

Informal learning on the Internet and its importance to curriculum

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Abstract

For many people 'learning for life' will function around learning informally through the Internet. When informal learning plays an important part of people's lives, the role of higher education in a world where sharing of knowledge is no longer a unique function of a learning institution, must change to stay relevant. Formal learning institutions have an important role of validating, standardising, and certifying knowledge in many areas but their role in imparting knowledge must change significantly as the ability to seek and construct knowledge is removed from the educational institutions and incorporated into informal learning experiences. If students become disengaged and disillusioned with the value of formal learning they may continue to learn but choose to bypass tertiary qualifications because the person learning informally can learn in their own time, focus on their own interests, and still test themselves against social criteria of success. However the ever expanding access to the Internet means that knowledge can be both overwhelming and transient and making personal sense of this means that people can close off to interpretations which do not support their own constructions. When so much information is subject to highly subjective construction, there is a great need for formal institutions to be actively involved in the creation of critical skills to ensure that subjective knowledge does not become the norm

Introduction

The Internet has changed the way people find information and acquire knowledge. According to Siemons (2005)[23], informal learning is such a significant aspect of our learning experiences, formal education is no longer the only way to learn. As people change the way they learn, formal learning institutions need to take up the challenge of how to incorporate 'learning for life' into curriculum and diversify the role of educators so that the impact of the informal learning on the Internet does not lead to a community devaluation of formal education.

The purpose of this paper is to consider the impact of the way people learn informally from the Internet on formal education, particularly in relation to curriculum development. It will examine the validity of such learning and discuss how previous informal learning can be built upon to keep students engaged when they chose to undertake formal learning.

Hiemstra (2009)[8] suggests the Internet is a great equaliser of learning. He says that if adults have the motivation, drive, and patience they can learn by themselves. They do it through social networks, opinions presented in tools such as blogs and discussion forums, and through information available in accredited and non accredited sources the use of which can encourage the development of quite sophisticated evaluation skills.

Merriam & Caffarella (1998)[16] believe that informal learning is at the heart of adult education because of its learner-centred focus and the lessons that can be learned from life experience. This notion suggests that the new things people learn will be primarily based on their own experience and interpreted accordingly. Livingstone (2001)[12] argues that informal learning constitutes the most elusive and shifting domains of adult learning but also the most extensive. However, educationalists in higher education institutions often chose to reject student's previous informal learning because it lacks academic rigour and formal assessment. They frown upon the use of tools such as Wikipedia and tell students that 'googling' will lead them to non-peer reviewed content that is perceived to be of dubious value (Achterman, 2005)[1], (McArthur, 2008) [15], (Reilly, 2008).[18].

As a result of this access to informal learning on the Internet, when people choose to be educated at formal institutions they may bring a body of experience, knowledge, and learning, achieved by using the Internet. They will also bring their own constructions of learning, written expression, critical application and review, search skills, use of media and specialist subject knowledge. When this learning is considered by formal learning institutions, it is generally through the Vocational Education and Training (VET) sector which recognises current competencies. In order to have such informal learning validated students may have to work through a complex process of achieving recognition through Recognition of Current Competencies (RCC) within VET qualifications then using a pathways program such as a VET diploma, to enter university.

Why is this a problem?

In previous times, disregarding private informal learning may not have been a significant problem for learning institutions. The stories of self-educated successes such as Walt Disney, Harry Truman, and Charles Dickens have been legendary, but the reality has been that opportunities for self education have been limited and required considerable tenacity. Students who were frustrated into dropping out because formal institutions did not recognise their knowledge and experience were not such great numbers that they impacted on institutions. Success stories of people who dropped out tended to be treated as exceptions that proved the rule. Now, however, the access to informal learning on the Internet is sufficiently broad that there is potential for it to impact on dropout and enrolment rates because students who feel they already 'know' more than their educators, question the relevance of curriculum, then disconnect, and disengage from formal learning.

According to Krause (2005)[10] engagement refers to the time, energy and resources students devote to activities designed to enhance learning at university. Engagement has become a pivotal focus of attention as institutions locate themselves in an increasingly competitive higher education environment. She says that this engagement is the single best predictor of learning and personal development. If students believe that they are not learning anything new, they have no incentive to make the investment required to obtain a formal qualification. Kuh (2001)[11] believes that the level of student engagement is one of the key factors in assessing the quality of the education. Therefore, when educators disengage students by not recognising what they bring to courses they place some core organisational reputations at risk.

