Journal of Education Studies | Volume 46 Number 4 (October-December 2018) pages 102-123
Special Issue : Educational Technology and Communications

แฟ้มสะสมผลงานบนคลาวด์ เครื่องมือในการเชื่อมโยงการเรียนรู้เชิงประจักษ์

Investigate Cloud-Based E-Portfolio, an Explicit Tool for Learning Transitions

Suthanit Wetcho

บทคัดย่อ

การสร้างแฟ้มสะสมงานอิเล็กทรอนิกส์โดยใช้ระบบคลาวด์เป็นฐาน เป็นรูปแบบใหม่ของการเรียนรู้ ซึ่งไม่เพียงแต่การใช้เป็นเครื่องมือแสดงผลงานเท่านั้น แต่ยังสามารถใช้ในการแสดงกระบวนการทำงาน การเก็บรวบรวมข้อมูลการทำงาน และการสะท้อนคิดบนพื้นฐานการเรียนรู้อย่างเป็นระบบ ทำให้ผู้เรียนสามารถเชื่อมต่อการเรียนรู้ได้ดียิ่งขึ้น ทั้งในการเชื่อมโยงความรู้จากระดับชั้นหนึ่งไปยังอีกระดับชั้น และการเชื่อมโยงระหว่างประสบการณ์เดิมกับประสบการณ์การเรียนรู้ใหม่ ๆ แฟ้มสะสมผลงานอิเล็กทรอนิกส์เป็นเครื่องมือเก็บรวบรวมผลงานอย่างเป็นระบบ ซึ่งแสดงความสามารถของผู้เรียน ทั้งในด้านกระบวนการ ความรู้ ทักษะการทำงาน และทัศนคติ แฟ้มสะสมผลงานอิเล็กทรอนิกส์ยังสามารถทำหน้าที่เป็นเครื่องมือการสอนที่มีประสิทธิภาพสำหรับการสะท้อนตนเอง และก่อให้เกิดการพูดคุยกับตนเองอย่างมีความหมายและถูกใช้เป็นเครื่องมือในการพัฒนาทักษะต่าง ๆ เช่น ความสามารถในตนเองการกำกับตนเอง การคิดเชิงวิพากษ์ การแก้ปัญหา และการเรียนรู้เชิงผลิตภาพ แนวความคิดในการใช้แฟ้มสะสมงานอิเล็กทรอนิกส์โดยใช้ระบบคลาวด์เป็นฐานเป็นการผสมผสานเชื่อมโยงกระบวนการของแฟ้มสะสมงานอิเล็กทรอนิกส์เข้ากับระบบคลาวด์ ซึ่งผู้เรียนมีบทบาทสำคัญในการสื่อสารกับผู้เกี่ยวข้องอื่น ๆ ประกอบด้วยกระบวนการทำงาน 5 ขั้นตอน ได้แก่การเก็บรวบรวม การคัดเลือก การสะท้อน การประเมินผล และการนำไปปฏิบัติจริง บทความนี้ได้อ้างถึงทฤษฎีการเรียนรู้ทางปัญญาสังคมซึ่งอธิบายพฤติกรรมกระบวนการทางปัญญา และปัจจัยส่วนบุคคลอื่น ๆ ที่ใช้เป็นแนวทางในการพัฒนาอาชีพ

คำสำคัญ: ระบบคลาวด์/ แฟ้มสะสมผลงานอิเล็กทรอนิกส์/ การพัฒนาด้านอาชีพ/ การเชื่อมโยงการเรียนรู้

ABSTRACT

Cloud-based E-Portfolio is a new way of using portfolio in learning progress which is not only the product of learning is shown but also the process of their works. A systematic collection of their works and reflections of their own background learning help learners face the transitions. Both taking a step to another class or level and connecting between new and previous learning experience. E-Portfolio is a systematic collection of evidences which is showing the students' true abilities in terms of progress, knowledge, skills and attitudes. E-Portfolio can be served as a powerful pedagogical implement for self-reflection to control their self-talk in a meaningful way and a skill developing tool such as self-efficacy, self-regulation, critical thinking, problem solving and productive learning. The idea of using Cloud-based e-Portfolio is to blend e-portfolio process into the cloud system which learner plays a dominant role and to communicate with other stakeholders. The five steps are as follows collection, selection, reflection, evaluation, and take action. The Social Cognitive Theory which functioning behavior, cognitive and other personal factors is discussed as a pathway for career development.

