

## Autonomy – An Institutional Endeavour

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*It is becoming more and more prevalent to hear of educational institutions, particularly at tertiary level, stating learner autonomy as a main goal for students, as the gateway for lifelong learning and increased personal success beyond schooling. While the importance and benefits of developing learner autonomy are widely agreed on, the successful provision of such an education is not automatic, and requires an awareness of what roadblocks are in the way of such development. If autonomous ability is a 'new' learning outcome, then it follows that changes to institutions and teaching and learning will be required to achieve it. This paper follows an earlier project which illustrated low levels of autonomous learning capacity among 3rd and 4th year undergraduate students at Kanda University of International Studies, and attempted to address this by raising the metacognitive ability of the learners. The project did show that the students were capable of developing this capacity if properly supported. This article discusses three major issues coming out of this research, and relating to autonomous learner development in a Japanese university context – personal epistemologies, institutional teaching and learning norms, and cultural context.*

At a national level, Japanese educational policy increasingly requires its educators and schools to encourage autonomous learning and critical thinking. At an institutional level, Kanda University seeks to do the same and to provide avenues for learning towards these ends. This occurs in one of two ways – through the design and delivery of required or elective courses, or through the voluntary

use of the on-campus Self-Access Learning Centre. Given the low number of graduates who go on to use languages in their post-university careers (recent figures are available from the careers department), it would seem that of all the skills students have attained during their university years, the 'content' is not what will be put to most use –the majority of students do not go on to work in an international context, or a context requiring foreign language use. So rather than the content knowledge gained, there is a greater likelihood that it is the process of knowing and learning that students will use post-university, as this is not domain or content specific. However, what this research project has uncovered is that it is almost solely 'the content' that students are aware of having been engaged with, and are comfortable engaging with. Students do not appear to have understood or internalized effective autonomous learning behaviours (though they are capable of doing so, as will be discussed later), or the concept of such skills or behaviours being transferable for one content area or situation to another. In other words, learners in this study (3<sup>rd</sup> and 4<sup>th</sup> year undergraduate students) had a very narrow conception of learning, as simply being what has been termed assimilation learning (Illeris, 2009), or learning by addition. Such learning is only concerned with adding to the amount of 'content' currently known. This excludes cumulative learning (where schemata and patterns are established), accommodative learning (relating and reconstructing knowledge) and transformative learning, which involves changes in the organization of self (Mezirow, 1991). So the types of learning required to become more autonomous and in control of both learning decisions and actual learning were unfamiliar to the learners in the study. This does not mean that they had not been exposed to such learning, but that if they had been, they were unaware of it, and incapable of transferring skills gained

from such learning to other situations. As such they do not meet the criteria of autonomous learners

“Essentially, autonomy is a capacity – for detachment, critical reflection, decision-making, and independent action. It presupposes, but also entails, that the learner will develop a particular kind of psychological relation to the process and content of his learning. The capacity for autonomy will be displayed both in the ways the learner learns and in the way he or she transfers what has been learned to wider contexts” (Little, p3, 1991).

On a more specific level, learners in the study did not have high levels of metacognitive ability. Martinez (2006) has defined metacognition as the “monitoring and control of thought” (p696, 2006). Many definitions exist (Dunlosky, 1998; Flavell, 1979; Hacker, 1998), but there is general consensus that 3 concepts are involved – metacognitive knowledge, monitoring and control (Dunlosky, 1998). Metacognition works as an executive function, a meta-level governing our cognitive processes and resultant actions. If students are increasingly responsible for all areas of their learning, having a meta-framework to guide their thoughts, decisions and practices would seem essential.

### **Background to the initial study**

Over the course of two semesters, 60 student participants took a one semester elective course entitled Independent Learning. Prior to deciding to take the course, students were able to access bilingual information about the course, which stated the major goals as

- Understanding yourself as a learner, and experimenting with ways of learning
- Learning more effectively
- Undertaking your own self-designed course of language learning
- Learning how to use your learning skills in broader contexts, not simply applying them to the learning of languages

For each semester, the course was subscribed to maximum capacity, indicating significant learner interest in either improving learning, or the opportunity to engage with an area of language learning of their choosing. During the course, data was collected at regular intervals about student understanding and ability to function autonomously, and specifically, metacognitively. Initially students were very unfamiliar and uncomfortable with any 'macro' or 'meta' elements of learning – making decisions about learning, analyzing learning, changing learning. This is clearly exemplified by the student comment below, discussing making a personal learning plan-

S: Cause...it was first time to plan myself. Actually, maybe I did choose by myself once, when I take an entrance exam of university, I was doing workbook by myself, but that was just about workbook. So just I decided, I'm gonna do it, so just I didn't care about the pages, just I did, as much as I can do. I just continued that way, so no one evaluated me. But I need some sort of evaluation of myself right? So that seems to be so hard. I have no idea.