If students become disengaged and disillusioned with the value of formal learning they may continue to learn but choose to bypass tertiary qualifications because the person learning informally can learn in their own time,
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focus on their own interests, and still test themselves against social criteria of success. Kendall (2005)[9] argues that informal learning is effective because it is personal and the learner is responsible for choosing what they learn while formal learning is imposed by someone else. With the development of global Internet communities, it is possible to achieve status and recognition as well as prosperity through participation and contributions which are not dependent on formal qualifications. Whilst not all people will succeed, the opportunities are there to make self development a real consideration. Candy (2004)[6] notes that there is a reciprocal relationship between technologies and the learner. Learning on the Internet continually expands opportunities to learn and the results of that learning continually expand technological options open to people who learn. The informal learning approach has therefore considerable attractions to many people.

Informal Learning.

Many of the earlier models and discussions around informal learning have been focused around non-formal learning. Livingstone (2001)[12], (Marsick & Watkins, 1990)[13], Candy (1991)[5] and Merriam & Caffarella (1998)[16] define formal learning by separating it from non-formal learning or informal training. Non-formal learning, they say, is facilitated but unaccredited learning which may take place in a number of circumstances including organisations, community centres, and social groups and often forms a bridge to formal learning. When informal learning meant non-formal learning, the differentiation between formal and non-formal has been the quality of facilitation, the issues of skills acquisitions versus learning, and the levels of competency achieved and demonstrated. A formal degree gave the holder a recognition of the level of knowledge and learning that non-formal learning did not.

However, informal learning no longer revolves around uncredited facilitated learning. Selwyn (2007)[22] acknowledges the difficulties of defining informal learning but says that there is an emerging consensus that the nature of informal learning is more specific than simply being any learning outside of formal education. Straka (2004)[24] says informal learning includes learning resulting from daily life activities related to work, family or leisure. Schugurensky (2000)[20] says informal learning is any activity involving the pursuit of understanding, knowledge or skill which occurs without the presence of externally imposed curricular criteria. According to Brookfield (1983)[3] informal learning has the following characteristics:

- It is deliberate and purposeful in that the adults concerned are seeking to acquire knowledge and skills. Such purpose and intention may not, however, always be marked by closely specified goals.
- Learning may be apparently haphazard and therefore unsuccessful at times.
- It occurs outside of classrooms and designated educational institutions and does not follow the strict timetable of the academic year.
- It receives no institutional accreditation or validation.
- It is voluntary, self-motivated, and self-generating. Adults choose to engage in this learning, although the circumstances occasioning that choice may be external to the person.

Marsick, Watkins, Callahan, & Volpe (2006)[14] claim the characteristics of informal learning are:

- It is integrated with daily routines,

- It is triggered by an internal or external jolt.
- It is not highly conscious.
- It is haphazard and influenced by chance.
- It is an inductive process of reflection and action.

Many of these features associated with informal learning, such as it is deliberate and purposeful; that it includes an inductive process of regulation; that it involves self motivation and self generating learning; can be associated with the aims of formal education. When a person can associate a clear and precise result directly related to their personal welfare and life needs from informal learning, it can add to confusion in students as to why they need formal education and what value it is to them.

Examples of Internet contribution

One of the greatest criticisms that educationalists have of the Internet is that by academic standards, content is often un-credentialed and it is not subject to stringent review. However, at the same time, one of the greatest strengths of the Internet and its web of social interconnections is that much of the content that is developed through community is also peer reviewed by users, through wiki talk pages, blog comments and public forums. Internet content can therefore be subjected to a much wider and intense form of peer assessment than can happen in formal tertiary assessment, where learning is validated by a limited number of expert assessors. In Internet communities, people's ideas, information, and contributions are open to public scrutiny and review and successful people can achieve recognition of knowledge, skills, and status within their communities and sometimes globally if they are involved with a successful resource. Wiley (2006)[27] believes the Internet to be the future of higher education because it is subject to non-blind peer review, one of the most demanding forms of review.

There are a number of examples of sustainable and valid resources on the Internet, that do not require contributors to acknowledge formal qualifications, but which have developed through considerable social interaction and peer review. Seely Brown & Adler (2008)[21] note that the ability to support socially constructed learning is one of the most profound impacts of the Internet. The following are just some examples of contribution to thought and knowledge that is readily available to anyone who wishes to participate. These resources are valued and recognised and subject to considerable scrutiny as part of the general knowledge continuum.

Software /Application development

The creation of open source software and the communities that have developed around it, has offered opportunities for gifted amateurs and non-qualified interested parties to become actively involved in the development of some of the major components and softwares used in many organisations learning institutions. Moodle, Joomla, and MediaWiki are all softwares that are developed through community involvement and used in education. Participation in these communities is unrestricted. Contributions and developments are subjected to the review of community members and users and assessment is by take-up and attrition rather than academic rigour. When they create workable software, members of communities can gain higher recognition and the

rewards for success can be quite substantial. In his groundbreaking essay on open source, Raymond (1998)[17] states his belief that fame from open source is its own reward and this he says, explains why programmers work hard on code and then give it away. He says that the cutting edge of free software will belong to people who start from individual vision and brilliance, then amplify it through the effective construction of voluntary communities of interest.

