

Capturing and Organizing Prior Student Learning with the OCW Backpack

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Abstract

The purpose of this paper is to present an approach for students to have non-traditional learning assessed for credit and introduce a tool that facilitates this process. The OCW Backpack system can connect self-learners with KNEXT assessment services to obtain college credit for prior learning. An ex post facto study based on historical data collected over the past two years at Kaplan University (KU) is presented to validate the portfolio assessment process. Cumulative GPA was compared for students who received experiential credit for learning derived from personal or professional experience with a matched sample of students with no experiential learning credits. The study found that students who received experiential credits perform better than the matched sample students on GPA. The findings validate the KU portfolio assessment process. Additionally, the results support the capability of the OCW Backpack to capture the critical information necessary to evaluate non-traditional learning for university credit.

Keywords

experiential learning, credit portability, portfolio, self-learners, OER, OCW/OCWC, non-traditional learning

Recommended citation:

Ouellette, Brian; Gitin, Elena; Prost, Justin et al. (2010). Capturing and Organizing Prior Student Learning with the OCW Backpack. In *Open Ed 2010 Proceedings*. Barcelona: UOC, OU, BYU.

[Accessed: dd/mm/yy].<<http://hdl.handle.net/10609/4845>>

Introduction

The current paper presents an approach for students to have non-traditional learning assessed for credit and presents the infrastructure to do this. One piece of the infrastructure is a new tool for self-learners to build structure around their experiences and work with Open Course Ware (OCW) and Open Educational Resources (OER), called the OCW Backpack. Using a tool for maintaining and organizing learning can have maximum benefit when the tool supports the transport of prior learning into a university system. The transportability of learning is dependent on a method of assessing learning portfolios for credit in an educational institution. As such, a study is presented that evaluates Kaplan University's portfolio assessment process with an analysis comparing academic performance of students receiving credit through this process with students with no experiential credits.

OCW/OER

OCW and OER are both references to learning materials that have been digitized and made available for free on the Internet. Both concepts emerged around 2002 along with several initiatives to publish and make available college course material for use, remix, and redistribution under an open license such as a Creative Commons license. The most notable initiative is the Open Course Ware project launched by MIT in late 2002.

Over the next several years, global players picked up the cause of OER and OCW, driving the discussion and practice to new levels. The Hewlett Foundation supported multiple projects, committing their resources and reputation to incubate an environment of experimentation. And over the same period of time, international organizations, led by UNESCO, have created a space for the analysis and understanding of the OER movement as it evolves and develops.

The resulting environment, almost 10 years later, is beginning to yield truly “disruptive” change while opening up world class resources to millions of previously marginalized learners. Importantly, however, the emerging environment has changed the very questions we can ask about learning as we come to understand it as nothing less than a “new ecology of learning”. As is often the case with profound change, people thought in a linear fashion when they initially considered OER, projecting forward the institution of education as it currently exists. In this view, OER and OCW would help current faculty, and current students. And it has done so, richly. But it has also changed the way we think about content, curriculum, and their relationship to both formal and informal learning.

The Open Course Ware Consortium (OCWC) is a collaboration of more than 200 higher education institutions and associated organizations from around the world creating a broad and deep body of open educational content arranged as courses. Remix and reuse of OCW courses is sometimes a challenge given their linear format, and considering the fact that in most cases not all

course materials is made freely available. Enter Connexions, an environment for collaboratively developing and freely sharing academic content that is modular and non-linear in format.

Originally intended to provide lecture outlines and other learning materials to fellow educators, the OCW/OER movement has generated the emergence of several other, unanticipated applications. College students migrate to open educational resources through OCWC or Connexions to support their learning from instructor-led college courses. Groups of learners and faculty combine forces to establish new organizations, such as Peer-to-Peer University (www.p2pu.org), an online community of open study groups for short university-level courses. And “self learners” – those who just want the knowledge – have emerged as the major users of OCW/OER. While OCW/OER resources don’t typically come with instruction or assessment, many self-learners indicate they would like the opportunity to obtain college credit for the learning they achieve through the study of OCW/OER.

OCW Backpack

The OCW Backpack is a tool for self-learners to track their usage of Open Course Ware and other Open Educational Resources. Putting structure around otherwise unstructured learner behavior, the Backpack operates like a “mini LMS” for self-learners much like eCollege® or Blackboard® works for students enrolled in degree-seeking programs. Thinking in terms of what a typical student’s backpack might include, the tool was constructed to provide the ability to include digital copies of course learning materials and course outlines, as well as course notes, and assignments completed by the student. Since the OCW Backpack is a digital web-based tool, our version of the “student backpack” may include deeper and broader functionality, including the ability to collaborate with other self-learners or the ability for a student to share portions of his or her profile through social networking platforms.

