

## Improving open access through prior learning assessment

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### Abstract

This paper explores and presents new data on how to improve open access in distance education through using prior learning assessments. Broadly there are three types of prior learning assessment (PLAR): Type-1 for prospective students to be allowed to register for a course; Type-2 for current students to avoid duplicating work-load to gain certification; and Type-3 mapping occupational skills as portfolio-needs analysis. In each of these some e-assessment can play a role, notably in Type-3 in distance education. Our previous research has been in Type-2 and we report the empirical results and challenges involved in practice. Moving beyond Type-2 we further report how e-Type-3 can improve our practice in the Open University of China—a very large ODL provider. We discuss the barriers and challenges being faced, and ways being explored to resolve these issues, to reduce the costs involved and to improve open access to learning.

**Keywords:** Open access, PLAR, Profiling, Reducing costs

### Introduction

Improving access to learning can be achieved through offering prior learning assessment and recognition (PLAR). There are two well-known distinct types of PLAR; one is the type traditionally used by open universities, offered to persons having valuable experience without certificates and wanting to enroll in higher education. In such case the course tutor can become overloaded in trying to help weaker students. The other one is the type used more recently by all kinds of universities, offered to enrolled students who want to avoid duplicating coursework which they have already covered during work-related or independent learning outside of the university (usually before enrolling). Certifying any person who has not sat through the coursework can be problematic. Following the descriptions given by Sir John Daniel in Mandell & Travers (2012) these are accordingly labelled Type-1 and Type-2.

A third type of PLAR has been suggested by Dickerson, Wilson, Kik & Dhillon (2012) in their current research into occupational profiling. They are working to build the skills profile for each kind of employment, each involving a vast number of measured skills. This third type is labelled Type-3. In education, there are five domains of learning, reported by Zhang & Kawachi (2011), involving for example knowledge and skills in the cognitive domain, the motivations in the affective domain, self-awareness in the metacognitive domain, interdependence in the environment domain, and study skills in the management domain. Current research is expounding on the learning skills to extend occupational profiling to specific course levels in higher education.

In our Open University of China we have offered assessment of prior experiential learning Type-2 to a whole cohort on a diploma associate-degree course. This pilot study, reported by Wang & Yin (2012), set out to understand the challenges involved and the various perspectives of stakeholders. This study is summarised here in the Methods section. The difficulties encountered, and suggestions for further studies are given in the Results section. And then we explore a future-oriented Type-3 assessment system to overcome these challenges and difficulties in the Discussion section. The findings here suggest that an online version e-Type-3 will offer reduced costs and improve open

access to higher education. We expound in detail the nature of e-Type-3 PLAR and the detailed mechanism of its application in practice into the closing section. The e-Type-3 PLAR moreover will facilitate job mobility and cross-accreditation.

## Methods

In this section we report the methods and challenges using Type-2 in a pilot study at the Open University of China. We offer a diploma associate-degree course in *Education*, which requires the student to take three years of course study and gain an accumulated 76 credits. This diploma course is often taken by practising teachers as In-Service Education and Training (INSET), and some of these teachers may be expected to have prior experience which overlaps with some course content. Towards the end of the course, there is a final project which comprises an 8-credit compulsory course. Involved in this project there is an initial project skills course worth 4 credits, and it is this part that students could be exempt from if they presented satisfactory prior experiential learning. The project skills involve how to deliver training using educational technology, and specifically in how to design effective training. In other words the students need to demonstrate a competence in lesson plan design, and proficiency in how to deliver the lesson. The skills are given in Table 1 below.

In this pilot study, we designed and delivered a new training short-course to introduce all the students to PLAR. After this introduction, we invited the whole cohort of 92 students aiming to graduate in June 2010 to offer a portfolio of their own individual prior experiential learning to see if they could gain recognition for prior learning, receive an award of 4 credits, and so reduce their required course study load. Each student submitted a detailed résumé or a variety of reports and documents which needed to be evaluated for merit by us. The evaluations were carried out by a team of experts at the Open University of China consisting of personnel from the Division of Academic Affairs and Admissions, our Institute of Open and Distance Education Research, the School of Public Administration, the International Cooperation Office, and front-line tutors at the respective local study centre. These experts held meetings to decide on a consensus as to which students presented potential prior learning that might meet our quality assurance requirements.

