

Citation

Kikuchi, A. (2008). An innovative approach to developing learner potential and autonomy: Moving from narrow to broad perspectives. *Accents Asia* [Online], 2 (3), 1-16. Available: <http://www.accentsasia.org/2-3/kikuchi.pdf>

An Innovative Approach to Developing Learner Potential and Autonomy:
Moving from Narrow to Broad Perspectives

Atsuko Kikuchi

INTRODUCTION

In the field of education, special attention has been paid to the concept of developing potential. Scheffler (1985) notes human potential as the capacity to develop further, and Pike and Selby (1988; Selby & Pike, 2000) posit that fostering ecological thinking plays an important role in developing the world's future possibilities and discuss the importance, in this era of globalization, of individuals being able to appreciate concepts and issues from a narrow to a broad perspective. It is vital for us to nurture individuals with broad vision so as to maximize their potential for development, benefiting humankind as a whole. However, not all individuals have the opportunity to cultivate their potential or are motivated to resolve the various social, environmental, and educational problems we face globally.

In efforts to help my students broaden their perspectives on life, which I posited would in turn develop both their awareness of language learning and their problem-solving abilities, I decided within my language lessons to focus on the interrelatedness and gap between the narrow and broad perspectives they held, a concept closely related to Pike and Selby's (1988) "four dimensional model" of global education. I contend that EFL teachers can enhance their students' language learning motivation by adopting such an approach, in turn helping learners to broaden their perspectives and maximize the development of their potential. In addition, positive outcomes are achieved quickly using this approach, since after the learners are motivated, they will take action very early, thus accomplishing their goals sooner. I developed the approach in order to maximize the



effectiveness of using these strategies, which are incorporated into language activities in every lesson. These strategies I call “Narrow to Broad Perspective (NBP)” strategies, and the NBP approach they comprise is unique, differing from Pike and Selby’s (1988) concept of global education.

In this paper, I introduce the NBP strategies that I have incorporated into my teaching of English because I noticed the general effectiveness of this approach; many learners seemed to accomplish their goals very early. My method is designed to help learners develop their individual potential during the English language lessons I provide. I posit that by learners identifying and becoming aware of the interrelatedness and gap between their narrow and broad perspectives of the world, they would be motivated by and interested in the educational tasks undertaken. Motivation is defined by Deci and Ryan (1985; Ryan & Deci, 2000a, 2000b) in terms of integrated intrinsic and extrinsic motivation. These motivations enable teachers to observe the emerging domination of intrinsic over extrinsic motivation, clarifying when or where learners become interested in what they learn. Through the incorporation of tasks involving NBP strategies into language teaching, teachers are able to focus on investigating learners’ reactions in class to these strategies, specifically by examining changes in their attitude and motivation once they start experiencing the interrelatedness and gap between narrow and broad perspectives.

REVIEW OF THE LITERATURE

Autonomy

Scheffler (1985) defines potential as the capability to enhance development at will. He notes that in an educational environment, to increase human potential is to energize an individual’s learning by guiding his or her educational aims within the sphere of his or her own efforts, and that the capacity to learn is to change oneself through learning. He also insists, however, that not everyone has strong potential; selection is inevitable in an educational situation. However, some learners might not have been given the time or opportunity to show their potential within a limited educational environment. This research suggests that a learner’s potential can be enhanced through language learning, as this process provides the opportunity to energize learners so they may autonomously



grow their potential.

Several scholars have been influential in developing the concept of learner independence or autonomy and how it can be attained (Holec, 1981; Little, 1991; Benson, 2001). Learner autonomy is generally defined in terms of the ability to take charge of one's own learning (Holec, 1981). Benson (2001) maintains that learners need to be independent of the direction and command of others, with the point being how well they achieve this within class. Field (2007) argues that Benson's report supports autonomy within a learning environment but places no focus on external learning outside this environment where "the acquisition of L2 continues in the world beyond courses and classroom" (p.31). He states that the manner in which learners continue their learning is critical, and that research after class is important for the learner to develop autonomy. He concludes that in the present era of globalization and rapid communication, English is used as a tool, a *lingua franca*, and that the teacher's role is to sensitize learners to the concept of how we learn rather than to focus on syntactic details. On the other hand, Van Patten's (1994) investigation of a model of second-language interaction revealed that novice learners in particular are not ready to acquire language because they struggle to comprehend what is meant, and as such, instruction of form is also critical to help learners achieve autonomy and their language goals. Research undertaken both during lessons and after lessons is significant, allowing us to study learners' reactions in a limited environment as well as in a broader environment over a longer time span. Both micro and macro viewpoints are necessary to develop learner autonomy.

