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An extensive model for implementing APEL and quality assurance in TVET teacher training system for South East Asia

Abstract

Accreditation of Prior Experiential Learning (APEL) is a relatively new concept in the Malaysian Higher Education system (HEIs) and in South East Asia in general, although widely known and practiced in other countries such as South Africa, Australia and America. Implementing APEL in higher education system could help prepare human capital better particularly for the preparation of teachers in the technical and vocational sector. The paper is based on a study conducted under the auspices of the Regional Cooperation Platform (RCP) aiming to develop an APEL model to steer a systematic adoption of APEL in higher education and increase the number of Technical and Vocational Education Training (TVET)-teachers that have acquired strong practical skills in the world of work.

In the process, the study will assess the quality assurance of existing practices in APEL for TVET teacher training (TVET-TT) among the participating RCP partner countries including Malaysia. This research is mainly a qualitative study involving multiple methods such as document analysis, thematic analysis and focus group discussion. Document analysis was conducted to identify the gap in current practices by comparing the similarities and differences in existing APEL practices in other countries. Thematic analysis was carried out on data gathered from interviews of officers from the Open University Malaysia and the Malaysia Qualification Agency for the purpose of identifying the APEL practices within Malaysia. The analysis findings indicate no quality assurance as such is yet in place. However APEL has been officially recognized in the system although it has not been widely implemented. The draft of an APEL model was proposed taking into account existing global practices and a series of focus group discussions were carried out to refine the draft in terms of verifying and validating the final model. The focus group discussions involved research counterparts from Indonesia, Laos, Cambodia and experts from the Wawasan Open University representing Malaysia. Upon completion of the validation process, a general model based on the APEL process was developed. This model has significant implications on the training provisions and quality of TVET teachers as it will attract more industry-experienced candidates to enrol in TVET teacher preparation programmes. In a nutshell, this model can provide general guiding principles for implementing APEL into a TVET system and provide guidelines for putting quality assurance in place. Nonetheless, a degree of fine-tunings may be required for application in certain countries.

1   Introduction

The concept of recognition of prior learning (RPL) is relatively new in Malaysia and has only been implemented to a limited degree in Vocational Education and Training sector under the Department of Skills Development by the launching of the Recognition of Prior Achievement (RPA) model in 1996. Since then, RPL has gained increasing attention and importance as demand has grown for certifications of the existing skilled workforce and the accreditation of diverse academic qualifications for applicants competing for higher education places. At the moment approximately Malaysia has 60,000 uncertified workers whose competencies derived prior work achievement are yet to be assessed and recognized (Ministry of Human Resource, 2009). The lack of certification for its skilled workforce has economic implications on Malaysia leading to greater dependence on foreign workers and less favourable perception by foreign investors. As a part of the Malaysian government's efforts to provide direction and support in providing a sustainable and evolving system for the recognition of prior learning and prior experiential acquisition, the Malaysian Qualification Agency (MQA) drafted a national policy proposal on RPL; dubbed the Accreditation of Prior Experiential Learning (APEL) in Malaysia – Policy Consideration. The policy is designed to give guidance to education providers, in particular the Malaysian tertiary, higher education and training institutions, and put into place the correct mechanism for implementing APEL and its associated quality assurance measures. However, this draft has yet to be formalized and institutionalized due to the demand for a more TVET friendly model. To this end research questions were developed to shape APEL into a mould that would better embrace TVET.

The pertinent information required led to the following research questions:

1. What is the current status of APEL practices?
2. What are the similarities and of APEL practices?
3. What essential characteristics are required within the process and assessment of APEL practices for admission and advanced standing?
4. What is the extensive APEL Model for TVET-TT programmed regarding process and assessment?

2   Background of research

Malaysia is revamping its vocational education system by transforming existing vocational schools into vocational colleges in order to produce highly competent and competitive manpower (Ministry of Education 2011). This implies that TVET is no longer a side-lined alternative but a main stream issue in education. This transformation however, has created a great demand for TVET teachers to be equipped with a high level of practical vocational skills. Formal skills training for vocational teachers requires an enormous amount of time and cost, and this process cannot meet the urgent demand to provide the necessary number of skilled teachers in the very near future. In the light such demand, the need to accredit the existing workforce in possession of the appropriate skills but lacking academic qualification is essential for enabling such personnel to join the TVET teacher training programmes in

Universities. However good this idea sounds, no action has actually been taken to award official accreditation to prior experience and implement accreditation of prior experiential learning (APEL) in the teacher training system up to the present.

