

Can the Use of the Course Management System Moodle Foster Learner Autonomy?

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1. Introduction

The development of technology has challenged traditional classroom based teaching as the normal mode of instruction. Technology Enhanced Language Learning (TELL) has been seen as both an innovative new approach to teaching and at the same time a threat to institutionalised language learning (Benson & Voller, 1997; Benson, 2006). TELL has been linked to learner autonomy because of the possibility to enhance both ‘out-of-class’ learning and classroom environments. There is extensive research on autonomy and wide ranging definitions of what it is, and how different versions are applied. TELL may facilitate Holec’s (1981 cited in Little, 2006, p. 1) widely accepted definition of autonomy, ‘the ability to take charge of one’s learning’, by creating an environment for out-of-class self-regulated study. However, Benson (2001, p. 141) warns the link between autonomy and TELL needs to be ‘evaluated against empirical evidence’ and Chapelle (1997; 2001) argues that further research grounded in SLA is required on how educational technology can support not only autonomy, but language learning and teaching as a whole.

A course management system (CMS) is an integrated software system that incorporates Internet and Web technologies to support and enhance education programmes. They are becoming increasingly common throughout higher education (Papastergiou, 2006). ‘Virtual learning environment (VLE), web learning environment (WLE), managed learning environment (MLE) and networked learning environment (NLE)’ are terms also used as alternatives to CMS (Navaporn, 2010, p. 111). Moodle or Modular Object-Oriented Dynamic Learning Environment is a widely used open source CMS designed by Martin Dougiamas. Moodle was designed to support a social constructivist approach to teaching and learning which includes inquiry-based, collaborative interaction and construction of shared knowledge (Brandl, 2005).

The focus of this essay is to first, provide an overview of how Moodle is used in my institution. Second, to discuss the various definitions of autonomy and the relationship between learner and teacher autonomy. Third, to review the social constructivist theory behind Moodle and how this may support autonomy, and finally, analyse how I use Moodle and to what extent it can foster learner autonomy. It will be argued that Moodle can be used as a tool to scaffold learner autonomy with appropriate pedagogy and additional learner training. However, the extent to how much it may foster autonomy is based on how it is used both in and out of the classroom.

2. Overview of Current Moodle Use

Moodle is the CMS used throughout my institution. The university is a new English-medium university in Kazakhstan. I teach EAP, Research Skills and English *for* on the Foundation programme which prepares students to enter one of three schools: Engineering; Science and Technology; or Humanities and Social Science. The students take five courses on the foundation programme. All students take EAP and Research Skills and depending on their pathway either: Maths and Physics; Biology and Chemistry; or International Relations and Economics. Also, there is a non-credit English *for* course which provides linguistic support for their chosen subject combination. All 536 students are enrolled onto Moodle and for the majority it is the first time they have used a CMS. Students are enrolled onto the following Moodle courses: EAP; English *for*; a course for each subject combination; and the Self Access Centre (SAC) Learner Support site which offers online reading, writing, and listening tutorials based on the EAP and Research Skills assessments. Additionally, each EAP tutor has the option to develop their own Moodle course to support their classes with 24 to 30 students enrolled on this course. This is encouraged at institutional level, but it is not compulsory and tutors can use and design their course as they wish. As of October 2013, 42 out of 43 tutors have their own Moodle course for the 2013-14 academic year. For October

2013 the most visited EAP tutor Moodle course received 4811 visits and the least visited course received 398 visits. The SAC Learner Support course received 7965 visits. As previously mentioned there are no institutional guidelines on how to use Moodle, although throughout the academic year professional development sessions are available on Moodle development, so each tutor utilises it in different ways with the lower visited courses mainly being used as a Web 1.0 noticeboard with course notes and links to other resources.

My own Moodle course was visited 2654 times in October 2013. I use the following Moodle activity or resource functions: *Assignments*, to collect graded work; *Forum*, to create a weekly discussion forum on a topic used in class; *Glossary*, for students to create vocabulary notebook entries on the Academic Word List (AWL); *Hot Pot*, a weekly quiz based on Schmitt and Schmitt's 2005 *Focus on Vocabulary 2* exercises and graded automatically; *Wiki*, to create definitions of difficult concepts; *Resources*, as a noticeboard to post blended lesson materials, past lesson notes and links to external further self-study resources. Blended learning in this instance is based on Oliver and Trigwell's (2005, p.17) definition of the integration of classroom learning and web-based activities such as Moodle. Other technology available in the classroom includes Internet access and a projector screen. All my students have laptop computers and access to the Internet at home.