KEYWORDS: CLOUD-BASED/ E-PORTFOLIO/ CAREER DEVELOPMENT/ LEARNING TRANSITIONS

Introduction

A transition means a shift from one person or one place to another. Behind the transferring process, Beach (1999) described transferring as a construct in the education psychology which refers to the appearance of a person carrying the product of learning from a task, a problem, a situation or an institution to another. In the rapidly changing society with only a career guidance in the school system to help learners in transferring their experiences and contexts across time may not be adequate. Portfolio can be served as a tool to gather pieces of information on oneself to make better decision about their own life in order to promote our learners to improve better

transition from a developmental change in the relation between an individual and one or more social activities. Kennedy and Sohlberg (2017) stated that portfolio is a foster self-coaching tool that helps students explicitly to identify about themselves, modify strategies of their need, assess their own ability to implement strategies, learn to rely on others for support, and become more resilient in adjusting their strategy and goal.

The evolution of portfolio in 21st century develops the ability of learner to be able to collect, select and reflect on their own collections of work to show the growth and the understanding on the period of learning. E-Portfolio took place in the era of web 2.0 to allow learners to collect the artifacts in any media types such as audio, video, graphic and texts using hyperlink to organize the material. After the coming of Internet of Things (IoT) which enable the cloud-service to store, connect and exchange data on cloud has been widely used. It's the time for E-Portfolio to redesign the platform again. The E-Portfolio is replaced by Cloud-based E-Portfolio.

A paradigm shift consistents with the considerations of the current trend and the situation from our National Education Plan (2017-2579) by Secretariat of the Council of Education (2017), which emphasized the importance of the information and communicating technological development. As the result, many countries in the world are facing free and boundless global economy under new challenges in the globalization of the Internet of Things. The citizens should have a quality with the knowledge, abilities, skills and desirable attributes they can learn and develop to maximize capacity in aptitude and interest, and also to work and live happily with other people in the society. E-Portfolio can be used to promote the development of guidance systems in schools, to make a choice in career decision and to organize the career in the field that learners are interested. Match up with the new admission system for higher education which the Association of the Presidents of Thailand announced the TCAS Admission System for the applicants to submit a portfolio to higher education institutions in selecting candidates for the first round of acceptance that will start from year 2018 onwards.

Learning Transitions

The concept of transfer has played a major role in American education and psychology world during 1890-1940 by many psychologists. E.L Thorndike (as cited in Beach, 1999) proposed an empirical response to the law of mental discipline, "Mind as Muscle" metaphor which transfer function of identical elements between tasks structuring rather than the generic exercising of the mind. While John Dewey shaped a transfer as a progression for public education within a larger community. Transfer defines a narrow and isolated aspect of learning.

Beach (1999) identified four primary types of consequential transitions are lateral, collateral, encompassing, and mediational. The lateral transition happens when an individual move from one activity to another that is related to the historical like moving from school to work that is appears to be a developmental link between learning at school and the learning required for the work. The second type of transition is the collateral transition, where an individual is engaged in two or more historically activities like moving between different classes in school. Collateral transition is multi-directional for example learning the basic in mathematics might transfer to understanding gear ratios in mechanics or engineering class. The third is the encompassing transition occurs when participants engage in a single social activity within the boundary of that activity for example participating in communities of practitioners that require the mastery of knowledge and skill for newcomers. Lastly, the mediational transition in which the participant has not yet experienced in that activity like starting to learn the mixing of the drinks as a bartender in a private vocational school. Transfer is later defined as a learning perspective by Mayer and Wittrock (1996) as learning something on a second tasks (B) that affect the existing knowledge (A). There are 5 possible learning transfer relations between old and new learning.

Possibility 1: Some learning occurs prior to A and B but is excluded from learning on both because it is not seen as relevant.

