlined in Biggs' (1993) 3P model was used to explore the learning process, build support and individual commitment, and monitor organizational results.

While Hashimshony and Haina (2006) observe that change at universities refers to reevaluating each activity in response to both the changing demands that have been placed upon universities and the emerging challenges these institutions face, in other words, 'value for money' and 'what employers want' (Berger & Wild, 2016, p. 9), it is critical that change begin within the context of the TEP. Within the last decade, universities have been operating in an environment of increased competitiveness and change. Measuring teaching excellence depends on indirect measures, such as rates of progression and attrition, student feedback and post-graduation employment rates; the precise data sets are outlined in the government's consultation document and formed the framework's quantitative element (Graham, 2016). According to Berger and Wild (2016), true change in education institutions occurs with internal reward and recognition processes that bring institutional missions relating to research and education closer together.

Technology and some of the associated guesswork and anxiety have quickly pushed Taiwan into the global arena (Korka, 2011). As leaders of education institutions encounter an array of new questions and challenges, the leaders of the TUT have sometimes wondered what their efforts to prepare and adapt to change will bring. In order to create something of value, it is necessary to have a more rounded concept of education and to measure learning and teaching effectively and with imagination. This implies implementing unique inter-relationships between education, research, business, and professions within institutions for the 'value added' aspect of university's individual missions. The 3P model of the learning process theory constitutes the approach leaders of the TUT took with respect to its educational change processes.

In this paper about vocational education, the focus is the integration challenges faced by the TUT faculties and students. An overview of the TUT's vocational education and the factors affecting its development as well as the solutions used to stimulate excellence for the integrative mechanisms and initiatives are described. Thereafter, the process implemented at the TUT for influencing change in vocational education is discussed. Finally, the components (presage, processes, and products) that comprise the TUT's vocational education and the resources for development are outlined.

2. CONCEPTUALIZING THE CHANGE PROCESS

The TEP framework, which includes effective teaching, support, assessment, and learning opportunities, is designed to monitor and enhance the outputs of the TEP process, which includes progression, employability, and student satisfaction. That process relates to the dimensions of quality within education (Biggs, 1993; Gibbs, 2010). Each dimension represents a stage in the process of an organization moving from the status quo to a context characterized by peer evaluation, self-assessment, and professional activities for academics who are committed to change. Vocational education institutions offer education for specialties in the workplace (Lankard, 1996). Lankard (1996) discusses how the learning process seems to result from a change in students' perceptions of reality as related to the restructuring of courses and course requirements. The learning process is concerned with the way education systems engage resources and the quality of the students or academic staff (presage) that stimulate emotional engagement through appropriate learning contexts (process) and facilitate the emotional interfacing with outcomes (product) that are modified to help "conceptualize the powerful interrelationship between emotion, creativity and learning" (Spendlove, 2007, p. 155).

In this paper, a three stage framework for teaching that gives explicit guidance to teachers and simplifies the teaching process for students is reviewed. The first stage involves *adequate quality*, which is achieved through assembling processes and outcomes. The second stage is to create a ‘sense of community,’ which facilitates the cross-fertilization of ideas amongst the student body. The final stage is institutional missions, where the collective mindset is changed and new recognition processes and systems are put in place to produce lasting change for the university.

It has become increasingly apparent that the integration of academic and vocational programs have a substantial impact on students’ learning processes (Lankard, 1996) and learning styles. Therefore, the learning process must be differentiated. In this regard, the TUT reviewed the Teaching Excellence framework’s 3P model developed in the UK Government Green Paper (2015) and developed the Taiwan Stage Two Teaching Excellence Project in order to identify three learning processes that support students in their learning, namely, passionate champions, appropriate learning contexts, and interfacing issues.

2.1. Internal and external audiences (University decision-making and mission)

Change processes are unique and depend on the organizational life cycle of a college or university (Kezar, 2001, p. 92); Jarvis (2000) defined the UK comprehensive spending review (CSR) as the following:

The recent CSR highlights the need for universities to be ‘more responsive to the demands of [the] market, recognise the need to change their ways... and become more efficient.’ (p. 52).

The study of dimensions of quality (presage, processes, and products) suggests that learning occurs as universities change their behavior in response to prior performance outcomes (Bingham & Davis, 2012). The dimensions illustrate how a principal perceives, processes, interprets, and reviews information and is focused on education professionals’ misunderstandings of change approaches. The 3P model is integrated into the process of learning so that the solutions exhibit quality management in a way to which members of the institutions can relate. Kezar (2001) emphasizes that change creates stress for education professionals because the institutional structures and cultures they depend upon change with the efforts of the institutional directors. It is essential that those leading institutional missions communicate with their internal and external audiences directly and bring them on board to prevent misunderstandings.