According to this 4<sup>th</sup> year undergraduate student, she had not engaged in any 'plan-

ning' of learning during her four years, and had no idea how to evaluate learning, again indicating that she had not been involved in evaluation of learning, or was unaware that she had partaken in activities / learning that were meant to be used in contexts other than simply the tasks where they had been required. Either scenario produced the same result – in-optimal control of learning.

Across the semester, students moved gradually from traditional classroom learning to completely independent learning. Initially they received explicit instruction about autonomous learning and metacognition, the role they play in learning, in and beyond the classroom and university. All information was discussed and modeled, and then experienced and evaluated by the students. Once students began the independent learning phase (where they chose to study anything from TOEIC to Speaking to a content area of interest researched in English), they were required to plan, monitor and evaluate each class, both concurrently and retrospectively. All received teacher guidance, which was provided at a level appropriate to the individual position, in terms of language ability, autonomous ability and epistemic positioning.

During the data collection phase, students undertook increasingly ill-defined learning problems with decreasing levels of support and instruction. Examples of this are completing a highly structured learning plan after receiving explicit instruction, to preparing for a job interview with a multi-national company, where little instruction was provided. Concurrent verbal protocol analysis was used as the main method (and later triangulated with data from interviews, reflective diaries and concurrent monitoring of learning) to get an accurate picture of what was

occurring as students were engaged with increasingly independent learning. This method was chosen as it does not disrupt or change learning, yet provides valid data that is non-reactive. What is important here is that this ‘covert thinking’ is not altered by the process-

“Perhaps the single most important precondition for successful direct expression of thinking is that the participants are allowed to maintain undisputed focus on the completion of the task while thinking aloud and merely to verbalize their thoughts rather than describe or explain them to anyone else” (Ericsson & Simon, 1998, p181).

In other words, subjects are not analyzing the task in an abstracted sense, rather, they are simply doing the task, and verbalizing what is occurring, thus not disrupting the natural progression or sequence of thoughts. Analysis of student data showed the following –

- a) Students were uncomfortable with making learning decisions, and controlling learning. Such roles were viewed as ‘teacher roles’.
- b) Students were lacking in metacognitive ability.
- c) Students became more comfortable with and capable of making learning decisions and controlling learning after engaging in continuing remedial cycles of increasingly independent learning, while being supported by the teacher.
- d) Students were ultimately able to transfer the ability to control learning to other content areas to a certain extent.
- e) Students were unaware of different ways to approach learning content

However, awareness was achieved after a semester of explicit instruction about the 'global goals' of learning.

- f) Students were unaware of different ways to approach learning content.

### **Personal Epistemologies**

Coming to university from an exam-focused transmissive educational system means that students have certain beliefs about learning and 'school', and importantly their roles and those of the educators, and of the purpose of learning. Epistemological beliefs relate to what we believe about knowing, and this has been shown to have a huge impact on our beliefs and concepts of learning (Brownlee et al, 2009). If we believe learning to be the transmission of black and white information, then we will not be able to clearly understand a non-transmissive learning situation or a learning situation where there are options beyond the correct and the incorrect. In other words, the transition from school to tertiary education places an epistemological challenge in front of students and one which requires a level of conceptual change (Sinatra and Pintrich, 2003). Although the 3<sup>rd</sup> and 4<sup>th</sup> year students in this study had moved beyond understanding knowledge in black and wide terms, they were not able to conceptualize learning beyond information to be received and retained.