Wikipedia model

One of the most criticised forms of information on the Internet is Wikipedia because of the uncertified nature and its openness to vandalism. Viégas, Wattenberg, Kriss & van Ham (2007)[26] have analysed Wikipedia and believe that despite academic concerns, there is strong evidence that the rigour and responsiveness imposed by its community of contributors, makes Wikipedia as valid a source as any other general encyclopaedia, while it also has the advantage of currency. Black (2008)[2] believes that the problem with Wikipedia is not its legitimacy as an information source but that if it becomes the standard for knowledge dissemination, the academic knowledge production system could be drastically affected and need to reassess itself to ensure its role.

The development of Wikipedia has opened opportunities for informal learners on the Internet to share their knowledge and learning, to have a voice to contribute to Wikipedia pages and influence what is available by commencing topics and adding topic comments. Wikipedia can be the first source for journalists, travellers, students, and even academics. It is entirely possible that when using Wikipedia the chief source of legitimate information is someone whose learning is not formally validated or assessed even though due to the nature of Wikipedia software their contribution is traceable and has been subject to stringent peer review and precise publication standards, such as neutral tone, referenced information and enforced relevance. How do universities recognise these contribution, or should they? If someone is capable of making this sort of contribution, should it not be possible to accredit it?

Blogosphere Journalism

The blogosphere opens up many possibilities for people to express opinions and ideas and contribute to discussion on any topic from science, politics, and social commentary to cult views and entertainment. In doing so individual bloggers can be quoted and applauded. Selwyn (2007)[22] notes that blogging is a very easy way to generate content, based on a personal, subjective view of the world. He believes that this has various implications for an understanding of informal learning.

There are no qualifications required for people to publish their own blogs but those writers who have style, ideas, and input can be lauded, and admired. Some authors manage to create a persona, making themselves a 'celebrity' among the community (Trammell & Keshelashvili, 2005)[25]. One of the main strengths of this form of publication and interpretation is that despite criticism that Internet publication participation is not subjected to critical, peer and formal evaluation, bloggers face the rigorous and often harsh judgements of participators, community members, and commentators. The ability to leave comments means that the interactions and opinions are also readily available to users, so the review is very transparent, creating a valuable and often

exciting addition to subject exploration. The public nature of blogs provides a record of personal interest in posts that indicate influences and relations with other participants (Efimova & de Moor, 2005)[7]. Schmidt (2007)[19] says that the blogosphere, being both a network of interconnected texts and a manifestation of social networks, can structure attention and provide social capital.

Discussion

There is a tendency in formal education to undervalue the concept of 'googling' or using Wikipedia or other common ways of finding information on the Internet. This attitude significantly devalues a part of many people's learning lives. However, accepting and encouraging students' own private learning, using tools that are readily available to anyone with access to the Internet should not be seen as a complete reversal of all existing pedagogies. It used to be that the assigned textbook and the lecturer's notes were the 'first level' knowledge. Now students may feel these sources are a repetition of what they already know from using Google. By accepting learning from standard Internet tools, educationalists may just be using a different sort of 'first level' knowledge. Perhaps the real problem is that previously students were not encouraged to contradict controlled 'first level' knowledge sources but now the 'first level' sources of knowledge that are readily available are outside institutional control and students, based on their own experience, challenge what is presented to them by educators. Seely Brown & Adler (2008)[20] see the informal social learning of the Internet as contrasting with the way education has been structured where pedagogy was transference from teachers to students. They suggest that one of the factors limiting the recognition of informal learning is the lack of familiarity and therefore fear that many educators have with the process of social informal learning compared to their students who readily accept it. Some of the concerns with what students already know would be eased if educators considered the potential of the Internet and apply it to their own practice.

However, informal learning using the Internet should not be seen as a substitution for formal education and the opportunities to expand horizons that scholarship creates. The ever expanding access to the Internet means that knowledge can be both overwhelming and transient and making personal sense of this means that people can close off to interpretations which do not support their own constructions. When so much information is subject to highly subjective construction, there is a great need for formal institutions to be actively involved in the creation of critical skills to ensure that subjective knowledge does not become the norm.

There is a real risk that whilst personal construction may be subject to extensive peer review on the Internet, people will seek out peers of similar minded interests who will support rather than challenge their constructions. Through informal learning people can develop constructed knowledge which includes prejudices, misinformation and misconceptions as well as skills, values and innovative creativity. This construction may have been subject to rigorous peer assessment and be highly influential in certain cases but the very outcomes and conclusions of informal learning are self contextualised. Therefore informal learning will often appear more relevant to people than formal education because it supports their own construction and shields them from reviews and challenges which force them to question what they have learnt.