Possibility 2: Some learning occurs prior to A and B and is used in learning A and B because it is seen as relevant to both.

Possibility 3: Some learning occurs prior to A and B but is used only in learning B because it is seen as relevant to B and not A.

Possibility 4: Some learning occurs on A but is not used in learning B because it is seen as irrelevant to B.

Possibility 5: Some learning that occurs only on A is used during learning on B because it is seen as relevant to B.

Tynjälä, Stenström, and Saarnivaara (2012) reported the paradigm of the relationship between school system, labor market and production unit to create role to form the transition process between the institutions and in which students can develop themselves while participating in full-time experience, take the gap years for extracurricular activities like volunteer work and use themselves as a portfolio learner which composite their learning experiences. In the rapidly changing world, it's clear that people need to transfer their learning through their school transitions and learn new skills and knowledge in order to prepare themselves through their life to serve the organization in the labor market that required the multi-professional skills. E-Portfolio can be represented as a bridge to connect the smooth learning transitions for example, from primary to secondary (Howe & Richards, 2011) to encourage learners to manage their transition and empower them on the achievement and needs in the new environment.

Transition is a period of changing in self-identity born out of uncertainty in social and cultural worlds of individual that much more than changing the physical location. The transformation in the lives of students should be managed to ensure students are able to grow and cope with the difficult phased in their education. During the transition periods, there are three main areas of concerns which are 1) The social dimension 2) The continuation of curriculum and pedagogy and 3) The individual progression. The emphasize of

an individual progression using e-portfolio will take into account of the individual history and background.

Theoretical Overview

Focus on Learning Theory

Social Cognitive Theory

Focusing on functioning behavior, cognitive and other personal factors together with the environmental events that interacting with each other. Bandura proposed the Triadic Reciprocality model that included the behavior, cognitive and other personal factors, and environmental influences operate interactively to each other. (Bandura, 1986) The schematization shown in Figure 1 The interacting factors will be various for different activities, individuals and circumstances. However, the life paths are affected by the encountering chance through the personal influence and social factors. At the point of personal determinants, the impact of chance encounter may include the entry skills, emotional ties, and values and personal standard. In the social determinants, the impact of the fortuitous encounters includes the milieu rewards, symbolic environment and information management, milieu reach and closeness, psychological closeness, nonsocial fortuitous events and fostering values futures.

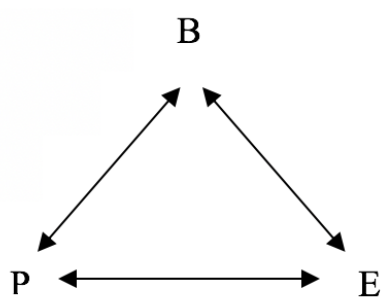

Figure 1 the Relations between three classes of determinants in triadic reciprocal causation

From Social Cognitive to Self-Efficacy Theory

In the aspect of personal, the growth of self-efficacy through transitional experiences of adolescence in each period of development causes a new challenge for coping efficacy. For example, from the childhood to adulthood, children must take full responsibility in every dimension of their life such as mastering new skills and coping with the relationships. The theory takes a concern of self-efficacy in adulthood that learners have to prepare for self-reappraisals of capabilities for their occupations in the middle aged and to retain the self-esteem as a physical strength. When people are making choices during informative periods in their development shape the course of their lives, self-efficacy becomes functional as a major mediator. Previous experiences during the informative period can be used to set the direction of life course by affecting the choices made and the successes attained.

Self-Efficacy means self-confidence in behavioral, thinking and emotional expression (Bandura, 1986) Moreover thought form Bandura (1997) also discusses self-efficacy skills that affect career decision making by stating that most people often avoid making career decisions because of uncertainty about themselves. Or tend to postpone the decision until it is time to be. Making a career decision is not just about choosing a career but also helps in developing problem solving skills when facing unpredictable problems.