The prior learning of each student was assessed on various skills on three dimensions: the capability to use educational technologies to design, and deliver a lesson, and to re-use / construct

**Table 1: Basic Template of Dimensions for PLAR in our Pilot Study**

Dimension	Skills to be Assessed
Capability to use the strategies of educational technology to design instruction	Skills in analyzing the learners, learning content, learning outcome, and in designing the instructional process and learning activities— demonstrated through designing and drawing up a lesson plan
	Skills in instructing smoothly, assessing and reflecting on the instruction
Capability to use ICT during instruction design	Skills in using multimedia resources during the instructional process and actions, and using appropriate ICT during the interpretation— demonstrated through using two or more types of multimedia in the design
Capability to design and develop educational resources	Skills in managing and re-using existing resources appropriately, and designing and developing new resources

educational resources. In other words the PLAR focused on using multimedia and reusable learning resources. These dimensions are given in Table 1, and form the basic template for our judgment, and these same dimensions are expanded and shown in more detail in Table 2 below, alongside the scoring system.

The outcome was pre-set to be either a Pass and award of 4 credits, or Fail and award of no credits. The scoring system is detailed as a template in Table 2 below. There was no percentage score pre-set as the pass rate on each dimension. Instead each student was scored and evaluated as Weak, Fair, Good, or Very-Good on each of six dimensions: (1) Learning outcome and learning contents, (2) Learner analyzing, (3) Instructional strategies, (4) Instructional process, (5) Instructional resources and media, and (6) Performance in the interpretation and interview. The categories (3), (4) and (5) derive from those three dimensions of Table 1 above. Following this the experts met to decide whether or not to award a Pass or not to the student.

## Results

There were several difficulties encountered in applying our template and assessing the prior experiential learning. The first difficulty was in explaining clearly the purpose and method of PLAR to the students. After the short introductory explanation to them, all the 92 students were invited to send in their detailed *résumés* of prior learning. From these 92, only 18 presented sufficient potential to meet the quality assurance guidelines of our university. These 18 potential candidates for PLAR were then invited to prepare and send in a lesson plan to be scored by the expert evaluators. The evaluation included an interview at which the student spoke openly about his or her lesson plan and responded to pre-set questions from the experts. The lesson was not itself delivered. Many aspects about PLAR in practice were encountered and some good experience was acquired for dissemination to others planning to adopt PLAR methods. Notwithstanding the success or failure of the process, expanding this Type-2 PLAR to thousands or millions of students would be impractical.

There is also some concern about the costs. Whether the student applying for PLAR pays in full or only a nominal amount, or whether the institution pays—performing PLAR rigorously entails the time and effort of expert academics and the resulting cost is high due to these labour costs. If the individual student applying for PLAR and exemption can help to offset the cost by paying up-front a fee, then the student who fails in the evaluation may feel the system was inadequately explained.

## Discussion

Assessment of prior experiential learning takes many person-hours and the individualised nature of the task brings difficulties. Each person's prior learning—particularly in adult workers from various fields of employment—means the portfolio each student brings to the task is highly individualised and expensive for the university. Some automation of the assessment process is needed sooner or later, especially for massive open online courses (MOOC). One suggestion is to develop an electronic self-administered questionnaire for the student to discover how well he or she fulfills the desired conditions. Similar questionnaires have been developed for e-readiness for prospective students to reflect on the qualities of online distance successful learners, and to understand a priori how well he or she fits these qualities, before enrolling on e-learning at a distance. In many respects these self-administered questionnaires on e-readiness have been criticised as reducing access by discouraging weaker students from applying to study at a distance.