OCW Backpack users, as a core function, have the ability to “add” OCW courses to their electronic OCW Backpack. The Backpack includes search capability where users can locate courses or course materials by subject, by school, or by keyword supplied by the user. The base of information that is searchable includes all course information and course ware published via RSS – a commonly used data format or web feed used to dynamically provide users with regularly updated content. Currently, approximately 50 OCWC member institutions currently publish their OCW content via RSS.

The potential feature set for the organization of learning resources, outside of simple bookmarking and a rating system, is limitless in a Web 2.0 environment. The first version of the OCW Backpack includes a few additional features. Backpack users have the ability to add Learning Outcomes and notes in a “notebook” arranged in their Backpack by OCW courses. For notes or assignments created outside of the Backpack, i.e., in other software applications, the user has the ability to upload and attach multiple file formats, including any type of document or media file to a course in his/her Backpack.

Study Guides are an integral component to tracking the learning that results from the use of OCW/OER resources. A Study Guide is an arrangement of OCW courses and/or other open educational resources that together support a defined learning outcome or set of learning outcomes. Faculty users have the ability to create Suggested Study Guides and publish them through the OCW

Backpack site. Other users have the ability to search, browse and view Suggested Study Guides. If the user likes a particular Suggested Study Guide, he or she can adopt it as one's own. Users can have multiple Study Guides in their Backpack, and users have the ability to adopt Suggested Study Guides in their entirety, or modify a Suggested Study Guide to fit their unique needs.

Like with OCW courses, a rating system is applied to Suggested Study Guides by the user base thus making it easier for Backpack users to search and browse the base of Suggested Study Guides, which could eventually number in the tens of thousands. Searches may be performed by subject, by course, by faculty, or by keyword string. Using the rating system, the OCW Backpack site will publish the top rated Suggested Study Guides as well as top rated faculty based on the rating of Suggested Study Guides they create. Again, this function is dynamic and 100% driven by the Backpack user base.

Collaboration is a core component to any learning environment therefore we feel it important to include through the OCW Backpack the ability for faculty, students and self-learners to collaborate with each other. Collaboration over the Internet is nothing new, and there are thousands of existing methods for collaboration in production today. Adding the ability to collaborate through the OCW Backpack is not just adding one more channel for communication. Collaboration through the OCW Backpack is unique because users are connected only through commonality created virtually through content they store in their OCW Backpack, so long as the user makes this information public as part of one's profile. That is, users are only connected with other users who have the same OCW courses or Suggested Study Guides in their OCW Backpack.

As is the case in traditional classrooms, collaboration between individual students, and between students and faculty is intended to promote learning. While the intent here is also to promote learning, the fairly unstructured environment of the OCW/OER space is not conducive to "teaching" per se. Instead it is our hope that student and faculty users alike take advantage of the opportunity to collaborate with each other to freely and openly promote individual learning. Again, this is our effort to put some structure around an otherwise unstructured learning environment.

KNEXT

Since 2002 Kaplan University has, through portfolio assessment, awarded college credit for experiential learning. A portfolio is "a formal communication, presented by the student to the college, as part of a petition requesting credit or recognition for learning outside the college classroom" (Lamdin, 1997). In an effort to recognize optimal levels of previous learning, Kaplan Higher Education, in 2008 developed a new approach for evaluating experiential learning for college credit. The new approach, called KNEXT (a hybrid of Knowledge Extension), employs a proactive process for identifying, documenting, and supporting learning through portfolio development. One goal of the KNEXT approach was to create standards for evaluating all learning, including learning derived from non-traditional sources such as self-directed study of OCW courses and other OER materials.

Ideally, the assessment of experiential or non-traditional learning requires evaluators to look into a student's past, to observe a student's application of skills and knowledge, and to ask questions to help synthesize the student's learning, before determining if the learning is equivalent of college

level (Colvin, 2006). In most cases, this level of assessment is too time-consuming and therefore not possible. This is especially true for online environments, or where there is great desire to scale in volume. Here, evaluators must rely on the students' ability to write about their experience, what they learned, how they applied what they learned, and how their thinking and their behavior has changed as a result. Most importantly, "the portfolio must make its case by identifying learning clearly and succinctly, and it must provide sufficient supporting information and documentation so that faculty can use it, along or in combination with other evidence, as the basis for their evaluation" (Lamdin, 1997). A second goal of the KNEXT approach was to use a portfolio development course to instruct students in the proper preparation of an experiential portfolio that may be submitted to request college credit.