The Malaysian Skills Certificates and Diploma in Technology awarded by the Department of Skills Development under the Ministry of Human Resource Malaysia are not currently being recognized as legitimate entry qualifications into most universities under the Ministry of Higher Education. Thus, the very people in possession of the necessary skills required by TVET teachers cannot enter the system crying out for them in face of the absence of a formalized APEL model. Beyond TVET teacher training a limited implementation of APEL is implemented by the Open University system (due to its open entry system), a few public and private training institutions under auspices of the Ministry of Human Resources Malaysia. Where APEL has been implemented in public universities, it is limited to a specific faculty that is not involved in TVET. Where research has been carried out the findings suggest a persisting lack of awareness, clarity about the nature, value and purpose of APEL and institutional bureaucracy and inexperience. Furthermore the situation suffers from an absence of expertise in assessment of experiential learning, all of which remain constraining factors for widespread implementation of APEL- in Malaysia (Kaprawi, Razzaly, & Raja 2010). While APEL implementation is in the process of maturing in Malaysia, an important question that has to be dealt with most urgently concerns to what extent a guarantee can exist safely confirming that institutions are capable of offering a quality assured APEL programme. Its (albeit limited) implementation of APEL still contains the outstanding issue that quality assurance is issue to be dealt with. Most significant is the urgent need to assess the quality assurance of existing practices on APEL for TVET teacher training (TVET-TT) in Malaysia in particular and in South-East Asian countries in general. It is generally considered that some South East Asian countries could well be at a similar developmental stage as Malaysia, but others may have advanced further in implementing APEL and its quality assurance. Thus, experience and expert sharing with these countries is crucial in setting up a benchmark for APEL of TVET-TT in this region.

3   Methodology

This research incorporates qualitative design and specifically implements the case study method. The case study approach was chosen for the purpose of gathering multiple perspectives and resources to render as complete as possible an explanation of the APEL process. Furthermore, the case study model can also be used as descriptive research for observing the individual or group as a whole. To explore the phenomena of the study, documentation, interview and focus group were utilized. The research aim is to assess the existing APEL TVET-TT practices of the participating RCP partner countries including Malaysia to develop a model for implementing APEL and developing quality assurance methods.

3.1 Data gathering methods

Data was gathered use three methods: document analysis, interviews and focus group discussion.

    i. Document analysis

Documents analysis was conducted to identify the gaps in APEL practices of the countries participating as well as nations across the globe. Journal articles, conference papers, and research reports from South Africa, Australia and North America were used as main materials for document analysis. A first draft of an APEL model based on the document analysis was developed for further discussion.

    ii. Interview

Semi structured interviews were conducted accompanied by two APEL experts of Open University Malaysia and the Malaysian Qualification Agency to obtain details on APEL implementation in Malaysia. These two experts were chosen as they were from institutions where APEL is already in operation. The essence of the interviews focused on the status of APEL implementation in the country and the challenges faced in its implementation. The interviews provide support for improving the draft model and in identifying gaps in existing practices revealed by comparison with the model.

    iii. Focus group discussion

Focus group research can often produce data rarely to be obtained from individual interviewing and observation. For this reason focus group discussion is a powerful tool for obtaining informative knowledge and insights (Kamberelis & Dimitriadis 2011). Three focus group discussions were conducted throughout the project. Two focus group discussions, involving members from participating countries (Malaysia, Thailand and Vietnam), were carried out for the purpose of drafting and finalizing the APEL model. The other discussion was executed for validatation of the Malaysian APEL model by experts from several local universities which were: Universiti Putra Malaysia (UPM), UTHM, Universiti Teknologi Malaysia (UTM)-Space, University of Malaya (UM), Universiti Kebangsaan Malaysia (UKM), Wawasan open University (WOU), Universiti Sains Malaysia (USM), Universiti Teknologi Mara (UiTM) and Universiti Perguruan Sultan Ibrahim (UPSI). The focus group discussion helped strengthen the generic model considered feasible for use in Malaysia. It is quite possible that this model is appropriate for other countries wishing to implement or strengthen their APEL system.

3.2 Participants

The study was conducted with participants from three countries: Malaysia, Thailand and Vietnam all of which are RCP members. Laos, Indonesia, and Cambodia were also invited to share their knowledge and experiences for this research. These countries are, to a reasonable

extent, quite representative of the varying scenario of APEL implementation in TVET-TT for South East Asia.