3. Autonomy

The term autonomy has become prominent over the past thirty years with the shift in theory and teaching praxis of second language acquisition towards learner centred approaches. There are no clear simplistic definitions of autonomy due to its social, psychological, political and pedagogical aspects (Benson & Voller, 1997; Reinders & Balcikanli, 2011). Perhaps a place to start is Little's (1990, p.7 cited in Ding, 2012, p. 30) discussion of what autonomy is not. He rejects the assumption of early definitions that remove the teacher from autonomy and state that autonomy is 'an easily described behaviour and steady state'. Little (2002 cited in

Benson, 2006, p. 23) went on to combine his own psychological perspective to Holec's widely accepted definition of what the process of autonomous learning entails:

Autonomy in language learning depends on the development and exercise of a capacity for detachment, critical reflection, decision making and independent action (see Little, 1991, p.4); autonomous learners assume responsibility for determining the purpose, content, rhythm and method of their learning, monitoring its progress and evaluating its outcomes (Holec, 1981, p. 3).

However, Ding (2012) argues that by trying to create a single version of or defending the original definitions of autonomy we limit the possibility of developing theory and classroom practice. As an EAP practitioner this complex understanding and lack of clarity may result in the difficulty in understanding our role in autonomy. My own interpretation and enactment of autonomy in teaching and learning would most closely align with Little's (1991) psychological capacity for autonomy quoted above and Littlewood's (1999, p.75) proactive and reactive model of autonomy. In my current context my students have already shown a psychological capacity and proactive autonomy by continuing study 'in a world which they themselves have partially created'. As a practitioner, I may develop reactive autonomy by facilitating situations where learners can learn autonomously and 'organise their resources autonomously to reach their goals' (Littlewood, 1999, p.75). This aligns closely with Smith's (2003, cited in Benson, 2006, p.24) strong pedagogies of autonomy with the 'assumption that students are, to greater or lesser degrees, already autonomous' and it is the role of the practitioner to 'co-create with students optimal conditions for the exercise of their own autonomy'. Fostering learner autonomy is important for individual development, to reach personal goals and also as Benson states (1996, p. 34) 'it transforms the social situations and structures in which they are participants'. This is important in my context, as Kazakhstan is transitioning to a 'western' construct of education; however, there is no empirical evidence to support the social and cultural effectiveness of autonomy as described above (Benson, 2001; Ding, 2012; Smith, 2008).

The development of learner autonomy through teacher support plays an important role in developing autonomy in the classroom. It is therefore clear that a teacher's own autonomy plays a large part in fostering autonomy in their students. Teacher autonomy can be defined as the teacher taking charge of their own learning or development, and having the freedom to make choices how they teach or freedom from control (Benson, 2000; Lamb, 2008). With regards to the second part of teacher autonomy above, in my current context I have minimal institutional constraints. I have a large amount of 'teacher power' to make independent decisions in the classroom with a skeleton scheme of work to consider and assessments to prepare for (Webb, 2002, p.47). Little (2000) states that the development of teacher autonomy is a pre-requisite for teachers fostering learner autonomy in their students. A teacher must have experience of being an autonomous learner if they are to understand their learners' needs and they should use this experience to manage and reflect autonomously on their own teaching. In undertaking this teacher education programme I am developing my own autonomy via distance learning. Moodle is being used as a tool to teach the theory of teacher and learner autonomy and it also fosters autonomy by providing a platform to experience autonomous learning. Just undertaking the course alone is not sufficient to facilitate learner autonomy in the classroom; there must be continuous reflection of me as a learner and as a practitioner, on what pedagogies can promote learner autonomy in my particular context (Lamb, 2008; Little, 1995; Smith, 2001). Little (1995, p. 178) suggests teachers need to provide students with the appropriate tools and strategies and become a 'facilitator of learning and manager of learning resources'. Voller (1997, p. 102) supports this by suggesting teachers develop these three specific roles and qualities: *a facilitator*, teachers should help scaffold and organise autonomous learning by understanding their students' needs and setting achievable goals; *a counsellor*, by offering support, motivating students and transitioning the shift in student-teacher roles; and *a resource*, by directing and advising on strategies and resources in and out of the classroom. Based on the above definitions learner

and teacher autonomy are interrelated and as an EAP practitioner TELL may act as a tool combined with relevant pedagogy to promote autonomy both in and out of the classroom.