Although Self-Efficacy is an important driving force to motivate learners however, the development of self-efficacy skills cannot be done in only one dimension but need other variables supported, such as financial support (Morgan, 2014, p. 5) In accordance with the study of Lent, Ezeofor, Morrison, Penn, and Ireland (2016) whom adopted a model of social cognitive model in the career self-management. Bandura (1997) states the elements of creating self-efficacy includes 1) Enactive mastery experience 2) Vicarious experiences comparisons 3) Verbal persuasions and allied types of social influences and 4) Physiological and affective states social cognitive model of career self-management: toward a unifying view of adaptive career behavior across the life span

Focus on Career Developmental Theory

Career Development Theory

According to Ginzberg and Associates (as cited in Duggan & Jurgens, 2007) include 3 stages in the career selection process which are; the fantasy stage (occurs in childhood before age 11) students involved in play and imagination, the tentative stage (during age 11-17) students developed their interests, capacities and values along with a transitional period and lastly the realistic stage (from age 17 to the early 20) that students tend to explore, crystallize and specify their career, students may face the ambivalent and indecisive in this phrase. The transition period individuals become aware of the reality and significance of decisions that must to be made. Their decisions are based on the understanding that adolescents have of themselves as a result of the information gleaned from previous phrase.

Career Decision-Making Theory

The Career Decision-Making Theory by Tiedeman and O'Hara is used to explain how career decisions are actually made and prescribe how career decisions ought to be made. The theory is proposed in two-stage models, the first model describes what happens as a person formulates a career choice, and the second stage illustrates what ensues when people attempts to implement their careers. Improving Career Decision Self-Efficacy skills are required when learners lack of confidence in decision making, lack of identification or external factors to develop the ability of decision (Taylor & Betz, 1983)

To support this idea of career planning, Office of Intramural Training and Education (2016) has mentioned the Cognitive Information Processing theory (CIP) that put forth a CASVE decision-making cycle to help understand a good career decision-making process which focuses on action-oriented steps which includes Communication (understanding the external demands--events and significant others, and internal states-emotions, avoidance behavior, or physiological cues that signal the need to begin problem solving), Analysis

(clarifying or obtaining knowledge about self, occupations, decision making, or metacognitions), Synthesis (elaborating and synthesizing alternatives), Valuing (prioritizing alternatives and making tentative primary and secondary choices), and Execution (formulating a plan for implementing a tentative choice that includes a preparation program, reality testing, and employment seeking). The cycle is a recursive process, in which individuals move backward and forward through the cycle, in response to their emerging decision needs and the availability of information resources. (Sampson, Peterson, Lenz, & Reardon, 1992)

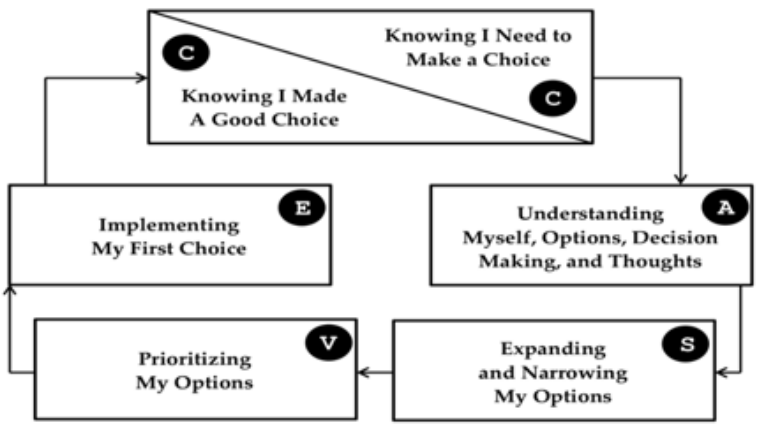

Figure 3 the CASVE model

E-Portfolio through transitions

The stages from CASVE model starting at knowing I made and need to make a good choice point then going through to the understanding of self, options, decision making and thoughts through their skills, knowledge and experience they have developed. Follow by the expanding and narrowing the options and lastly setting up the prioritizing and implementing the choices. Activities that can be developed this process including self-talk to create self-awareness and an individual's ability to assess and control where they are in career decision-making. E-Portfolio can be served as a powerful pedagogical implement for self-reflection to control their self-talk in a meaningful way.

