

CAPACITY BUILDING THROUGH GRAPHIC DESIGN SOFTWARE USAGE IN OPEN UNIVERSITY MALAYSIA

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ABSTRACT

In the rising economy and fast paced technologies, companies are finding ways to build the capacity of their workforce using cheaper or free technology solutions that can collaborate, share, develop the relevant knowledge and skills. This process is a priority in order to obtain, improve, and retain the skill needed to do their jobs competently or to a greater capacity. Therefore, the widespread use of open educational resources particularly free software seems to offer promising solution in capability building efforts of an individual or organisation facing constraints in the workplace. Thus, this study aims to explore the effectiveness of capacity building initiatives through the use of graphic design software for the targeted support workforce of Open University Malaysia. Accordingly, several workshops were conducted using graphic design software known as Inkscape. Furthermore, a survey was carried out to explore the awareness, perceived ease of use and intention to use of the Inkscape software. The results are very positive and encouraging, especially when the participant are able to create attractive design works and are willing to continue producing them at their workplace.

Keywords: *Capacity Building, Graphic Design, OER, OSS, Inkscape*

INTRODUCTION

In today's rapidly changing environment, there is considerable concern that the workforce in the higher education may lack the capacity and technical expertise to keep up with changes or demands of new practices particularly in making their institution's programme offerings visible and desirable. This concern is important to be addressed as higher education continues to grow, increased competition places more pressure on institutions to market their programmes. The institutions need to creatively explore to support and market their programmes to reach a wider array of prospective students. The promotional activities blended with traditional approach to evolving digital marketing landscape seems promising for greater potential in rapidly increasing their programme visibility. Universities should be managing their brands more proactively by improving their marketing communications to potential students and other stakeholders ([Chapleo, 2015](#)).

However, having the competency to market the programmes as well as creating their own marketing campaign are still a big concern. It is important to note that workers are in need of further and targeted learning opportunities for their professional development and capacity building in their line of work. Nevertheless, institutions are aware that they must provide their workforce with the right skill in the areas that they need most, but the challenge is how to provide equal professional development opportunities at a low or no additional cost to the institution or to their workforce. Funding for capacity

building programmes has reduced in recent years due to escalating operation costs, financial pressures and uncertain economic climate. This trend suggests that workers will increasingly need to manage their own professional learning, including evidencing their performance against specified metrics and frameworks ([Gibbs, 2013](#)).

One solution for this concern in providing flexibility and cost-effective capacity building opportunities is by embracing the advantage of Open Educational Resources. [Bossu & Willems \(2017\)](#) highlighted that the use of community-based creation will increase access to education, improve quality, reduce educational cost and promote collaboration among learners. Thus, the purpose of this study is to build the capacity of Open University of Malaysia (OUM) workforce using graphic design software to support and promote the programme offering. Discussion of the study is concerned with two main questions. First, what are the feedback after experiencing using the graphic design software? Secondly, are the graphic designs created effective enough to support learners and promote the programme offering? In answering the questions raised, the feedback on the graphic design software experienced are described. For the latter, capacity building strategies and recommendation are discussed through open educational resources to support learners and promote the programme offering.

LITERATURE REVIEW

The term Open Educational Resources (OER) was coined at UNESCO's 2002 Forum on Open Courseware as "teaching, learning and research resources in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions ([UNESCO, 2002](#)). Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge ([Atkins, Brown et al., 2007](#)).

The acceptance of OER has been strongly accepted with the establishment of OpenCourseWare consortium that offer a way for effective collaboration with more than 200 members of higher education institutions ([Carson, 2009](#)) including the China Open Resources for Education (CORE) consortium, with 35-member universities. The Khan Academy now provides over 3,400 courses and is used by some 3.5 million students each month. Open source software projects also provided a major impetus for OER. Many software platforms for learning have been developed as open source projects, including learning management platform Moodle, Linux operating system and the Apache http server, statistical computing software known as "R" and many more free software.

The aspiration of OER movement fit perfectly with the direction of higher education institution in reducing the cost spend and enrich learning experience for capacity building of their workforce. Capacity building or best known also as capacity development initiate with the idea to empower people to realise their full potential. [Wignaraja \(2009\)](#) defines capacity building as the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time. While [Bolger \(2000\)](#) refers capacity development as approaches, strategies and methodologies to improve performance at the individual, organizational, network, sector or broader system level.