4. Constructivism, Moodle and Autonomy

Constructivism is a broad theoretical perspective which includes different types of constructivism and many divergent theories. Heinecke, Dawson and Willis (2001 cited in Papastergiou, 2006, p. 594) describe nine areas where constructivist instructional principles lie: ‘negotiation of learning objectives; student control over their learning; authentic, purposeful and contextual learning; problem solving; collaborative learning; multiple, alternative perspectives; knowledge construction and validation through action and discourse; authentic assessment; and development of metacognitive skills’. Ding (2012) states that constructivist epistemology is core to a wide range of autonomy definitions particularly Little’s psychological perspective of autonomy and also Holec’s (1981: 21, cited in Ding 2012) view of autonomy where the learner ‘constructs and dominates’ his own version of knowledge. This broad theoretical background helps underpin a wide range of TELL technologies combining both cognitive and social constructivist schools of thought.

Moodle was developed based on these constructivist principles with a focus on social constructivism which regards learning as a social activity. Social constructivism places the learner, as an active member, at the centre of the learning process and highlights the importance of social and co-operative learning with the construction of personal knowledge (Brandl, 2007; Brown, 2007; Papastergiou, 2006; Tam, 2000). Vygotsky pioneered research into social constructivism with his concept of the *zone of proximal development*. His concept of scaffolding learning with the help of an experienced other places the responsibility of the teacher to facilitate a collaborative problem-solving environment and guide students with expert help (Tam, 2000). Moodle can be used as a tool to scaffold the development and

construction of meaning through the sharing of ideas, texts and other sources (Dougiamas & Taylor, 2003). This approach mirrors the process of knowledge creation in academia in which learners are apprentices in a community of practice, and knowledge is socially constructed and constantly evolving (Angelo, 2000 cited in Papastergiou, 2006; Dougiamas & Taylor, 200; Warschauer, 2005).

Moodle may provide a context for learners to apply and develop autonomy. Users are able to control the pace of learning, mode of interaction, and by enhancing opportunities for collaborative learning, control of interaction (Blin, 2004; Benson 2001). This responsibility for learners to take control of their learning may also empower and motivate learners which may foster autonomy (Murry et al. 2005; Schwienhorst, 2003). However the exercise and development of autonomy through the use of Moodle may require learners to already be autonomous to a certain degree, as they have to navigate and use this new technology effectively (Benson, 2001). Smith (2001, p.396) states this ‘form of learning may require the *exercise* of autonomy, but they do not necessarily *develop* this capacity’. Also, the use of Moodle may require users to be digitally literate and possess digital competency skills so they are able to navigate and use Moodle effectively (Ryberg and Georgsen, 2010, p. 89). This needs to be a consideration for the EAP practitioner when using Moodle on how digital literacies can be taught or enacted, and includes the recognition of multiple literacies and how they are created as a social practice (Street, 2003; Ryberg and Georgsen, 2010). Finally, Moodle can be used in a variety of different ways and how it is used is important to what extent it can foster autonomy. The final part of the essay will discuss how I facilitate learner autonomy with the use of Moodle and discuss what advantages and limitations it has.

5. Facilitating Learner Autonomy with Moodle

I use Moodle in and out of the classroom in a variety of different ways as described in section 2 above. The simplest way I use Moodle is to collect assignments and post class notes for future revision or self-study. Also, Hot Potatoes, an open source authoring tool, is used to create homework quizzes based on classroom activities and the glossary function is used for students to post AWL vocabulary notebook entries. These activities in themselves only require the exercise of autonomy and are no different in developing autonomy than traditional homework in that the only learner control is when they do it (Bobb-Wolff, 2010).

I also use Wikis and Forums on a weekly basis to facilitate collaborative learning of in class texts and blended lesson media. Students work outside of the classroom to create concept definitions with each student contributing to the wiki, and the forum is used for students to discuss a question. This allows students time to reflect on what they have done in the classroom and matches Voller's (1997) *facilitator* role that scaffolds learning and supports a constructivist approach as students construct individual knowledge through the social process of discussion and negotiating meaning. This also compliments traditional learning and supports Littlewood's (1999) reactive autonomy with the teacher setting the direction. It may also foster Benson's (1997) psychological version of autonomy through control over access and interaction. However, the teacher is still the dominant authority in the student-teacher role. One way to increase learner control could be to create an opportunity for student facilitated problem solving and encourage students to solve the problem by sharing thoughts, ideas, texts and media. Students would be responsible for choosing the topic area, creating a problem or discussion point, and hosting a forum. During the process the Moodle blog function could be used to create a diary or self-report which could be used as a reflection tool to identify learning strategies. This may develop the teacher's role as a *counsellor* by motivating students, helping students transition from teacher-centred instruction, and helping students evaluate their learning.