From our pilot study, we have developed a template of the target education and skills equivalent to the study-load amounting to 4 credits for which the students sought to gain prior learning

**Table 2: Scoring System of Various Items for PLAR in our Pilot Study**

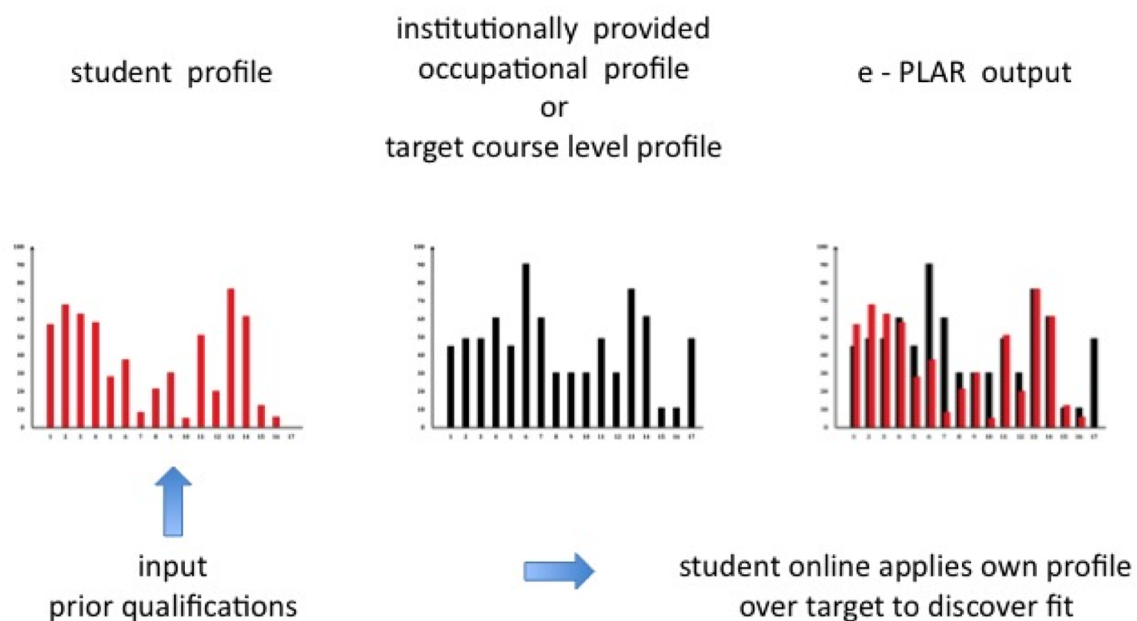
Dimension	Item	Score as %			
		weak	fair	good	very good
Learning outcome and learning contents	the analysis and description of the learning contents are clear and accurate, and include the role and place of this part in the whole course and the difficulties and focus that should be paid attention	0-3	4-5	6-7	8-10
Learner analyzing	to analyze learners' characteristics in combination with the learning contents and learning outcome	0-3	4-5	6-7	8-10
	the analysis and description of the learners is accurate, clear and helpful for deciding on the choice of instructional strategies and specific educational resources				
Instructional strategies	to choose appropriate strategies according to the learners and the learning contents	0-3	4-5	6-7	8-10
	to use strategies flexibly				
Instructional process	to design appropriate instructional actions according to the learning outcome	0-7	8-11	12-15	16-20
	the forms of instructional actions can be adapted to the learning contents				
	instructional actions can stimulate the learners' motivations to learn				
	the instructional process can be delivered smoothly				
	appropriate time distribution				
Instructional resources and media	the resources can focus on the learning contents and can satisfy the different learners' demands	0-11	12-17	18-23	24-30
	can use appropriate multimedia				
	can use resources creatively				
	to use some self-designed resources				
Performance in the interpretation and interview	to interpret the lesson plan accurately and clearly	0-7	8-11	12-15	16-20
	can use and explain some modern educational theory during the interpretation				
	to be natural, graceful and inspiring during the interpretation and interview				