Global Education

The concept of education has evolved in our intricate, mutually dependent, and fast changing world. Pike and Selby (Selby & Pike, 2000) proposed that curriculum development be named "Global Education", pursuing the dictum of 'one world' in which the interest of specific individuals and societies are looked at in view of the entire planet. Their work has highlighted new perspectives in education in light of ecological awareness. In their efforts to promote a higher level of global education, they refined their original "four dimensional model" (Pike & Selby, 1988) which focuses on time, space, issues (problems) and potential (possibilities in the future). The revised four



dimensions are especially focused on interrelatedness from an ecological perspective: (1) knowledge and awareness of worldmindedness (Richardson, 1985), (2) skills: communication, empathy, and cooperative problem solving; focusing on building potential for later generations, (3) attitudes: interconnectedness and interdependence, especially with regard to the ecosystem (Bohm, 1980; Pike & Selby, 1988), and (4) values: necessary for the empowerment of the individual within a complex, interdependent and fast-changing world, where values are viewed in relation to the probable future, the possible future and the preferable future, and overall there is greater contemplation of the future (Pike & Selby, 1988). The model is offered as a catalyst to stimulate reflection on the suitability of present learning programs and to suggest directions for responsible and reactive educational reform (Selby & Pike, 2000).

What Pike and Selby (2000) argue is that the spatial dimension of their model addresses interconnectedness and interdependence, for example, how personal well-being is connected with the world, and how the global environmental direction is influenced by human behavior and changes in the ecosystems of communities. The temporal dimension refers to the integration of the past, present and future, but is particularly focused on the future. I believe that the preferable future can be shaped by human potential, and as such, the possibilities that every one of us plays are important in determining the world's future. In order to understand and predict our future, we need to view life from broad dimensions.

Dimensions

According to the Collins Cobuild English Dictionary for Advanced Learners (2001), the concept of dimension has four categories of meaning: (1) a particular aspect, (2) extent or size, (3) a measurement such as length, width or height, and (4) in mathematics and science, spatial concepts such as points, lines, and solids. When we consider the concept of broadening the learner's perspective or aspect, we could say that we are developing a broadened dimension by starting to view things from a new perspective.

Motivation

Keller (1983) defined motivation as the choices people make and the effort they exert. He states that, "Motivation refers to the choices people make as to what experiences or goals



they will approach or avoid, and the degree of effort they will exert in that respect” (p.389). Motivation is classed as either intrinsic or extrinsic. Deci and Ryan (1985) define intrinsic motivation as the performance of a task for its own sake, whereas extrinsic motivation is defined as the pursuit of some reward external to the completion of the task, such as getting a job or getting good grades. Ryan and Deci’s (2000b) self-determination theory concerns the relationship between intrinsic and extrinsic motivation, leading to the notion of autonomy. They also point out that an autonomous or self-determined form of extrinsic motivation is regulated through identification, which is a conscious valuing of regulation and the internalization of value. “The most autonomous form of extrinsic motivation is Integrated Regulation, and that integration occurs when Identified Regulations are fully assimilated to the self, which means they have been brought into congruence with one’s other values” (p.73). They argue that extrinsic motivation can be changed to intrinsic motivation if outside factors have been internalized by the individual. They further hold that “internalization and integration are the processes through which extrinsically motivated behaviors become more self-determined” (p.65).

According to Deci and Ryan’s (1985; Ryan & Deci, 2000a, 2000b) theory, motivational development is strongly influenced by the quality of motivation in the change from extrinsic to intrinsic motivation. Thus, when learners experience the interrelatedness and gap between narrow and broad perspectives within a lesson, the process might trigger emergence of intrinsic motivation, where intrinsic motivation could dominate. Even though a teacher may set a task where extrinsic motivation dominates, if learners are sensitized and become interested in the task within a lesson, intrinsic motivation can become dominant even within a short time. Identifying the interest and the internalization of the interest could be facilitated through the process of clearly recognizing the interrelatedness and gap between narrow and broad perspectives.

In addition, research relating to language learning motivation supports the significance of the concept of integrative motivation, first described by Gardner and Lambert (1972). They show that integrative motivation is effective since language skills are comprehended as integral to involvement in the social groups using the target language, which indicates the importance of interaction. Moreover, instrumental motivation is more external than integrative motivation, meaning that language is learned



in order to gain something, such as a higher paying job or higher status (Gardner & MacIntyre, 1991). Dörnyei (2001) states that “Gardner’s (1972) theory is not the integrative/instrumental duality but the broader concept of the *integrative motive*” (p.16). This is a complex construct made up of three main components: (1) integrativeness, which is interest in the social group using the target language, (2) attitudes, which involve interest toward topics, and (3) motivation, which is the interest in attending classes (Dörnyei, 2001). The *integrative motive* would somehow enable us to identify learners’ motivation in regard to the three aspects. The learner’s language level is irrelevant; if the learning situation is appropriate, motivation grows and learners should become interested in tasks and topics. Then, whether learners maintain and develop motivation is an important factor. Further, Dörnyei and Otto’s (1998) process model of language learning motivation focuses on time span, and suggests that motivation differs depending on the stage of action in which learners are situated. I contend that follow-up research to investigate learners’ attitudes during class and after class is crucial for promoting their language learning and their potential because motivation changes with time.