Kaplan University's portfolio development course is designed to provide students with the support they require to develop a comprehensive portfolio of experiential and non-traditional learning. In the course, students are taught about lifelong learning, and how to identify college-level learning. Students are also taught the differences between traditional classroom learning, experiential learning, and other forms of non-traditional learning. Assignments in the course help students examine what they already know, and from where they acquired this learning, i.e., on the job, from volunteerism, during travel, through self-study, etc. If students have already earned college credit, then they also examine the learning acquired through these traditional methods. Emphasis is placed on learning rather than on the method in which the learning took place. This process works well for documenting learning derived through the study of OCW/OER where learning is non-sponsored and self-directed. At the completion of the course, in addition to meeting course outcomes, students should have substantially completed a portfolio, including a Goal Statement(s), Expanded Resume, Learning Autobiography, Credit Request(s), and Supporting Documentation.

Students who develop learning portfolios and wish to have them assessed for Kaplan University credit use a proprietary online system called the Portfolio Development and Assessment System (PDAS) which was specifically developed by Kaplan for Kaplan University students. While the student user experience is fairly straightforward, a sophisticated set of workflows coupled with a feature-rich management interface allows Kaplan to manage a high volume of credit requests and evaluations through a global network of faculty and Subject Matter Expert assessors, while at the same time maintaining a high level of Quality Assurance. As part of the quality assurance process, faculty who teach the Kaplan University portfolio development course do not assess portfolios or determine whether or not credit should be granted through the portfolio assessment process.

The Kaplan University portfolio assessment process utilizes both Kaplan University faculty and faculty from other institutions as well as other Subject Matter Experts to assess portfolios. In the process, faculty assessors determine if the portfolio meets the minimum requirements and if the learning, as described and documented, is the equivalent of college-level learning and if the student should be awarded college credit for the learning. Kaplan University has adopted the Ten Standards for Assessing Learning developed by the Council on Adult and Experiential Learning (CAEL) which includes a provision that credit, or its equivalent, should be awarded only for learning, and not for experience (Fiddler, 2006).

The Kaplan University portfolio assessment process was developed with consideration for widely accepted standards and a commitment to quality assurance. Determining how well students receiving credit through this process do in their programs is critical for validating this specific

approach. Additionally, establishing the academic success of students receiving experiential credit from the assessment of learning portfolios provides strong evidence for the benefit of the OCW Backpack tool. The tool will ultimately allow students to organize and capture their learning using OER and OCW materials in a fashion consistent with an assessment system like KNEXT. The current study was designed to compare the academic performance of students receiving credit through KNEXT with students having no experiential credits in order to validate Kaplan University's portfolio assessment process for awarding experiential credit.

Methods

Sample

The study presents an ex post facto causal-comparative analysis of historical data collected over the past two years at Kaplan University (KU). Students who received experiential credit for learning derived from personal or professional experience were compared to a matched sample of students with no experiential credits. There were 240 KU students who enrolled and successfully completed an experiential learning portfolio development course. The students were from the Arts and Sciences, Business, Criminal Justice, and Information Technology programs. The students participating in the study were enrolled in one of four programs at Kaplan University as online students pursuing an Advanced Start Bachelors, Associate, or Bachelor degree (19% Advanced Start, 13% Associate, and 68% Bachelors students). Students who completed the course developed portfolios of experiential and open-source learning, and were subsequently awarded credit by submitting their portfolios for assessment by KNEXT.

The average number of earned credits for the students completing portfolio development course was 29.24, with a standard deviation of 18.27. The median number of earned credits was 27. Students had completed an additional number of courses at the time of analyses. Students completing the portfolio development course had an average of 42.43 ($SD = 12.47$) additional credits, median of 42. The average age of students awarded experiential learning credit was 41.7 ($SD = 9.4$). The sample included 51% female, 37% male, and 12% not identifying their gender. Marital status of the sample was 54% married, 34% single, and 12% not identified.