In order for students to build the new schemata necessary to function in a highly constructivist learning environment that makes new demands of them, the exemplification of learning strategies is not enough. This simply 'adds' to assimilated learning, rather than generating any conceptual change. There is no development of the new schema required to know why, when and how to use or

stop using certain strategies (Seel & Djisktra, 2004). While within the fields of second language learning and autonomous language learning metacognition is deemed important, and has even been termed the 'neglected variable' (Wenden, 2001), it is largely discussed and promoted as strategies. Yet in the field of education, educational psychology, cognitive science and cognitive psychology, it is neither a strategy nor group of strategies. It is rather, domain-general higher order thinking, which can be responsible for learning at a macro level. It can be more powerful than aptitude (Swanson, 1990), can improve learning outcomes across domains and over time (Adey and Shayer, 1994; Gunstone, 1991; Nuckles et al., 2008), and it can be fostered in learners (Adey and Shayer, 1994; Baird, 1986; Brown, 1987; Brown & Palinscar, 1989; Brown & Pressley, 1994; Cross & Paris, 1998; Gunstone, 1991; Hartman, 2002, Nuckles et al, 2008). This is an ability that all learners can use beyond the university career, not matter what the content of their chosen working area. There is a strong correlation between the level of 'sophistication' of epistemological beliefs and the degree of metacognition occurring, the depth of processing and the learning outcomes achieved (Perry, 1970; Pieschl et al, 2008).

The fostering of metacognition requires understanding of the concept, explication, explicit experience of using it, remediating such learning and the requirement to continue to use it. Learners must be required to take on a macro-role in their learning, in other to develop the ability to do so, and this does not happen as they result of occasional or disparate interventions. Freshman undergraduate student tend to be multiplicity pre-legitimate (Eaton et al., 1995; Marra, Palmer, & Litzinger, 2000; Pavelich & Moore, 1993), meaning not only are they not used to engaging



with the macro elements of learning, they do not yet have any conception of their role in learning beyond the retention of always correct information that will be provided to them. Moving from this position to one where students are willing and able to take control of their own learning requires instructional intervention that will affect their epistemic beliefs. The students in this study, prior to engaging in the course, could make some decisions about learning, but they were sometimes inaccurate or inappropriate, generally static, and almost never monitored or controlled once they had been made.

### **Institutional Teaching and Learning Norms**

At Kanda University of International Studies, the language curriculum delivered by the English Language Institute and the English Department attempts to deliver on goals and learning outcomes. Students are tested, streamed and re-streamed in terms of language proficiency. Tests are revised in search of increased accuracy. Curricula are in a state of constant revision as the needs and abilities of students change, and as the society around us changes. There is consistent effort to have a gradual build up of language and language requirements over the 4 years of university, and to provide content that is appropriate and increasingly difficult.

One example of a major challenge that learners face upon entering the university is switching to receiving almost all of their English language learning through English. While initially challenging, this system appears to be successful and ultimately appreciated by the majority of students. However, this success largely depends on the fact that it is an 'institutional norm', meaning that at this universi-

ty, all language classes are delivered in English (excluding some linguistics and elective courses). So for learners, it becomes the norm rather than the exception.

Unfortunately, this is not the case with the development of autonomy. Students do have the option of taking voluntary modules through the SALC, and of seeking voluntary help with independent learning at any time, but this is not an institutionalised norm. It is an institutional offer, and an offer of something rather abstract, particularly for students with a largely black and white understanding of knowledge and learning. Some of the language courses do include some instruction and activity based on skills and strategies deemed important for autonomous learning, but this is not dealt with in the university wide, graduated, integrated manner that language skills and abilities are. The result, as was seen in this study, is of students who may have achieved very high levels of language fluency, but who have not had parallel gains in autonomous learning capacity. In other words, they may understand discrete elements of autonomy and be able to use them when requested to and assisted, but they have not developed a psychological relation to the process and content of learning that would allow them to learn optimally autonomously, or to transfer this ability to wider contexts. This is unsurprising, if their engagement with autonomy has been isolated, discrete engagement.

If autonomous learning is a central goal of an education system, it would seem necessary to adopt the same level of vigour to its delivery and the examination of whether or not learning outcomes are being achieved, as is given to more obvious content areas, as in this case, language learning.