The final way I use Moodle to foster autonomy is with the *Add a Resources* function. My Moodle course is divided into six broad skill areas; Writing, Reading, Listening, Speaking, Research Skills and Study Skills. Within each area there are links to various online activities, authentic texts and media, and other institutions online self-access centres. This replicates Voller's (1997) teacher as a *resource* by providing students with direct contact to good quality information and sources. This is an important factor as students may be overwhelmed with the amount of learning resources online and at first may be unsure of their quality. Also, as briefly discussed in section 4 above, to use Moodle or other TELL technologies to their full potential students may need training in how to exploit the resource for their needs (Murray et al. 2005). Shetzer and Warschauer (2000, p. 176) state 'language professionals who have access to an Internet computer classroom are in a position to teach students valuable lifelong learning skills and strategies for becoming autonomous learners'. Also, by just providing resources alone students will not necessarily become autonomous they need to be aware of what Benson (1997, p. 23) calls 'technical autonomy'. This may include raising awareness of learner strategies such as cognitive and metacognitive strategies. By raising awareness of the process of learning and helping students set their own clear and realistic learning objectives the students are able to take charge of their own learning. This reflects Littlewood's (1999) proactive autonomy with learners choosing the direction and strategies for learning. Nevertheless, having access to resources and awareness of the learning process may not be sufficient. Based on my Moodle Activity Report which logs activity for the past year on each topic, the amount of visits for each resource is low. For example, the link to the Manchester University Phrasebank received the most visits with 105 and the UEFAP EAP Guide for Students only received 35 visits in the past twelve months.

Finally, Grob and Wolff (2001, p.233) argue 'that computers are much better suited in language learning to act in an organising and structuring capacity rather than to take up a role as a learning machine'. As demonstrated above, this is true of Moodle as it can be used as a

tool by teachers to help foster autonomy by organising learning resources and facilitating an environment for autonomous learning.

6. Conclusion

EAP practitioners have a responsibility to teach lifelong learning skills such as digital literacies and autonomy. Therefore, practitioners need to continue to develop their own autonomy through professional development and teacher education. In my current context Moodle is fostering autonomy to a moderate degree, but I need to offer more opportunities for student led activities and encourage my students to take control of their learning. Moodle can be used as tool to foster learner autonomy and help students organise their resources to reach their goals autonomously. How Moodle is used in and out of the classroom will depend on what extent it may foster autonomy. It can be used to scaffold the transition from a teacher-centred approach by allowing students to take control and direct their own learning. Practitioners need to reflect on how they use technology and should be open to adjusting their teaching practices to incorporate technology if there is appropriate evidence to do so. Due to word limit constraints learner strategies and classroom pedagogies to develop autonomy were not discussed. The incorporation of technologies to enhance learning should be based on appropriate pedagogy and empirical evidence. Moodle is grounded in a constructivist approach to teaching and learning; however, further research is needed to measure the extent of how Moodle can foster autonomy.

References

Benson, P. (1997) The philosophy and politics of learner autonomy. In: Benson, P. and Voller, P. (Eds) *Autonomy and Independence in Language Learning*, pp. 18-34. London: Longman.

Benson, P. (2000) Autonomy as a learners' and teachers' right. In: Sinclair, B., McGrath, I. and Lamb, T. (Eds.) *Learner autonomy, teacher autonomy: Future directions*. pp. 111-117. London: Longman.

Benson, P. (2001) *Teaching and Researching Autonomy in Language Learning*. London: Longman.

Benson, P. (2006) Autonomy in language teaching and learning. *Language Teaching* 40: pp. 21-40.

Benson, P. and Voller, P. (1997). Introduction. In: Benson, P. and Voller, P. (Eds.) *Autonomy and Independence in Language Learning*, pp. 1-12. London: Longman.

Blin, F. (2004). CALL and the development of learner autonomy: Towards an activity-theoretical perspective. *ReCALL* 16: pp. 377-395.

Bobb-Wolff, L. (2010) Can Moodle Increase Learner Autonomy. *Revista Canaria de Estudios Ingleses* 61. p. 99-115.

Brandl, K. (2005) Are You Ready to "Moodle"? *Language Learning and Technology* 9 (2): pp. 16-23.

Brown, H. D. (2007) *Principles of Language Learning and Teaching*. 5th ed. New York: Pearson.

Chapelle, C. (1997). CALL in the year 2000: still in search or research paradigms? *Language Learning and Technology* 1: pp. 19-43.

Chapelle, C. (2001) *Computer Applications in Second Language Acquisition, Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.

Ding, A. (2012) *Deconstructing and Reconstructing Teacher Autonomy: A Case Study of Teacher-Learners' Autonomy on a TESOL MA*. Ph.D. thesis, University of Nottingham.