accreditation and thus exemption. This template of desirable skills can be expanded to cover the full spectrum of skills required for a course at the outset or at course completion—in a similar fashion to the taxonomy of skills expounded by school syllabuses. These skills have been reported in part by Zhang & Kawachi (2011), and ongoing research is detailing a comprehensive profile over all five domains of learning to construct the template for Type-3 PLAR. This profile will then have institutionally pre-set levels (y-axis in Figure 1 plots) on each item (x-axis in Figure 1 plots) associated with the start of a course (offering easy Type-1 PLAR) and at the end of a course (offering easy Type-2 PLAR).

## Suggestions

Type-1 PLAR can be expensive for the institution since the candidates are not enrolled and paying tuition fees. Type-2 PLAR can also be expensive if the full cost is not borne by the student—and students who are evaluated as unsatisfactory may complain about the costs they paid out. Accordingly a Type-3 PLAR is suggested, based on our experience, reflection, and literature study.

This Type-3 PLAR can be organised so that students and the wider public can self-evaluate themselves. This can be achieved more easily these days through using online computer-based technologies, and the resulting e-Type-3 PLAR can be offered freely, taking up only the time of the student or person interested in discovering their skills profile status. The interested person can do this to prepare well in advance an own profile that meets the institutionally pre-set levels in relevant education and skills. As shown in Figure 1 below, the student can overlay electronically his or her own profile to discover the fit with the target profile. The student not only can discover how and where to improve own skills to construct a better fit (getting self-motivation to learn), but also can gain confidence sufficient to justify paying for the institution to then review his or her profile and award PLAR credits accordingly. The institution only gets involved when the student has achieved



**Figure 1: The System Design for e-Type-3 PLAR**



a good fit, and submitted this for administrative checking, before involving expensive academic experts in the PLAR process.

The basic mechanism is that the student can access online the target profile of a course in which he or she would like to be granted some PLAR exemption—for example to avoid taking a long lecture course and take instead the summative examination. The student can understand the learning goals of the course and can discover through a simple overlaying of own profile whether he or she has indeed already acquired the desired learning. Any omissions or shortfalls could be covered by taking an OER course or MOOC elsewhere. After satisfying him or herself, then the course accrediting-provider office-staff can review the student's profile, and if this looks adequate then this can be assessed by (expensive) expert accrediting faculty.

The resultant e-Type-3 PLAR evolved from our pilot study, given the high costs incurred in Type-2 PLAR we had used. The pilot study was centrally funded as a one-off trial to explore the mechanics of PLAR at the Open University of China. With sufficient central funding and only a few students being evaluated then Type-2 PLAR remains viable, but (1) on a massive scale as existing in our university, and (2) with no continuing funding thus requiring students to pay, where these may be very poor, we need to develop e-Type-3 PLAR. Findings suggest the e-Type-3 PLAR will be the only way forward for large-scale ODL providers. We are now exploring collaboration with other foreign open universities to re-apply these proposals to see how well they work online. Of particular interest to others are the benefits such as monitoring to pre-empt student drop-out, and as a very low-cost way to promote student mobility across different providers in the light that different providers have trouble to standardise their syllabuses and adopt a single syllabus especially across national borders.

A student's unique profile will naturally evolve over time as the student challenges learning over the years. Monitoring the development of the changes in the individual student's profile—particularly against a profile of an average student—can help to predict dropping out and the specific education and training that is responsible.

Moreover, comparing one's current state with an ideal target state to gain awareness is the key action in the initiation of emotion and motivation to study (Kawachi, 2006). So other academic benefits unrelated to PLAR can be expected.

Additionally the student profile is easily transmissible for cross-accreditation elsewhere. One clear use for the profiles achieved by students will naturally be by future employers or current employers looking to promote the student. In this sense the academic profiles are matched with occupational profiles to see the fittingness. The e-Type-3 PLAR can promote horizontal and vertical mobility in labour at no extra cost.

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