Capacity building is not a new concept in higher education. Such processes have been used for decades to prepare and train staff to adopt new procedures, new technologies, new policies and so forth ([Brew & Cahir, 2014](#)). Professional development and capacity-building are important and influential instruments to empower staff to embrace and participate in change ([Healey, Bradford et al., 2013](#)). In higher education, capacity building is pertinent particularly to the support workforce as it provides significant proportion of worker dealing with learner's affair in the learning centre or campus. The learning centre is a place that functions to provide variety of academic and administrative support such as class tutoring, registration, payment, academic advising or works dealing with other department or

centres in the most efficient manner. However, recent transformation in the model of learning centres moves toward the concept of a “learning commons” (Keating & Gabb, 2005). Learning commons, which often is equip with information technology as well, can become a place to serve students of today who have already come to expect quick response to questions asked. Thus, this approach is ideal for learning centre to support the learning commons of student needs to learn more in less time with greater ease and confidence with attractively designed of self-help instruction.

METHODOLOGY

This study has conducted several workshops with the aims to build the capacity of targeted OUM’s workforce using OER for graphic design known as Inkscape. The learning outcomes of the graphic design workshop are 1) participant able to install and use Inkscape software in creative manners, 2) participant able to manipulate the free resource of graphic, icon and font, 3) integrate all elements needed to design attractive and creative graphic works. During the training, participants were given additional printed handout (as in the appendix) and asked to explore the tools available creatively.

In seeking the insight, an online survey was carried out, right after workshop completion to measure awareness of the open educational resources available, perceived ease of use and intention to use of the software. Thirty participants attended the workshop voluntarily responded were mostly from the support workforce holding the position as executives, administrators and manager in the OUM Learning Centre. The workshops conducted for the period of two days with 15 participants per each session.

FINDINGS

The findings of this paper are discussed in relation to the survey instrument administered after completed the workshop regarding the usage of the graphic design software known as Inkscape. Before questions postulated specifically on the Inkscape usage, several questions on commercial software usage were asked as in Table 1. This was meant to get participant background using any other commercial graphic design software other than Inkscape.

Table 1: Survey Question on Commercial Graphic Design Software Usage

No	Question
1	Have you ever used or being trained using commercial graphic design software? (Yes, No)
1.1	If yes, what is the software name?
1.2	If yes, have you used it to design for OUM or personal usage?
1.3	If No, what is the reason for not using it?

In brief, 68% of the participant attended indicate that they are yet using any commercial graphic design software before, while, 32% of the participant have positively experienced using the commercial software. Among the preferred commercial software namely Adobe Photoshop and Adobe Illustrator used to design graphic for OUM or personal usage. Nevertheless, they are participant who have been trained with Adobe, yet to use the software on their own. Several concerns were highlighted as a reason, including, software license has expired, complexity of the software, high computer specification required to work with the software and the current job does not required to do any design works.

Table 2: Survey Question on OER Graphic Design Software Usage

Item.	Question
2	Have you ever used any of OER software in designing the graphic before? (Yes, No)
2.1	If yes, what is the software name?
3	How did you find the task to design the graphic using Inkscape software? (5-point Likert scale from Very difficult to very easy)
4	I would find the Inkscape software is easy to use. (5-point Likert scale from strongly disagree to strongly agree)
5	Do you have any intention to use Inkscape software for your personal or work usage? (Yes, No)
5.1	If yes, in what ways that you will use it?
6	Is there any other support that you need for graphic design in your workplace
7	Any opinion, on how the training can be further improved?

In regards of questions postulated on the usage of OER graphic design software as in Table 2. Surprisingly to note that, none of the participants have use any of OER software before to design graphic. After the Inkscape usage, the findings from item 3 and 4 indicates roughly equal positive experience. Item 3 found, 87% indicates that the task to design graphic using Inkscape software is either very easy or easy to use and the rest indicates neutral. Meanwhile for item 4, 91% either strongly agree or agree that Inkscape software is easy to use, and the rest 8% is neutral. Item 5, indicates 96% stated the agreement on the intention to use the software for various promotional purposes such as to design flyers, banners, poster, leaflet, video clips, buntings and announcements. Further support needed such as chances to upgrade their computer requirement and further training on creative artworks. Further improvement can be made by having more graphic design workshops for different level of expertise.

DISCUSSION

The workshop conducted intended to build the capacity of OUM's targeted support workforce using OER graphic design software in their workplace. The findings indicated positive experience on the easiness of the software to do graphic design and willingness to use the software in their workplace. The graphic design workshop offers an advantage to create promotional resources such as ads, poster, brochures, pamphlet, banner, leaflet, booklet or many other types of design. Nowadays, marketing campaign can be published through the source of social media sites, like Facebook, MySpace, YouTube, Flickr, blogs, Twitter have big potential to influence for higher education choices. Thus, the capacity for graphic design skill seem to be as priority particularly to the workforce in OUM's learning centre who is in the best position to campaign the programme offering to the potential leaners while assisting the existing learners in their study.