The purposive sampling was used to select members from six RCP countries as participants. The research subjects were the experts in the related field. The selected experts all have vast experience in dealing with APEL process in their institutions. The participants invited to the project work at the Open University, Open University Malaysia (OUM) and Malaysian Qualification Agency (MQA).

Open University Malaysia (OUM) is one of the private higher education institutions in Malaysia given the mandate to implement an open entry system by the government for the purpose of lifelong learning education. This system permits the OUM to enrol students with more flexible entry requirements. Thus, APEL is used for entry purposes as well as advanced stages of the OUM syllabus. Wawasan Open University (WOU) is also one of the key APEL players in Malaysia permitting students to enrol at WOU through APEL process.

MQA is the main government body managing APEL implementation in the country. The agency is responsible for standardizing the APEL process and acting as a reference centre for higher education institutions in Malaysia. MQA awards individuals that pass the APEL application with APEL certificate. This certificate is to act as a license for enrolment of the individuals for any HEIs with low academic qualification. However, it is important to note that MQA does not provide any places for the applicants in the HEIs. The HEIs decide whether they accept the individuals with APEL certificate or not based on their policy and requirements.

3.3   Research procedure

In thematic analysis, the data was obtained through an interview with two respondents of the Open University Malaysia and Malaysia Qualification Agency. The interview took place in two different settings with the same thematic questions at respective institutions. The data was transcribed and analysed in terms of the current situation of APEL implementation.

Concurrently, document analysis was conducted to determine the gaps based on the similarities and differences of APEL practices of the countries participating. The journal articles, conference papers, research reports, and other relevant reading materials were thoroughly analysed and interpreted. The findings from both thematic analysis and document analysis were utilized to create a theoretical draft of an APEL model. The model was distributed to the participating countries which were then all requested to provide feedback on the model.

To support the findings from the interviews and gap analysis, three rounds of focus group discussions were developed. The first round of focus group discussion involved experts from local educational institutions and members of participating countries such as Vietnam, Laos, Indonesia, and Cambodia. The discussion of the APEL model was conducted at the Universiti Tun Hussein Onn Malaysia (UTHM). Several methods of discussions were implemented to refine the definition of the APEL process model from different perspectives in line with the

respective needs and educational policy. The methods comprised brainstorming, dialogue sessions and debate between the representatives of the countries participating.

After two months analysing the data from the first round of focus group discussions, the second round of focus group discussion was carried out. At this point, the main purpose of the focus group discussion was to obtain a consensus from the local universities' practitioners on the first draft of APEL model. The result found that awareness of APEL among the local universities had increased and they were willing to share their views on APEL to improve the first draft. One major difference during this round was the how detailed characteristics of the APEL model for the Malaysian APEL process model were developed.

The final round of focus group discussions were conducted in Kuala Terengganu to obtain validation for the extensive model to be used by the participating countries. It was attended by the representatives of the participating member countries. Several models (e.g. Malaysia APEL model and Vietnam APEL model) were compared and integrated to form the finalized APEL model. Figure 1 shows the flow of the research process.
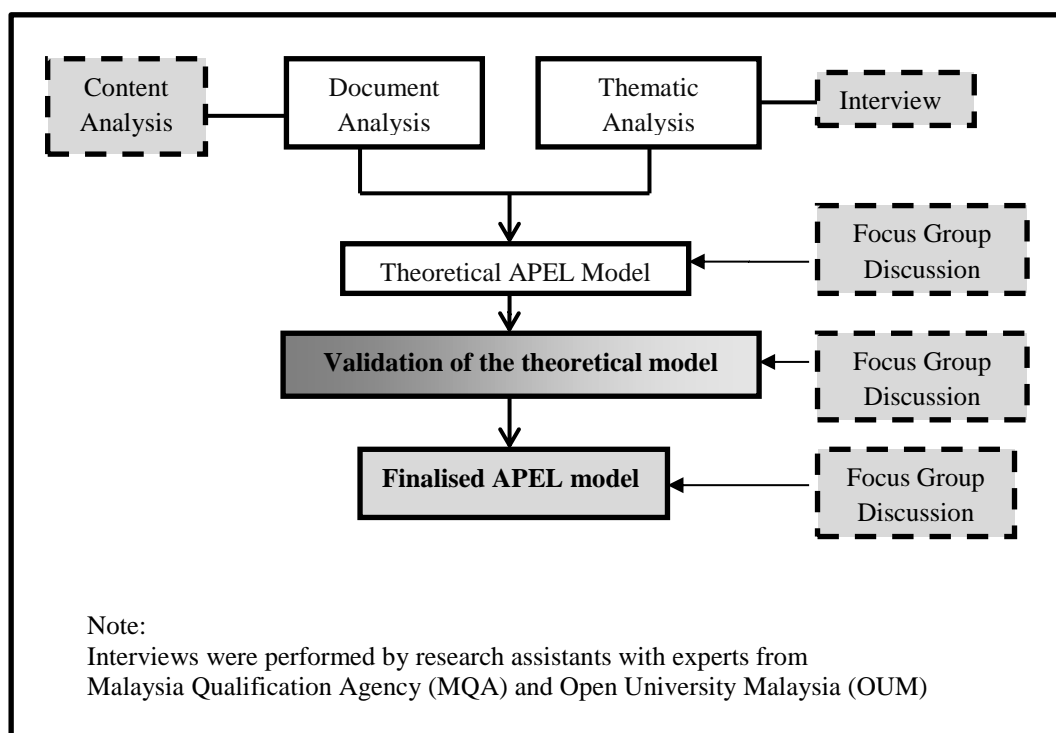