### **Cultural Context**

Autonomy and its role in learning have come from the Western education system, and are now being fostered in others context using this Western model. Yet cross-cultural education research, the growing schools of sociocultural theory, social constructivism and socially situation learning and cognition all clearly define the need for learning to be socially and contextually situated. Although beyond the scope of this paper, the cultural context is an essential element of how autonomy can and should be developed. Two examples of this are the areas of critical thinking and motivation, which are both central to developing autonomy. Students involved in this study, while having chosen to take a course about independent learning were not generally motivated by the independent element without 'expert' guidance, and experienced difficulty and confusion when asked to view their learning critically. In terms of motivation, one of the central issues pertains to choice. In Western conceptions of autonomy, choice is seen as a motivator. However, this is very much context specific. Iyengar and Lepper's (1999) work showed that Anglo-American students show more intrinsic motivation when choices are personally made, whereas Asian-American students showed more intrinsic motivation when choices were made by "trusted authority figures or peers". Rudy et al (2007) showed that "inclusive relative autonomy" (p983) was associated with psychological well-being for Chinese Canadians and Singaporeans, but not for European Canadians, for whom individual relative autonomy had the same well-being associations.

This has some practical applications. In a context where there is a higher degree of interdependency and such interdependency is viewed as a positive societal

factor, then the facilitation of higher levels of autonomous development should account for this. So in the more inclusive Asian context, the delivery must be more inclusive and interdependent. Students will not develop the same positive motivations simply by being given the freedom to make choices. While encouraging voluntary SALC usage has some benefits, it also results in largely individual use. Autonomy is not a synonym for individual, and in a context that desires and requires inclusiveness, a system that tends to promote solo endeavours (whether by choice or because of institutional restrictions) is out of step with its members.

This argument is further strengthened by research on the delivery of critical thinking courses (Martin-Davies, 2007), which provides empirical evidence for 'cultural influences in inference-making...and intercultural differences in thought patterns' (p13). While this in no way positions any group of learners above or below another in terms of ability, it does indicate that in different contexts, different concepts, such as critical thinking, may require more explicit explanation and different teaching approaches.

## **Conclusion**

Students entering university in Japan generally do not have the abilities to function as autonomous learners, or the learning schema required for this, nor will they automatically acquire them while attending university. The development of learners towards this end requires a university-wide commitment to the creation of curricula, pedagogy and other learning opportunities that require students to develop in this way, and that are offered in the same graduated, integrated and

scrutinized manner that is applied to the offering of more traditional learning content. Having the development of autonomy as an expected institution goal and as a non-domain specific learning outcome across departments is necessary, as may be teacher re-education in order to design instruction that increasingly and appropriately transfers responsibility to learners. Just as the current generation of language educators shifted to communicative language teaching in order to develop capable users of language who can function in a multilingual world, now educators may need to look beyond content, and towards the abilities that learners will use and need in their lives beyond university. Although our students may not stay within their university content area, the increasing life long learning demands of our society means they will require adaptability, decision-making in the face of multiple choices, and monitoring, control, evaluation and remediation of such choices.

## References

- Adey, P., & Shayer, M. (1994). *Really Raising Standards*. London: Routledge.
- Baine, J.D., Mills, C., Ballantyne, R. & Packer, J. (2002). Developing Reflection Through Journal Writing: impacts of variations in the focus and level of feedback. *Teachers and Teaching: theory and practice* 8(2): 172-196
- Baird, J. R. (1986). Improved learning through enhanced metacognition: a classroom study. *European Journal of Science Education*, 8, 263-282.
- Brown, A. (1987). Metacognition, executive control, self-regulation, and other more mysterious mechanisms. In F. Weinert & R. Kluwe (Eds.), *Metacognition, motivation and understanding* (65-116). New Jersey: Erlbaum.

- Brown, A. L., & Palinscar, A. S. (1989). Guided, cooperative learning and individual knowledge acquisition. In L. B. Resnick (Ed.), *Knowing and Learning: Essays in Honor of Robert Glaser* (393-451). New Jersey: Erlbaum.
- Brown, R., & Pressley, M. (1994). Self-regulated reading and getting meaning from text: The Transactional Strategies Instruction model and its ongoing validation. In D. H. Schunk & B. J. Zimmerman (Eds.), *Self-regulation of learning and performance: Issues in educational applications* (155-180). New Jersey: Erlbaum.
- Brownlee, J., Walker, S., Lennox, S., Exley, B., Pearce, S. (2009). The first year university experience: using personal epistemology to understand effective learning and teaching in higher education. *Higher Education*, 58, 599-619.
- Cross, D. R., & Paris, S. G. (1988). Development and Instructional Analyses of children's metacognition and reading comprehension. *Journal of Educational Psychology*, 80, 13, 131-142.
- Dunlosky, J. (1998). Linking Metacognitive Theory to Education. In Hacker, D.J., Dunlosky, J. & Graesser, A.C (Eds.), *Metacognition in Educational Theory and Practice*. New Jersey: Lawrence Erlbaum Associates.
- Eaton et al (1995). *Portfolio analysis and cognitive developmet at Fairhaven College*. WA: Western Washington University
- Ericsson, K.A & Simon, H.A., (1998). How to Study Thinking in Everyday Life: Contrasting Think Alound Protocols with Descriptions and Explanations of Thinking. *Mind, Culture and Activity* 5(3): 178-186.
- Flavell, J.H. (1979). Metacognition and cognitive monitoring. *American Psychologist*, 34:10, 906-911.
- Gunstone, R. F. (1991). Constructivism and metacognition:theoretical issues and classroom studies. In R. Duit, F. Goldberg & Niedderer (Eds.), *Research in Physics Learning: Theoretical Issues and Empirical Studies* (129-140). Bremen: IPN.