Nevertheless, the graphic design skill is not limited to only creating promotional materials but can be further enhanced in creating self-help learning instructions. This initiative is to capture common learning inquiries that learners been asking at the learning centres throughout semester. Therefore, self-help instructions such as online registration, Employees Provident Fund (EPF) withdrawal has been created to assist for what learners should know and be able to do in an easy step. Even though, learning instruction has been fairly explained in broad level of detail from the student handbook accessible through online, learners of today always expect fast and quick response whenever they come to the learning centre asking for their needs. These learning instructions designed can be posted at the notice board or noticeable corner in the learning centre. This effort will help to reduce repetitive inquiries which by then give an advantage to the support workforce to push their time in promoting the programme offering.

Building workforce capacity with graphic design competency is not a simple task. There is no magic formula or predetermine working days that guarantees effective design created. Instead, the process is a trade-off between workload, creativity and desire to learn. Nowadays worker plays multiple roles and struggle to stay afloat. Adding tasks to be competent in designing their own marketing campaign can become time intensive. A sustainable strategy must be in place for creating the promotional design together and voluntarily share their idea and creative works from a shared platform within the community who have the same interest or nature of work. This active collaboration to some extent will minimise the effort to create creative works for every single event and have the advantage of many design choices or input from the community.

However, strategies for capacity building is a long-term and continuing process and must take into account people's motivation to participate in the activities. It is through recognition or incentives offer will push or complement the motivation for workforce to learn, adapt and grow to their full potential.

The policy maker of the institution need to engage in serious capacity-building efforts such as incentive for academics to improve quality content, incentive for worker to pursue professional development or engage in the improvement of operation process. Series of training need to be planned to enhance their knowledge, skills and understandings as well as positive attitudes for the desired developmental change.

CONCLUSION

Capacity building encompasses people, technology, institution and resource capabilities. A fundamental goal of capacity building is to obtain, strengthen and maintain the capabilities of every stakeholder in fulfilling their own objectives and potential. Capacity building with open educational resources movement enables new forms of collaboration and production. This is important particularly in stiff competition to market and sustain the trust of the programme offering, increasing competency with the right skill in the areas that they need most for effective support and marketing capacity give an advantage to better understand the decision making, perception and branding of the higher education. However, the needs for capacity building are always changing and there are no ready solutions. Further research need to be explored with mechanism such as partnership development between institution and industry that give access to: knowledge and skills; innovative and proven methodologies; networking and funding opportunities; and strategies for advocacy, government relations and public outreach.

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ATTACHMENT

Open Educational Resources Creative Tools

1. Installing Inkscape (vector tool) <https://inkscape.org/en/>
2. Getting started with Inkscape:
 - <http://vektorrascheln.de/posts/2015/Dec/inkscape-fuer-einsteiger-teil-ii-praxis-en.html>
 - <https://fedoramagazine.org/getting-started-inkscape-fedora/>
 - <https://fedoramagazine.org/inkscape-adding-colour/>
 - <https://fedoramagazine.org/inkscape-design-imagination/>
 - <https://fedoramagazine.org/inkscape-fedoracape-creating-and-editing-paths/>
 - <https://imagesbyheatherm.wordpress.com/2009/10/05/text-in-a-circle-using-inkscape/>
 - <http://www.designmarkgraphics.co.uk/blog/articles/2013/02/22/draw-a-bright-sticker-inkscape.html>
 - <https://design.tutsplus.com/tutorials/kerning-spacing-and-other-text-tricks-in-inkscape--cms-20576>
 - <http://www.designmarkgraphics.co.uk/blog/articles/2014/12/04/create-curved-vector-ribbons-in-inkscape.html>
 - <https://design.tutsplus.com/categories/inkscape>

3. Utilising free vector graphics from:
 - <http://www.freepik.com/>
 - <http://vector.me/>
 - <http://retrovectors.com/>
 - <http://www.vectorportal.com/>
 - <https://www.vecteezy.com/>
 - <https://pixabay.com/>
 - <https://depositphotos.com/>
4. Utilising free icons from <https://www.flaticon.com/>
5. Searching for the best fonts of 2017:
 - <http://graphicdesignjunction.com/2017/01/50-best-free-fonts-for-2017/>
 - <http://imcreator.com/blog/free-fresh-fonts-2017-new-designs-every-month/>
 - <https://www.fontsquirrel.com/>
 - <https://fonts.google.com/>
6. Combine all! Be creative!!