Figure 1:   Flow of the Research Process

4   Data analysis

There are many existing methods for the analysis of data for creating a qualitative method. In this research, the data was obtained using two qualitative methods: document analysis and thematic analysis. The methods were used to answer all the research questions.

To answer the first research question, both methods were used. Document analysis was used to obtain the status of APEL practices from the participating countries and thematic analysis was used to get the status of APEL practice in Malaysia.

For the second and third research questions document analysis was used. These were the APEL policies of various higher education institutions around the world.

For the last two research questions, answers were provided by document analysis and focus group discussion. The focus group discussions were carried out during a workshop on APEL held by the research team. The focus group discussion participants were the representative of several Asian higher education institutions and experts from Malaysia. The focus group discussions arrived at a consensus for the APEL theoretical model and created a validated model for the use in Malaysia and partners countries too. Table 1 shows the analysis plan for each research question.

Table 1:   **Analysis plan for research question.**

Research Question	**Analysis plan**
1. What is the current status of APEL practices?	Document analysis & thematic analysis (interview)
2. What are the similarities and differences of APEL practices?	Document analysis
3. What essential characteristics are required within process and assessment in APEL practices for admission and advanced standing?	Document analysis
4. What is the extensive APEL Model for TVET-TT programmes in regard to process and assessment?	Document analysis & focus group discussion
5. How the extensive APEL Model for TVET-TT programmes can be generically applicable to all the participating countries (Malaysia, Thailand and Vietnam)?	Document analysis & focus group discussion

5 Findings and discussion

The findings emanated from the data analysis and results from document analysis, interviews (thematic analysis) and focus group discussion. The findings will be analysed and explained in sequence to answer the research question and draw the conclusions from the research.

5.1 What is the current status of APEL practices?

- APEL in South Africa can be seen as a means for making up for the unfair discrimination in education, training and employment opportunities that dogged their past. It is a tool for the implementation of the reconstruction and development programme. As a result APEL is extremely well developed and has been utilised for the development of human capital development in South Africa.

- In Australia, APEL implementation and practices are long and well established. The concept is in line with the use of learning contracts in work-based higher education that provides a channel for recognizing prior working experiences as criteria for university programmes admission and advanced ranking.

- APEL is widely practiced in North America to recognize and accredit the learner's prior experiential learning. However, the implementation of APEL is decentralized and based on states and educational institutions. Similarly, the APEL is essentially directed at university programmes admission and credit transfer for advocating lifelong learning.

- Likewise, APEL in Europe is well in place. The development of APEL is in line with the Bologna Declaration of 2001 that recognized the need for accreditation of prior experiential learning. APEL has been successfully applied in various disciplines including teacher training in vocational education making higher education more accessible and attractive.

- The status of APEL implementation varies between Asian countries. APEL practices have already been established in Thailand. However, policy in Thailand does not allow the implementation for APEL in TVET-TT as the APEL system has been established for other disciplines. APEL is also practiced in Indonesia to a certain extent for TVET-TT. Vietnam, Laos and Cambodia do not implement APEL in their system.