Dougiamas, M. and Taylor, P. C. (2003) Moodle: Using Learning Communities to Create an Open Source Course Management System. Paper presented at *EDMEDIA 2003*, Honolulu, 23-28th June. Available at <<http://www.editlib.org/13739>> [Accessed 25th October 2013].

Grob, A. and Wolff, D. (2001) A Multimedia Tool to Develop Learner Autonomy. *Computer Assisted Language Learning* 14(3-4): pp. 233-249.

Lamb, T. (2008) Learner autonomy and teacher autonomy: Synthesisng an agenda. In: Lamb, T. and Reinders, H. (Eds.) *Learner and teacher autonomy*, pp. 269-284. Amsterdam: John Benjamins Publishing Co.

Little, D. (2000) Learner autonomy and human interdependence: Some theoretical and practical consequences of a social-interactive view of cognition, learning and language. In: Sinclair, B. McGrath, I. and Lamb. T. (Eds) *Learner Autonomy, Teacher Autonomy: Future Directions*. pp.15-23. London: Longman.

Little, D. (2006). *Learner autonomy: Drawing together the threads of self-assesment, goal-setting and reflection* [online]. Training teachers to use the European Language Portfolio. Available at <http://archive.ecml.at/mtp2/Elp_tt/Results/PagEF/e06.html> [Accessed 24th October 2013].

Littlewood, W. (1999) Defining and developing autonomy in East Asian contexts. *Applied Linguistics* 20 (1): pp. 71–94.

Murry, L., Hourigan, T., Jeanneau, C. and Chappel, D. (2005) Netskills and the current state of beliefs and practices in student learning: an assessment and recommendations. *British Journal of Educational Technology*, 36(3): 425-438.

Navaporn, S. (2010). The application of a course management system to enhance autonomy in learning English as a foreign language. *System* 38: pp. 109-123.

Oliver, M. and Trigwell, K. (2005) Can “Blended Learning” be redeemed? *E-learning* 2(1): pp. 17-26.

Papastergiou, M. (2006). Course Management Systems as Tools for the Creation of Online Learning Environments: Evaluation from a Social Constructivist Perspective and Implications for their Design. *International Journal on E-Learning* 5 (4): pp. 593-622.

Reinders, H. and Balcikanli, C. (2011) Learning to Foster Autonomy: The Role of Teacher Education Materials. *Studies in Self Access Learning Journal* 2(1): pp. 15-25.

Ryberg, T. and Georgsen, M. (2010) Enabling digital literacy: development of meso-level pedagogical approaches. *Nordic Journal of Digital Literacy* [online]. 5 (2): 88-100. Available at <<http://www.idunn.no/ts/dk/2010/02/art03>> [Accessed 26 October 2013].

Schwienhorst, K. (2003) Neither here nor there? Learner autonomy and intercultural factors in CALL environments. In: Palfreyman, D. and Smith, R.C. (Eds) *Learner autonomy across cultures: Language education perspectives*, pp. 164-179. Basingstoke: Palgrave Macmillan.

Shetzer, H. and Warschauer, M. (2000) An electronic literacy approach to network based language learning. In: Warschauer, M. and Kern, R. (Eds.) *Network-based Language Teaching: Concepts and Practice*, pp. 171-185. Cambridge: Cambridge University Press.

Smith,R. (2001) *Teacher education for teacher-learner autonomy* [online]. Language in language teacher education. Available at <http://homepages.warwick.ac.uk/~elsdr/Teacher_autonomy.pdf> Accessed [24th October 2013].

Smith, R. (2008) Learner autonomy. *ELT Journal* 62 (4): pp. 395-397.

Street, B. (2003) 'What's 'new' in New Literacy Studies? Critical approaches to literacy in theory in practice'. *Issues in Comparative education* 5 (2): pp. 77-91.

Tam, M. (2000) Constructivism, Instructional Design, and Technology: Implications for Transforming Distance Learning. *Educational Teachnology & Society* 3 (2). Available at <http://www.ifets.info/journals/3_2/tam.html> Accessed 25th October 2013.

Voller, P. (1997) Does the teacher have a role in autonomous learning? In: Benson, P. and Voller, P. (Eds) *Autonomy and Independence in Language Learning*, pp. 98-113. London: Longman.

Warschauer, M. (2005). Sociocultural perspectives on CALL. In: Egbert, J. and Petrie, G. M. (Eds.) *CALL Research Perspectives*, pp. 41-51. New Jersey: Lawrence Earlbaum.

Webb, P.T. (2002) Teacher Power: the exercise of professional autonomy in an era of strict accountability. *Teacher Development* 6(10): pp. 47-62.