2.2. Student factors and teaching context (presage)

In the presage stage, the 3P model for contemporary educational organizations and learning contexts is described; a specific focus is how presage (student factors and the teaching context), as well as process (approaches to learning) affect the final product (learning outcomes). In the case of the TUT, the intention was to show that understanding two presage factors, namely, students’ orientations to learning (measured using the Study Processes Questionnaire [SPQ]) and students’ levels of cognitive engagement in a comprehension task (measured using SOLO) with a product factor (subsequent academic performance in two first-year music units measured using final grades) illustrate an understanding of the context and its processes. The SPQ measures general orientations to learning or more specific approaches to learning in given learning contexts or across learning tasks (Ramsden, 2003). SOLO taxonomy (Biggs & Collis, 1982) provide a systematic way of describing how a learner’s performance grows in complexity when mastering academic tasks.

The TUT is a technology university. Technical and vocational education should take into account both the study and career needs of students (Ministry of Education, Taiwan, 2013). The presage step at the TUT was used to evaluate the quality of the students and academic staff to explain how the choice of teaching strategy, teaching intention, and conceptions of teaching and learning enable or constrain the form education takes within an institution.

2.3. Satisfying learning experience (process)

In the process stage, the 3P model for contemporary educational institutions and learning contexts is described; a specific focus is the model's appropriate use in education. In the case of the TUT, the intention was to show that understanding the context and its processes are important and then illustrate how understanding the context and its processes could be accommodated.

At the TUT, the change began with a few key people who were members of the Teaching Excellence Committee (TEC) led by the principal. The TEC members supported and promoted faculty excellence and faculty development in the areas of teaching by selecting faculty for scholarly and/or creative pursuits' awards. The TEC members sponsored a department-wide survey of the TUT's 335-strong workforce. The results of the survey not only helped faculty define the problem areas but also provided a way for individual faculty members to participate.

The members of the Integrative Committee, as internal and external audiences, moved outward and spread the message throughout the school. The Integrative Committee members began weekly briefings that involved the principal's Chief of Staff and the Commissioner of the Department of Administrative and Financial Services. An overview of the 3P model for leading integration was provided to the principal's team. In addition, members of the team were asked for their support, which was forthcoming. Senior management teams of all the academic departments, the TUT's human resources managers, and the alumni of the TUT Alumni Association were briefed about a professional development program for senior managers.

2.4. Interfacing with outcomes (product)

The goal of the 3P model is to guide implementation of a system. With the 3P components of the integrative education model, change is focused on the process of learning or giving students tools with which they can become successful and responsible learners. Jacobs (1989) and Shoemakers' (1989) researches involved the implementation of curriculum integration and supported the efficacy of the 3P model. System changes, including implementing an on-going evaluation plan, were envisioned by the UK Government Green Paper (2015) and the TEP framework (Berger & Wild, 2016).

At the TUT, a Creating Integrative Change Template (CICT) helped with applying the relevant parts of the 3P model to the Music Department at the TUT that was aimed toward building new instructional approaches to reach every student. The 3P model that applied the TEP framework's dual objectives were included in the CICT template and have been critical to building integrative change in the Music Department's system. Implementation created a department-wide commitment to using flexible curricula to engage all students.

Form 1A (see Table 1), a model template, lists the two objectives of the 3P model with examples of implementation approaches that have evolved in teaching departments. Form 1B (see Table 2), with examples from the 3P model, offers a more comprehensive set of implementation strategies that include the two main objectives of the model for the existence, evolution, and effect of learning sequences. In the process, some instructional interventions were developed based on the CICT template, for example, school- and job-oriented learning within curriculum development processes.

Table 1.
Form 1A: Creating integrative change: Examples from the 3P model.

Form 1A. Creating an Integrative Change Model Template: 3P Model Objectives	3P Implementation Examples
1. Internal audiences (university decision-making)	Advocates present Practical Design for Learning to principals, school boards, and administrators; grant writing involving administration; reallocation of funds from various sources to make Practical Design for Learning work for all students.
2. External audiences (university mission)	Teaching aligned to the concepts of ‘value for money’ and ‘what employers want’, provide a holistic approach.

Table 2.
Form 1B: Creating integrative change: Examples from the 3P model.

<p>Form 1B. Creating Integrative Change: Examples from the 3P Model</p> <p>Internal audiences</p> <ul style="list-style-type: none"> ▪ Advocates present to administrators and school board. ▪ Some administrators/principals spearhead work. ▪ Administrators support grant writing. ▪ Administrators support flexible fund allocation. ▪ Commitment to Practical Design for Learning at superintendent level. 	<p>External audiences</p> <ul style="list-style-type: none"> ▪ Lessons that need to be borne in mind for the current consultation exercise. ▪ Outline past experiences of quality assurance. ▪ Group conceptualization of quality are differentiated into five categories: exception, perfection, fitness for purpose, value for money, and as transformative.
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In Form 1C (see Table 3), the Learning Template, structured support for selecting those parts of the 3P model that might apply in other departments at the TUT is offered and new components as well as specific implementation strategies added, for example, scenario requirements based on both project and process characteristics.

Table 3.
Form 1C: Creating integrative change learning template.