- Regarding Malaysia, APEL has been well implemented in some private universities for admission and advanced studies. In public universities, however, the concept of APEL is applied but limited to university programme admission.

5.2 The similarities and/or differences between APEL practices

The similarities and/or differences are based on document analysis. The initial difference is in the terminologies used. There are various international terminologies for APEL such as Prior Learning Assessment (PLA), Prior Learning Assessment and Recognition (PLAR), Accreditation of Prior Learning (APL) and Recognition of Prior Learning (RPL). In Malaysia, the term APEL is used and denotes a systematic process that involves the identification, documentation and assessment of prior experiential learning to determine the extent to which an individual has achieved the desired learning outcomes for access to a study programme and/or awards of credit (MQA 2009).

The second difference lies in the number of activities and the types of activities at each stage. The pre-assessment stages include pre-entry, initial contact, pre-screening, pre-application counselling, learning identification and application for APEL itself. Most of the activities in pre-assessment stages involve; i) initial contact with the candidate i.e. an institution, to create awareness of APEL via marketing, ii) advise and mentor the candidate on APEL procedure and iii) pre-screening the candidate's viability and identify credits and units that can be claimed or awarded. At the assessment stage, the activities are i) mentoring and advising the candidate to build on the evidence through specific methods provided by the advisor, ii) assessment evidence provided by the course subject-matter expert, iii) verify the authenticity of evidence, iv) appeal process and provide feedback on assessment and the final awarding of the credit or certificate to the successful candidate based on the institution-determined policy. The process continued to the post-assessment stage consisting of recording the data, post APEL counselling and training.

Most of the institutions practiced similar activities whereas at the pre-assessment stages initial contact was carried out (see Table 2). Candidates contacted the institution to obtain clear information on APEL policy and procedure before making application. Learning identification is also carried out in most institutions to ensure candidates apply for the appropriate study programme that accepted APEL entry or credit transfer. At this point the institution may have its own rules and policy on how much credit can be awarded by APEL (EUCEN 2007).

At the assessment stage, preparation for assessment was carried out in many institutions as it was felt that it could provide guidance to candidates to carry out the assessment method. In this case, explanation has to be provided on methods for gathering evidence and the types of evidence that prove a candidate's competence (Venter 1999). Cohen et al. (1993) point out that candidates must be encouraged to describe the experience in which learning took place. The advisor must also advise candidates on how the prior learning may contribute to particular qualification. Feedback is carried out in only a few institutions such as SAQA, MQA, UNISA, MQA (Malaysia), OUM, NQV and FETAC. The purpose of the feedback stage was to notify the result to candidate either through post or email.

In the post assessment stage, recording has become one of the important procedures in many institutions. Results were recorded according to the university information system requirements. In Australia, recording took place according to credit points or credit banks. The credit bank is a system allowing students to store credits for later use (Cohen et al. 1993). The records are also used to notify the faculty of the credit granted for APEL. In the meantime, post counselling was only considered in certain institutions such as UNISA, Australian University, Staffordshire University, NYATANGA and National Vocational Qualification. The purpose of the process was to counsel the learner on possible future career options. If the candidate did not obtain his/her credit via the traditional academic route, special attention was given to the study techniques and advice to enable the learner to learn within the institution (Venter 1999).

5.3 The Extensive APEL Model

An extensive model of APEL explains the process of APEL application for TVET-TT. This model can be used as a referral model for all participating countries. Table 3 illustrates the description details of the APEL process model from the pre-assessment stage, assessment stage, award and post-assessment stage. The extensive process model consists of four main stages: Pre-assessment, Assessment, Award, and Post–assessment stage. The pre-assessment stage prescribes the activities to be undertaken by institutions and applicants to determine eligibility for initiation of APEL application. The assessment stage determines the suitability of an application for a specific programme. If eligibility is determined, the applicant is then be awarded an APEL certificate at the award stage; recording of application results and counselling takes place at the post-assessment stage