E-Portfolio is a systematic collection of evidence in which teacher and student use to monitor student progress, knowledge, skills and attitudes as an evidence of the student's true ability. The portfolio includes a portfolio of student progress, students' comments on their learning and selected works. (Cole, 2000) The example of developed e-Portfolio has identified by Ash (2000) includes 1) Communication, to support the content from the subject, encourage the learners to bring their knowledge, views and opinions in order to achieve the standard of learning. 2) Acceptance of Self and Others to create awareness of strengths and weaknesses. Helping learners to reflect on their own growth and accepting the cultural diversity and social responsibility 3) Self-Reflection, help learners learn from mistakes and the success of their own. 4) Critical Thinking and Problem Solving, to understand the depth of learning through critical thinking and problem solving and allow students to analyze, synthesize, and evaluate information for decision making 5) Value and Ethics including honesty, justice, equality, cooperation, self-acceptance, and others to create value in making decisions in the real world. 6) Conflict Resolution to understand the context and lead to solve the complex solutions. Social, political, economic and environmental diversity.

Type of Portfolio

Stefani, Mason, and Pegler (2007) identified the student's development needs and progress through portfolio in 2 ways. The Reflective Portfolio intended to enable students to assess their own growth and changes in their thinking over a period of time. This may be a purely personal portfolio. The Assessment Portfolio used as a part of the assessment strategy to present documents and the other artefacts are collected primarily for the purpose of assessment. Ash (2000) divided the portfolio into two major forms and classified the sub-types based on usage and goals 1) Instructional Portfolios show the work assigned and the workload including draft documents, brainstorm notes and feedback from teachers. Self- reflection in portfolio helps to create value in the students themselves and communicate with

parents to develop in the classroom. 2) Assessment Portfolios show the level of understanding or learning of students along with self-assessment, peer-assessment and from their teachers. It consists of sub categories. 2.1) to show the events, projects, high stakes / graduation 2.2) uses of K-12 career portfolio 2.3) whole group portfolio 2.4) portfolios in subject area and 2.5) showcase Portfolio. H. C. Barrett (2010) categorized e-portfolio in 3 domains which are 1) The Developmental Portfolio e.g. project portfolio to show the progress of works 2) Reflective Portfolio e.g. learning portfolio to show the ability and understanding 3) Representational Portfolio e.g. showcase portfolio e.g. photo portfolio.

To create the new e-portfolio, there are many steps to take. According to the previous study (Suthanit Wetcho, 2016) summarized the process of reflective electronic portfolio. It is divided into 5 steps as follows 1) Collection to collect the invention through the course throughout the year or direct experience in the field which helps in learning or development under the knowledge. 2) Selection is the selection of works or artifacts from the total collection in Step 1 to evaluate and select the best evidence of growth 3) Reflection is a reflection of events. By telling stories of their own experiences that have contributed to their learning, 4) Evaluation both formative and summative assessment from various stakeholder and 5) Take Action and Connect to link the ideas between reflection and evidence or a piece of work that represents learning to create their own image and practice the systematic thinking about experience and what is learned.

Cloud-based e-Portfolio

Baris and Tosun (2013) discussed the approach to selecting tools for electronic portfolio which reduces the time constraint and creates a user-friendly environment with 4 steps:

1. Setting up electronic portfolio and identifying target audience.

- What type of portfolio is designed? And for what purpose? And who is the user?

2. The selection of subjects or contents of the portfolio.

- What is the platform and the appearance of the portfolio? What piece of information is presented? And what is the access schedule?

3. Use of portfolio

- What is the format of the content presented in the portfolio? What is the level of interaction with others? And how the social networking is used with portfolio.

4. Presentation of portfolio

- The portfolio is offered in any channel, such as discs, websites, etc.

The trend of using e-portfolio, Parkes et al. (2013) summarized useful tools for the electronic portfolio consist of 1) Tweets which not only does the synthesis of text compile through 140 characters but also connects to other networks 2) Video Collages which are the evidences of the growth of learning from work within short 3 minutes to reflect on the idea. 3) Weekly Blogs and Vlogs to standardize the reflection practice and communication with team administrators and related people. The students should evaluate their own growth on a weekly basis. Tang, Chen, Yang, Chung, and Lee (2016) stated that Facebook can be used as a tool to provide support in all three forms. This gives the opportunity to provide feedback and leads to the solution like getting advice from friends quickly. Moreover, Facebook also provides a reliable and secure environment to share a happy moment within the group and communicate both information and emotional supports.