Brookfield(2005)[4] says that why a person chooses to respond or discard learning after a period of critical reflection is not understood. When a person's experience is tied to non-validated learning and the conclusions, and realities which people formulate are not tested formally, how people synthesise, reflect, and enact this learning may be based on very narrow parameters. Schugurensky (2000)[20] believes that whilst reflection and evaluation may validate informal and non-formal education, it can also contradict it and that this is true for all types of non-formal learning. Candy (2004)[6] notes some issues with informal learning on the Internet. He acknowledges that there is anecdotal evidence to suggest that some users may accept uncritically what they found on the Internet and ignore anything that is not available online. He also agrees that there could be a tendency to de-contextualise information found on the Internet and this could limit the effectiveness of any informal learning.

When informal learning plays an important part of people's lives, the role of higher education in a world where sharing of knowledge is no longer a unique function of a learning institution, must change to stay relevant. According to Selwyn (2007)[22], the Internet offers growing opportunities for a wide variety of activities and opportunities that support learning but do not fit in with conventional ideas of education. This means that educators who wish to use these opportunities need to reconsider their present pedagogies and the way in which they conceptualise informal learning on the Internet and how it impacts on the way that students learn and what they know. Formal learning institutions should consider shifting the focus of education from what is known, to what can be found and evaluating that which is recorded in a multitude of places. Siemons (2005)[23] suggests that knowing is no longer necessary, what is needed is the ability to find and understand and know-how and know-what is being supplemented with know-where which is what he calls the understanding of where to find knowledge needed.

What formal educators should be doing is building on the knowledge and understandings that students bring to the institution and encouraging them to find ways to expand and explore new perspectives. Educators need to develop students' critical response early in curriculum rather than later so that they are given the opportunity to expand their own understandings, rather than disengage because they cannot find relevance in the curriculum.

By accepting their role in enabling people to manage the breadth of information available, formal institutions can recognise prior learning without compromising their standards and aims. Therefore the student complaint that they already 'know' what is being taught becomes invalid, because students are asked to justify, assess and utilise what they know, rather than accept what educators present. Formal learning institutions should have a major role in ensuring that their students understand the transience of knowledge. Students can be actively engaged by focusing on critical evaluation and the skills of reflection and transference. Educators need to ensure that students understand how to synthesis and evaluate what they find on the Internet regardless of where they find it.

Educators need to support the informal system of learning rather than dismiss it or enforce curriculum which avoids it. They also need to incorporate the way people learn informally into their pedagogies and encourage students to explore their informal learning rather than restrict it. Educators should not be so concerned with

directing how students learn, or the medium from which they learn. There is a need to develop curriculum which allow students to present evidence of their understanding and learning, encourages them to learn in ways that are personally relevant, and ensures students can evaluate their understandings critically. Formal learning institutions should also consider ways of fast tracking courses when students can present valid rigorous informal learning, rather than asking them to validate that learning through formal assessment based around a lineal progression through the curriculum. Formal learning institution need to create a significant Recognition of Prior Learning, (RPL) based not just on previous formal learning, but on informal learning as well, and ensure that this is built into application processes in a way which prospective students can recognise as supporting private informal initiatives.

Conclusion

Up until now, learning organisations have been able to by pass the effects of personal learning and the informal culture of the Internet and exclude it from the formal educational experience. However as informal learning becomes a significant part of people's normal learning lives, formal learning institutions need to take up the challenge by exploring how informal leaning impacts on people, and what it means to people and incorporate it into curriculum. Brookfield (2005)[4] says that the only way to understand the connection between various forms of learning is to move away from the focus of content and knowledge in adult learning and concentrate on personal learning through critical reflection. Rather than reject informal learning because of limitations and perceived lack of rigour, educators in formal learning institutions should consider developing curriculum based on student achievement and not lineal progression. Educators need to accept that informal learning is frequently subject to a rigorous process of peer review. They should therefore, find ways of building on what learning students bring to formal institutions, using flexible options of progression, assessment, and adaption. Formal learning institutions have an important role of validating, standardising, and certifying knowledge in many areas but their role in imparting knowledge must change significantly as the ability to seek and construct knowledge is removed from the educational institutions and incorporated into informal learning experiences.

When tertiary educational institutions do not incorporate one of the most powerful ways in which adults learn into their curriculum, the relevance of their role as encompassing learning institutions in a changing world may need to be challenged. There is a risk that potential students, potential community leaders, will ignore formal learning institutions or disengage from them in such numbers that educators risk being seen as keepers of an elite knowledge that ignores the greater part of community learning.

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