Table 2: **The Extensive APEL Process Model for TVET-TT Programme**

	PROCESSES	DESCRIPTION
Pre-assessment	**Pre-entry (Publicity and promotional activities)**	- Advertise through website e.g. Ministry of Higher Education or Malaysian Qualifications Agency and join Higher Education Carnival/ Fair - Use social media (facebook, twitter, geek etc.) , mass media (TV, newspaper, magazine, etc.) and all the relevant stakeholders e.g. alumni - Form advisory board/organize outreach programme, road shows etc. to approach potential candidates. - Distribute newsletters and testimonies to potential participants - Work with regulatory bodies (such as Education Ministry, Human Resource Department/Ministry, Technology Promotion Association (Thailand-Japan)-www.tpa.or.th- or www.e-3L.com) - Organise forum for career counsellors (in educational institutions) marketing / communications Officer in corporate / government companies, organisations etc.
	Initial contact (Application materials & related forms)	- APEL handbook and guidelines - Application form - FAQ - General briefing/advice to be provided if required by applicant
	Learning identification through self-assessment & application submission	- Self-assessment (online or hardcopies) by student based on menu of suitable courses from the faculty for *TVET teacher training* - Candidate refers to curriculum checklist and qualification rubric** (prepared by the institution) which need to be compared/matched with candidate's Formal Learning (Certificated learning e.g. Diploma etc.), Non-formal learning (e.g. Seminars, workshops etc.) and Informal Learning (available on website) ** Rubric to match experiential learning to standard (course learning outcome) - Counselling and advice provided by course expert - Submission of application form and the related fees (based on the institution)
	Pre-screening	- To be administered at the respective Faculty level - Criteria: - Candidates must first fulfil the entry requirements for a particular programme (e.g. APEL Certification for admission) - candidate's CV and personal statement verified by official bodies - payment of application fees

	Application verification		• Faculty verify the documentary evidence presented by candidates for a faculty approval process (entry) or • APEL assessment for advanced ranking will be initiated (credit transfer)
Assessment	**Preparation for assessment**		• Advisor helps students in gathering and compiling of evidence • Candidate will be provided with rubric assessment, checklists and samples of assessment questions/tools
	Assessment		• Portfolio/e-portfolio followed by interview, challenge test (inclusive of an interview session) and/or standardised examination (for teachers training) • Assessment tools used must meet the criteria of validity, sufficiency, currency and authenticity • Assessor appointed must be a course matter expert.

	Judgement		• Match between prior experiential learning (job competencies and documentary evidence) and the course learning outcomes as well as the module descriptors using Rubric for Course Learning Outcome (based on the individual country)
			• Content match must be more than 70% (based on the regulatory bodies prescribed by the individual country)
			     o Malaysia – practice 80% match (MOHE & MQA)
			     o Thailand – 75%
			     o Vietnam – at least 75%
			• credit transfer to be awarded based on regulatory bodies prescribed by the individual country

	Verification and endorsement of evidence		• Verified by referees • Verification of job competencies and other relevant documentary evidences • Formal prior learning qualification presented must be approved by authorised agency/regulatory bodies (e.g. Thailand-regulated by faculties) • Verification of portfolio and challenge test results after the moderation process • Results presented to APEL Examination Board within the faculty
	Feedback		• Results are disseminated through post, mail or/and social media • Result to be announced at least once a year (depends on the institutional policy)
	Appeal		• Appeal can be submitted at any prescribed time • For those who failed portfolio / tests, they can substantiate and re-compile their portfolio/re-sit the test at a stipulated time frame determined by the institution.
Award	**Accreditation and certification**		• For admission: by regulatory bodies and faculty in the respective country e.g. in Malaysia the Malaysian Qualifications Agency (MQA) will issue the : APEL Certification award • For Credit Transfer (advanced standing): issued by the relevant faculty in the respective institutions e.g. an APEL Credit Transfer result statement/slips/certificate
Post-assessment	**Recording**		• A robust infrastructure and recording system • Up-to-date records are maintained at all time • Record keeping for 7 years / according to the law • Validity of the result depends on discipline
	Post APEL counselling / Guidance		• Provide guidance for appeal process • Learner support to be provided when required

Assessment is a critical aspect of APEL thus details of the assessment components are further described in Table 4. Table 4 illustrates the extensive assessment components and gives a detailed description of how assessment is to be made, including the characteristics of advisors and assessors, assessment methods and criteria, certification and appeal. The advisors play a very important role in the assessment process. For instance, one of the advisor's responsibilities is to assist candidates in identifying learning outcomes associated with the experience and identify areas where claims can be formulated. However, to give effective advice and guidance, the advisor must have a good understanding of what needs to be demonstrated to meet the learning outcomes of the programme. Hence, the advisor must be confident he or she can provide advice on the types of evidence appropriate especially when demonstrating learning through experience (EUCEN 2007).