After the era of cloud computing which the e-portfolio is ubiquitous accessed on the cloud system. Students can work collaboratively as a workspace process which learning experience occurs via reflective practice. Teachers and their peers can play the role of providing feedbacks both

synchronous and asynchronous. H. Barrett (2010) proposed the model of using cloud-based storage which integrated the 3 stages process beginning with the selection/reflection through the direction and presentation and follows by the self and teacher evaluation. Every students' works are transferred to be digital format and become a part of online portfolio like using free online storage (with free limits) for example Dropbox, Box.com, Google Drive (working with GoogleDocs format) and Microsoft OneDrive working with Office 365. Yang T.-C. , Chiang, and Yang (2012) provided a framework of processing learning portfolios bases on ubiquitous learning activities. The u-learning environment is employed by the cloud platform as a service (PaaS) approach to enhance learning outcome.

To conclude the idea of using Cloud-based e-Portfolio, the integrated of e-portfolio process is blended into the cloud system. Learner plays a dominant role and communicate with other stakeholders. In the collection and selection, the acceptance of self and others are generated. The reflection process helps learners to reflect on their own growth and learn from mistakes. The evaluation creates the opportunity to develop critical thinking, learning to solve the complex problem and understanding the depth of learning for decision making. Value and Ethics occur within learning community when learners are taking actions and connecting with others. Finally, they can implement their choices, develop their careers and get through the learning transitions.

Explicit case study

E-portfolio is used in every transition periods from the lower levels like kindergarten, primary school, secondary school through the higher education and working life. There are many explicit case studies learned from the researcher who works on the development and experiment of e-portfolio system.