3P/New model objective	Implementation Examples
Internal audiences	Enable or constrain the research, consultancy and knowledge transfer of activities within an institution (PRESAGE) Develop and evaluate a department-based framework for managing quality and standards at the undergraduate level (PROCESS)
External audiences	Planned and deliberate strategies and processes for academic management at the undergraduate level and graduate schools (PRODUCTS)

3. THE TEP FRAMEWORK: IMPLEMENTATION TREND

According to the three-year learning plan for the TUT's TEP, it was deemed necessary to initiate a Teaching Excellence Center. The Teaching Excellence Center, established in 2001, has as one of its goals that of demonstrating students' potential and giving recognition to faculty and students for the comprehensive and practical nature of curriculum in the vocational education system. Student learning is the goal of the Center. The Center is open to all fulltime faculty who teach at the TUT. An ongoing evaluation plan for faculty was designed.

The Center was created to foster teaching and learning of the highest quality at the TUT. Vocational training systems are based on both the study and career needs for students in industry and schools and include the spirit of being practical and useful, as suggested by the Ministry of Education, Taiwan (2013). Whether knowledge-based innovations and research can be advanced further hinges on developments in higher education. Higher education is already a primary arena for competition among many countries with respect to knowledge creation and human resource development. Not only does higher education play a decisive role in national development, but also, higher education is a vital source from which enhancements in national competitiveness spring.

From the TUT's exploration of cooperative learning structures and processes, faculty and students recognized the existence of learning sequences. Moreover, the fast-changing social landscape, political liberalization and democratization, rapid economic growth, industrial restructuring, and increasingly pluralistic social values evident over the last few years have brought new challenges for higher education in terms of its traditional functions and stewardship role. Staff at the Center constantly use the Center as a value platform to help guide the TUT's development. Those changes in education most likely to affect the TEC's ability to achieve its two goals are the following: (a) Public recognition of faculty members for their dedication, creativity, honed insights, and skills; and (b) faculty members' contributions to the realization of a high-quality learning environment for TUT students.

In the future, several key external factors in the Center's environment will need to be addressed. Due to the rapid change in many sectors of education, it is critical the TEC's implementation process be a dynamic one. The Center involves (a) supporting faculty efforts to improve teaching by creating learning environments in which the TUT's diverse student body achieves maximal learning potential, and (b) promoting a culture throughout the university that values and rewards effective teaching and respects and supports individual differences among learners.

4. CONCLUSION

In education, the learning process may be viewed as involving technology infrastructure, administrative support, teacher training, collaborative curriculum planning, creative funding, administrative support, redefinition of roles, and parent/community involvement. In this paper, a narrative case study was used to describe the implementation of the TEP framework for integrative change at the TUT. The framework appears to be an all-win program for schools, students, and enterprises (Berger & Wild, 2016; Ministry of Education, Taiwan, 2010). The rationale for implementing the framework was based on Berger and Wild's (2016) assertion that educational policy and practice should be integrated within a comprehensive change process that addresses what the product is or should be, what the process should entail, and what people should learn. In the TEP framework, technology infrastructure, administrative support, teacher training, redefinition of roles, collaborative curriculum planning, parent/community involvement, and creative funding are the seven components supporting and regulating learning processes.

The TEP framework, which strengthens learners' links within chosen professions, when included in the cycles of curriculum planning and realization, becomes an integral part of learning process. It constitutes preconditions for the development of curriculum and vocational education quality in vocational school and colleges.

It is critical that leaders create learning and teaching strategies that add to their universities' future viability and the well-being of people and communities. In order to face the challenges that accompany social change, Taiwan's Ministry of Education (2013) is actively working to establish an educational foundation to support the concept of a "knowledge-based economy" (p. 1). In 2013, a sub-project entitled the Promotion of the Innovative Education Industry was implemented. Ultimately, continued engagement with the learning process of teaching and the learning process in vocational education and training will serve to enrich the learning and teaching experience for all those involved in educational programs.

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AUTHOR INFORMATION

Full name: Hua-Hui Tseng

Institutional affiliation: Tainan University of Technology, Taiwan

Institutional address: No. 529, Zhongzheng Rd., Yongkang District, Tainan City 71002, Taiwan.

Short biographical sketch: Hua-Hui Tseng is a Professor of the Graduate School of Music and Music Department at the Tainan University of Technology, Taiwan (TUT). She was previously Director of the Library of the TUT (August 2007-July 2013) and Dean of the College of Fine and

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Applied Arts of the TUT (August 2006-July 2007). Her passion is piano music research with a keen interest in 20th century piano music. She is from Kaohsiung, Taiwan. Her Master's Degree in Piano Performance was completed at the University of Portland, Oregon, in 1982. Her Doctoral degree in Educational Leadership was completed at University of Phoenix, Arizona, in November 2008.

The Educational Ministry of Taiwan has honored Prof. Tseng for her accomplishments in the production of multi-media educational materials in years 1998 (Bronze Medal) and 2000 (Gold Medal). In 2006, Prof. Tseng was invited to join the Higher Education Evaluation and Accreditation Council of Taiwan as an evaluator until 2013. In December 2011, the Ministry of Education honored Tseng's accomplishments with respect to applying a life-long learning model. Tseng's recent activities have expanded beyond music education to social welfare. She currently serves on the board of Young Women's Christian Association (YWCA) of Kao-Hsiung as President.