Assessment methods appropriate for APEL assessment as proposed by participants and knowledge gained from document analysis are the challenge test and portfolio. The challenge test can be prescribed in many forms such as test, demonstration and site visits. According to Algonquin (2007) the challenge test is a method of assessment administrated by the faculty to measure an individual's learning achievement regarding the course learning requirements. It measures learning demonstrated via written and non- written evaluation whereas the portfolio is a document presented formally that describes the learning achievement of prior experience, links the learning to specific college course learning requirements and shows validation or proof via third party documentation and other forms of evidence.

In conjunction with the chosen assessment methods, the portfolio enables articulation of learning from the learner's perspective as learner's experience and it is the most comprehensive tool available for the assessment of prior learning. Hence portfolio development engages the applicant in a process of self-review before beginning a programme of study thus enabling a process of self-discovery achieving self-esteem via affirmation of personal competence, development of academic skill and establishing a theoretical and practical understanding of the learning process. The two assessment instruments discussed have also been individually used by OUM, where candidates are assessed using either the challenge test or portfolio (Yick 2012).

Table 3: **The extensive APEL Process Model on Assessment for TVET-TT Programme**

ASSESSMENT COMPONENT	DESCRIPTION

1. Advisor	• Advise student in preparing the evidence
	• Assist candidate to identify the learning outcomes associated with their experiential learning and identify areas where claim might be formulated
	• Advisor's appointed must be a
	    ○ Course matter expert
	    ○ Knowledgeable in APEL system and law and regulations.

2. Assessor	• Course matter expert/ Academician • at least three assessors : one portfolio • Require a certified assessor from government agency (based on individual country) advisor can be an assessor for the same applicant
3. Coordination	• The process of APEL application is monitored by a designated coordinator.
4. Assessment method (A and/or B and/or C) **A. Portfolio**	• Course matter expert assesses the portfolio by using the guidelines • Portfolio assessed can only be used for a single purpose (either for entry requirement or credit transfer - incorporating information on curriculum structure and course content) • Use Rubric to match the experience to the course learning outcome
B. Interview	• Assessors will be provided with a model of questions to be used as a guide. This can be modified based on circumstances • Structured interview to assess whether the candidate can accurately reflect on the task/responsibilities undertaken and whether s/he is able to transfer the knowledge/skills acquired to other situations in the same domain.
C. Challenge Test i. Assessors judgment ii. The purpose of application	• Questions / assignment task to be prepared by course matter experts • Questions bank must be developed • To ensure validity and relevancy of the questions, question papers must be vetted by an internal/external examiner • Printing, dissemination of question papers and invigilation of the examinations to be handled by the Examination Office of the Faculty (or designated staff) to ensure integrity of the exam • Scheduled challenge test with candidate **1. Written Test** The content-based test would depend on the nature of the learning outcome/requirement of a course/programme. Undertake an examination to determine the achievement of the learning or competency outcomes. **2. Demonstration of skills set** Candidates are required to perform a task for the purpose of testing. Candidates will receive the assignment a few days before the demonstration test. **3. Site Visit/ Assessment** • To validate claims and review evidence • To assess the competency of the applicants

5. Assessment criteria		• It is compulsory to pass both assessment components (portfolio & challenge test/interview)
		• Rubric for assessment (matching of content and level of study)
		• The certificated qualification must be verified
		• Evidence / statement presented must be verified by referees.
		• Assessment tools used must meet the criteria of validity, sufficiency, currency and authenticity
		• Assessors will take into account the level, standard, content, relevance and currency of the prior learning. The following must be observed:
		  1. Appropriate assessment method according to the learning activity
		  2. Appropriate assessment method according to the level of qualification sought
		  3. Ensure reliability
		  4. Ensure validity
		  5. Plan the process of assessment.
		  6. State results objectively
		
		• Authenticity, Quality, Currency, Sufficiency

6. Result		PORTFOLIO
		• Results to be recorded as **Accept / Reject** on the transcript (**for entry**).
		• Results to be recorded as **APEL Credit** on the transcript (**for Credit Transfer/Advanced Standing)**
		• Conditions:
		  - Credit sought by portfolio cannot duplicate other coursework
		  - Total number of credits allocated for one portfolio is maximum six credits (based on individual country)
		  - Students must first register with the University to apply or receive such services
		    (only those applying APEL for credit transfer)
		  - The onus lies with the students to prepare an acceptable portfolio based on the prescribed guidelines
		CHALLENGE TEST
		• Results to be recorded as Accept/Reject on the transcript.
		• Conditions:
		  - A student can only take the challenge exam/test only once and cannot repeat for a course that s/he has failed or registered previously
		  - Students must first register with the University to apply or receives such services

7. Accreditation and Certification		• For admission: by regulatory bodies in the respective country e.g. In Malaysia the Malaysian Qualifications Agency (MQA) will issue the APEL Certification award • For Advanced Standing / Credit Transfer: issued by the relevant faculty in the respective institutions e.g. an APEL Credit Transfer result statement/slips/certificate • Certified by the APEL committee of the faculty.