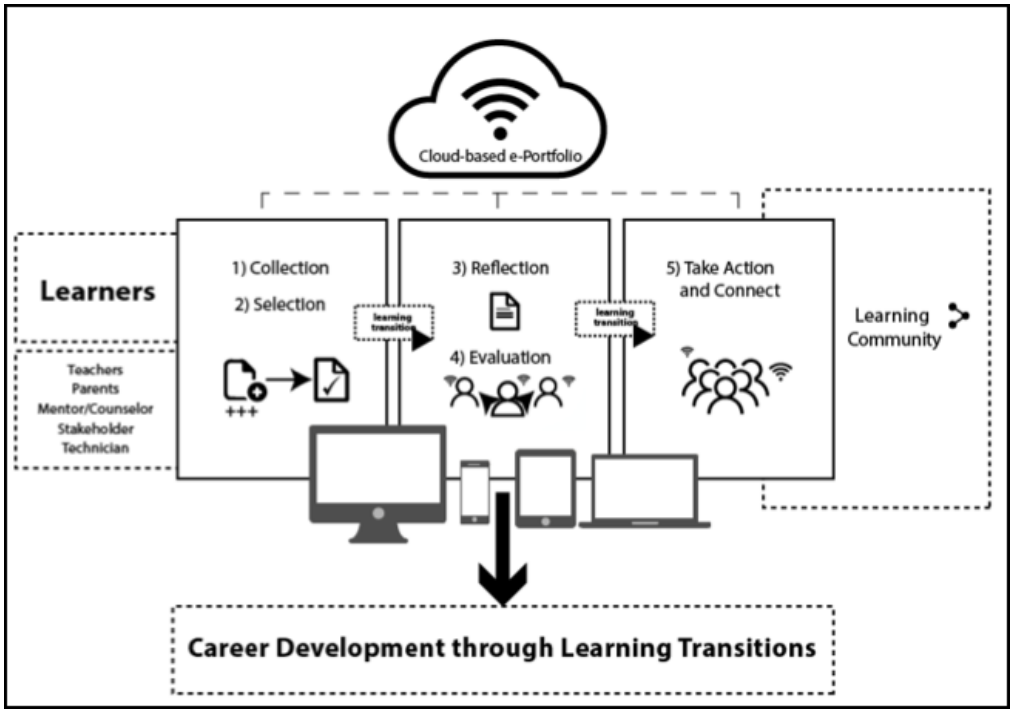

Figure 4 The Cloud-based e-Portfolio approach

Ada, Suna, and Elkonca (2016) pointed the views of using e-portfolio in transition from elementary to secondary education in the roles of academicians, school administrators, and teachers which included e-portfolio to make the contribution to the period before the exam. From School to College, Ayo (2017) developed portfolio for running the university's operation on internet using cloud computing technology. Moreover, From HE to Working Yu (2011) emphasized on using e-portfolio as a tool for employers who are interested in using electronic work files to recruit people to work which provides useful insights for them, such as writing, reflection, learning, etc. Lackner and Tanya Martini (2017) stated the uses of self-reflect on the learning experiences on e-portfolio in the transition to work context which provides the opportunity for students to indicate the majority of their significant learning experiences e.g., paid and unpaid work, extracurricular activities and final interview. The progression is predicted by student grades on a self-reflective e-portfolio.

Otherwise, e-portfolio is used to develop other needed skills for learners such as self-efficacy, self-regulation, critical thinking, problem solving and productive learning. To clarify these ideas, the writer has divided the use of e-portfolio in to different levels using the explicit case study. In school, Goodman and Cherrington (2017) introduced the using both traditional and e-portfolio for assessment in early childhood education (ECE) in New Zealand in which encourages learners to read and reflect in the meaningful ways to develop ownership over their own learnings. The previous research also reported the self-efficacy skill on career decision is developed after creating the reflective e-portfolio in a small social support group which found significantly higher at .05 levels (p=.00) M= .59 (Suthanit Wetcho, 2016)

E-Portfolio also used in the higher education as stated in Thai Qualifications Framework for Higher Education (TQF: H. Ed.) (Krongtip Nakvichet, 2015) stated the 2 types of educational measurement includes product evaluation or summative evaluation and process evaluation or formative evaluation. The evaluation process should adopt various types of measurement including Portfolio as an authentic assessment tool which gives the empirical evidence by collecting data via both documents and electronic files. Hubert, Pickavance, and Hyberger (2015) revealed that e-portfolios took prominent places in the lives of students at colleges and universities and also used more commonly use in the high-impact practices (HIPs). Prakob Koraneekit (2007) stated the results from the development of e-portfolio formats using self-assessment of students practicing professional teachers research. The teacher's professional critical thinking was significantly higher than before at the .05 level. Chye, Liau, and Liu (2013) pointed the explicit view on using e-portfolio in the context of problem-based learning. Moreover, researchers stated that student teachers' motivation and perceptions are developed when using e-portfolio in context of problem solving in the positive way. Beckers, Dolmans, and Merriënboer (2016) conducted a systematic review to identify the influences on the developing self-directed learning in e-portfolio activity which integrated

into the educational routine. Teachers coach students regularly, scaffolding to increase motivation, and design e-portfolio to facilitate goal-setting, task-analysis, plan implementation, and self-evaluation. Yang M., Tai, and Lim (2016) proposed the role of e-portfolios as the authentic assessment to support productive learning like doting tasks to develop learning interests, engagements in reflective and self-regulated learning. The e-portfolio is used for the first-year undergraduate students at a higher education institution in Hong Kong with formative functions included showcasing and sharing learning artifacts, reflecting learning processes, connecting learning and enabling feedback for improvements. Finally, e-portfolio has a potential to use for a working life. Tammets and Laanpere (2014) reported that the e-portfolio could be a potential tool in recruitment as a transition tool from academic institutions to professional institutions. Oishi, Seki, and Kondo (2017) suggested a case study of using Facebook e-Portfolios for Career Education to promote the activities that students tackle in the program which provided learning logs and reflective journals.