In order to conduct comparative analyses of student GPA, a matched sample ($N=550$) was randomly drawn from students in the same four programs. Additionally, the random sample was taken from students having completed at least two terms so the comparison group consisted of students at similar places in the programs. The average age of the comparison group was 33.3 ($SD = 9.3$). There were 65% female, 28% male, and 7% gender unidentified students in the comparison sample. The students were 33% married, 60% single, and 7% unidentified for the comparison group.

Design

An ex post facto causal-comparative research design was used to evaluate three hypotheses. Research hypothesis one, do students who received experiential credits perform equal or better compared to the matched sample students? Research question two, are the number of experiential credits received by students related to their academic performance? Research question three, is the relationship between number of credits awarded and academic performance different for students pursuing an associate, advanced start bachelor, and bachelor degree? Academic performance of the students was defined as cumulative GPA for the current study. Experiential credits for students in the study were awarded based on the assessment of learning portfolios through KNEXT. The portfolio evaluation was done by faculty evaluators consisting of both internal and external subject matter experts recommended by the Dean (Associate Dean) of Faculty of their appropriate discipline.

The first hypothesis tested whether there was a significant difference in academic performance between students receiving experiential credit and the matched sample students. The test of this hypothesis was conducted using a one-way Analysis of Variance (ANOVA). The second hypothesis evaluated whether the amount of experiential credit awarded to a student was related to academic performance. The second hypothesis was tested through computing a correlation between GPA and the number of experiential credits received. The third hypothesis tested for whether or not the relationship between GPA and the number of credits awarded was consistent for associate, advanced start bachelor, and bachelor degree students by conducting a logistic regression by degree type. In order to test the third hypothesis, the students receiving experiential credit were grouped based on a median split of the sample and the logistic regression was conducted to determine whether or not there was a significant relationship between GPA and number of credits awarded, investigating the relationship by degree type. The analyses testing hypothesis two and three were conducted only for the sample of students that received experiential credits.

Results

A One-way ANOVA test was used to test the impact of receiving experiential credit on students' academic performance. A significant difference in the average GPA was found between students receiving experiential credit and the matched sample comparison group, $F(1, 788) = 219.86, p < .001$. The average student cumulative GPA was higher for the portfolio students ($3.57(SD=0.59)$) compared to the matched sample students ($2.43(SD=1.12)$). A significant correlation was found between GPA and number of experiential credits, $r(238) = .21, p < .01$. Students with experiential credit were placed into one of two groups based on the number of credits they had received using a median split. A separate logistic regression was computed for associate, advanced start bachelor, and bachelor students testing for the relationship between GPA and the likelihood of being one group versus the other. There was no significant relationship between GPA and group membership for associate and advanced start bachelor students. A significant relationship was found between GPA and group membership for bachelor degree students, with an odds ratio of 2.14. This indicates

that students with higher GPA are 2 times more likely to be in the group with more experiential credit.

Conclusion

Our findings demonstrate that students who receive credit for experiential learning through our KNEXT system are appropriately placed and successful in our academic programs. The comparison of students receiving experiential credit with the matched control sample showed that students receiving experiential credit had on average a significantly higher GPA. Furthermore, the results showed that students with more experiential credit had a significantly higher probability of a higher GPA, particularly for students pursuing a bachelor's degree. The findings of the study suggest that students receiving credit for experiential learning through assessment systems such as KNEXT can be more appropriately placed within a program and succeed in transitioning into an educational institution to complete a program. Establishing a course to teach students how to organize their experiential learning into a learning portfolio has been an important component of student success with the submission of prior learning for consideration of credit. The challenge most learners face in benefiting from a program such as KNEXT is in understanding how to organize and present their prior learning for evaluation.

The development of the OCW Backpack provides a resource for learners to organize their learning for evaluation. The results of this study provide a solid basis for the capability of the OCW Backpack to capture the critical information necessary to evaluate non-traditional learning for university credit, thus optimizing students' overall academic experience. Tools such as the OCW Backpack, when combined with programs of assessing experiential learning, allow self-learners the freedom to plan their own best trajectory for achieving their educational goals, in and out of the traditional educational environment.

Bibliographic references

- Colvin, J. (2006). *Earn College Credit for What You Know* (4th Edition). Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Fiddler, M., Marienau, C., & Whitaker, U. (2006). *Assessing Learning: Standards, Principles, & Procedures* (2nd Edition). Dubuque, Iowa: Kendall/Hunt Publishing Company.
- Lamdin, Lois S. (1997). *Earn College Credit for What You Know* (3rd Edition). Dubuque, Iowa: Kendall/Hunt Publishing Company.

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