8. Appeal		1. Applicant only repeat the assessment component that he/she failed
		2. The new assessor should be appointed for the assessment.
		  - Candidates can appeal for review of their assessment results
		  - For appeal related to admission, candidates must submit their appeal to the Dean of Students and Academic Registrar while appeal for credit transfer has to be directed to Dean of the relevant Faculty.
		  - The decision of the board on the results of the appeal will be final and no further appeal shall be allowed.
		  - Candidates can appeal for review of their assessment results
		  - For appeal related to admission, candidates must submit their appeal to the Dean of Students and Academic Registrar while appeal for credit transfer has to be directed to Dean of the relevant Faculty.
		  - The decision of the board on the results of the appeal will be final and no further appeal shall be allowed.

Upon meeting all the requirements of the assessment successfully, the applicant is awarded the APEL certificate, however should they fail an appeal process is in place that they may resort to.

6 Perspectives toward regional implementation of APEL in VTE

6.1 Conclusions

The findings of this research provide an overview of the process in developing a model valid for use in a real situation. In general, APEL has been well implemented in the education system and policy on several continents i.e. Africa, Australia, Europe and North America. However, in Asia the implementation of the APEL process is still developing. The implementation of APEL in education is a relatively new system based on recent findings. Therefore, an appropriate model of APEL, may help other institutions to implement APEL in a systematic and efficient way. Though there is still much work to be done, this research is valuable as it is pioneer research in the development of the APEL system in the Malaysian Higher Education system. The outcomes from this research can be a source of guidance for future research in the area. Needless to say, many other intrinsic and extrinsic outcomes have been generated by the research process. Thus, the area covered by this research may help in finding alternative ways fir developing TVET and increase the quality of TVET's product in general.

Based on the findings, an extensive APEL model for the TVET-TT programme in process and assessment has been developed. The APEL model is used for university programme admission and advanced ranking. The process model comprised four stages: pre-assessment, assessment, award and assessment. The APEL assessment model, consists of eight components comprising of advisor, assessor, coordination, assessment method, portfolio, interview, challenge test and assessment

6.2 Recommendation

Based on the implications of this study, a number of recommendations have been found useful for future research plans. Before rolling out a research on APEL, steps should be taken to ensure that the concept is well understood by the research member. Research leaders may choose suitable and related members or give a brief explanation of APEL to members before the research begins. This may help in reducing times and confusion between the members and provide a more rigid and directed outcome from the discussion.

The limitations of the research discussed here can provide opportunities for future research. Firstly, the research methods used were mainly of the qualitative paradigm with a small number of respondents, thus preventing us from making statements for generalization. If quantitative data collection methods such as questionnaires were implemented, we could provide solutions to cope with the difficulties and challenges in APEL implementation. This can help to provide insights into how widespread certain issues are regarding APEL implementation and give valuable help for suggestions regarding the APEL model. For future

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research, a mixed method approach on the same topic should be carried out to get a bigger picture on the situation. To this purpose different groups of samples should be assigned to provide data for the research.

Secondly, our research only focuses on the APEL model that represents but a small part of the bigger APEL process. The scope of this research does not include other critical stages of the APEL process such as the assessment and appeal. Due to this limitation, findings from this study only represent 'half the picture'. The study of the individual stages provides an opportunity for future research in experiential learning. Here researchers can focus on specific stages, such as the pre assessment, assessment or post assessment stage. Research should also focus on the policies of APEL implementation rather than the process itself. Investigating this issue will prove quite fruitful and help reveal the other half of the picture.

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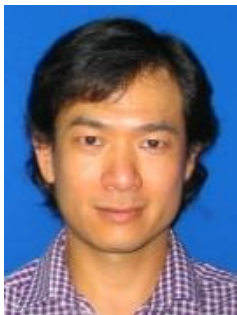## Dr. MOHAMAD MARLINA

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