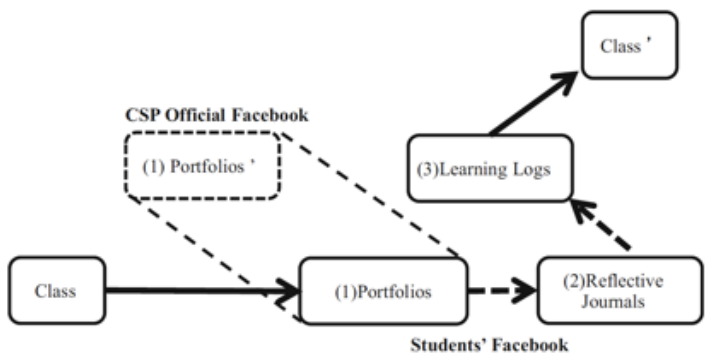

Figure 5 Students' activity on Facebook E-Portfolio

Portfolio Assessment

Portfolio can be a possible tool for students to take responsibility for assuring their own learnings using assessment analytic data (in the form of a report or even a dashboard). (Ellis, 2017) Learners can get feedbacks during the e-portfolio development from teachers and tutors through 1) the peer assessment, which learners are sharing information or allowing for work to be

reviewed by other students. Alternatively, peer assessment can mean a social interaction (using technology) and an encouragement for learners/peers to engage in dialogue on each other's work. 2) Teacher/tutor led feedback or dialogue of sharing expertise between student and teacher, encouraging the student to progress their learning. Shotiga Pasiphol and Pitak Sotthayakom (2014) mentioned the formative assessment steps by providing feedback to identify strengths and weaknesses which the information is provided by the teachers, friends, students and parents in electronic form. In two types. 1) Feedback is the message that describes the action or the work of the students whether it is right or wrong and good or bad, the feedback will be based on the rubric criteria that teachers and students developed together. 2) Feed forward is a message or a piece of information that is a way to improve your work in the future without mentioning the advantages or disadvantages of the work. HC Barrett (2010) shared the reflections as the assessments in portfolio in two levels: 1) Portfolio as a process which integrated audio and video storage to reflect on learning during the learning experience. 2) Portfolio as a product is a reflection of the work presented by setting the goal of learning through writing articles and blogs, to reflect on ideas to show that we have achieved goals.

The Missouri Department of Elementary and Secondary Education (2014) defined three levels of evaluation of the portfolio: 1) work samples selected, teacher should establish clear criteria for evaluation, let students understand the components of the portfolio. This may be used to assess performance, evaluate by using checklist or the rubric. 2) reflections on the work, both the work process and the reflections on works. 3) portfolio it-self, is to check that the portfolio meets the criteria, such as evidence of growth. Variety of workpiece portfolio management balances between the process and the work. Based on the synthesis, there are 6 criteria for e-portfolio evaluation which are: 1) the selection of the evidence or sample of the work, 2) the design of the multimedia application, 3) the planning. , state of layout and text. 4) portfolio description / Experience connected. 5) the completion of

portfolio. 6) Reflection Ash (2000; Shotiga Pasiphol & Pitak Sotthayakom, 2014; Koraneekit & Khlaisang, 2014; The Missouri Department of Elementary and Secondary Education (2014)

Conclusion

The developmental changes in cloud-based e-Portfolio which proposed in this article reflected the benefits of using cloud system which learner plays a dominant role for collecting and reflecting on their own learning. This will be positive results for the learning transitions both lateral transitions (changing the levels to learn) and collateral transitions (transfer of learning) In addition, the potentials use for assessing learners both process (formative assessment) and product (summative assessment) are included in electronic form which learners can get feedbacks and set the goal for themselves. The proposed models of coaching by Whitmore (2010) stated a structure and the sequence of questions for transition which can be integrated into cloud-based e-portfolio process including: Goal setting for the session both short and long term, reality checking to explore the current situation, options and alternative strategies and to answer the questions What is to be done, When, by Who, and How. The evidences will grow during this step together with the supportive learning community. This explicit tool is correlated to the success prediction in learning transitions.

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Authors

Suthanit Wetcho, Faculty Member at Department of Educational and Communications Technology Faculty of Education, Chulalongkorn University
E-mail: suthanit.w@g.chula.edu