- Hacker, D.J., Dunlosky, J. & Graesser, A.C. (1998). *Metacognition in Educational Theory and Practice*. New Jersey: Lawrence Erlbaum Associates.
- Hartman, H. (2002). *Metacognition in Learning and Instruction*. MA: Kluwer Academic Publishers.
- Illeris, K. (2009). A comprehensive understanding of human learning. In K. Illeris (Ed.) *Contemporary Theories of Learning: Learning Theorists...in their own words*. Oxford: Routledge.
- Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the Value of Choice: A Cultural Perception on Intrinsic Motivation. *Journal of Personality and Social Psychology*, 76(3), 349 - 366.
- Little, D. (1991). *Learning Autonomy 1: Definitions, Issues and Problems*. Dublin: Authentik.
- Marra, R.M., Palmer, B., and Litzinger, T.A. (2000) The effects of a first-year engineering design course on student intellectual development as measured by the Perry Scheme, *Journal of Engineering Education* 89(1), 39-46.
- Martin Davies, W (2007). Cognitive contours: recent work on cross-cultural psychology and its relevance for education. *Stud Phil Educ*, 26, 13-42.
- Martinez, M. (2006). What is Metacognition? *Phi Delta Kappan*. 696-699
- Mezirow, J (1991): *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass.
- Nuckles, M., Hubner, S. & Renkl, A. (2009). Enhancing self-regulated learning by writing learning protocols. *Learning and Instruction*, 19(4), 259-271.
- Pavelich, M.J. & Moore, W.S. (1996). Measuring Maturation Rates of Engineering Students Using the Perry Model. *Journal of Engineering Education* 85(4), 287-292.
- Perry, W.G (1970). *Intellectual and ethical development in the college years: A scheme*. NY: Holt, Rinehart & Winston.

- Pieschl, S., Stahl, E. & Bromme, R (2008). Epistemological beliefs and self-regulated learning with hypertext. *Metacognition Learning* 3, 17-37.
- Pintrich, P. R., Wolters, C. A., & Baxter, G. P. (2000). Assessing Metacognition in Self-Regulated Learning. In G. Schraw & J. C. Impara (Eds.), *Issues in the Measurement of Metacognition* (43 - 98). Nebraska: Buros Institute of Mental Measurements.
- Rudy, D., Sheldon, K.M., Awong, T. & Hoon Tan, H. (2007). Autonomy, culture and well-being: The benefits of inclusive autonomy. *Journal of Research in Personality* 41, 983-1007.
- Schraw, G., Dunkle, M.E., Bendizen, L.D. (1995). Cognitive processes in well-defined and ill-defined problem solving. *Applied Cognitive Psychology* 9, 523-538.
- Seel, N.M. & Dijkstra, S. (2004). *Curriculum, Plans, and Processes in Instructional Design*. NJ: Lawrence Erlbaum
- Sinatra, G.M. & Pintrich, P.R. (2003). *Intentional Conceptual Change*. NJ: Lawrence Erlbaum
- Swanson, H.L. (1990). Influence of metacognitive knowledge and aptitude on problem solving. *Journal of Educational Psychology*, 82:2, 306-314.
- Wenden, A. (2001). Metacognitive Knowledge in SLA: the neglected variable. In M.P. Breen (Ed.) *Learner Contributions to Language Learning* (44-64). Harlow: Pearson.