Despite the many studies on learner motivation, little research exists on utilizing one formula to motivate learners or develop potential. Both Scheffler (1985) and Dörnyei (2001) insist that it would be absurd to use one formula to change learners’ attitudes by motivating them or developing their potential. However, Scheffler (1985) mentions that the induction and development of learners’ potential would be one of the most important factors in education, so I contend that the many methods created by various educators may in fact have one common essence—a method that broadens learners’ perspectives, and at the core of such a method could lie the NBP approach.

Though Vansteenkiste, Lens and Deci (2006) suggest avoiding the usage of words during class that control learners, such as ‘must’ or ‘should’, when facilitating learners’ autonomy, they do not mention a specific strategy that maximizes learning autonomy in a short and efficient time span. I posit that experiencing educational tasks that incorporate the NBP approach in language learning can help learners to generate intrinsic motivation, which in turn might lead to development of their language learning, their potential, and other values, and do so in the short term.



THE NBP APPROACH

The NBP approach entails the use of NBP strategies in several stages in every language lesson. This section exemplifies the NBP strategies incorporated into lessons by describing their use in problem-solving activities.

Class Materials and Procedure

I designed several lessons incorporating the NBP approach, two of which are presented in detail here. The two lessons on which I focus illustrate key aspects of the strategies involved at different stages of viewing narrow and broad perspectives, and each lesson broadens perspectives in a different way. The Moebius strip lesson comprised several stages that, while being related from the start to the finish of the lesson, could each lead learners to broaden their perspectives. The Diet and Digestion lesson comprised several closely related stages, which covered the concept of the processes of time and space.

Table 1 shows the topics, general subjects, grammatical forms, materials, and several stages of the NBP approach used to sensitize learners to view things from different angles in order to broaden their perspectives. Working through the several stages in each of the lessons, we move from a narrow to a broad perspective.

Table1. Topics, subjects, grammatical forms, strategies of the Narrow to Broad Perspective (NBP) approach, and materials used in two lessons

	Topic	Subject	Form	NBP approach; Stages	Materials
1	Moebius Strip	Mathematics (Dimensions)	comparatives	Setting: Ask learners if they experienced any problems. Stage 1: 1. An ant can walk only inside or outside the strip 2. Imagining the ant on the Moebius strip (with no front or back) Stage 2: 1. A twisted rubber band casts a shadow of 8 on the table (figure 8 looks crossed) 2. The rubber band in space (not crossed like a roller coaster)	Glue Scissors Paper strips Picture of an ant Rubber bands Picture of a roller coaster



Accents Asia

				<p>Stage 3:</p> <ol style="list-style-type: none"> 1. A map of Japan 2. The Earth seen from space 3. The Earth under more water in the future <p>Stage 4:</p> <ol style="list-style-type: none"> (1. In the setting, ask learners about experiencing problems) 2. Ask them what they think about their own and world problems 	<p>Map of Japan</p> <p>Picture of the Earth</p> <p>Picture of a futuristic city</p>
2	Diet and Digestion	Biology	Passives	<p>Setting: before the lesson, have learners eat sweets.</p> <p>Stage 1:</p> <ol style="list-style-type: none"> 1. Explanation of two-dimensional visual image of the digestive system 2. Emergence of imagined three-dimensional image of interconnectedness of the digestive system <p>Stage 2:</p> <ol style="list-style-type: none"> 1. Checking each organ individually 2. Imagining their interrelatedness <p>Stage 3:</p> <ol style="list-style-type: none"> (1. In the setting, had learners eat sweets) 2. Ask them the whereabouts of the sweets they ate at the beginning of the lesson 	<p>Sweets</p> <p>Picture of digestive system</p> <p>T-shirt showing digestive system</p> <p>Drinking straw</p>

Class Procedure: Moebius Strip Lesson

The themes of this lesson are to understand the process of moving from a narrow to a broad perspective, incorporating the concepts of worldmindedness, interrelatedness beyond space, and the process of time (past, present, and future potential). I incorporate the NBP approach in four stages of the lesson to help learners broaden their perspective by transferring what they learned to themselves, to others and to the world. The instructor starts by asking the learners if they have any problems in their lives. In Stage 1, using scissors, some glue, and a piece of paper, the learners and the instructor make a ring of paper cooperatively. The instructor shows them an ant that he/she drew, and then asks if the ant could see outside the ring when walking inside it, and vice versa. The instructor is introducing the NBP approach here by asking what the ant could do to see both sides.



The instructor twists a strip of paper for a second to elicit the idea. Finally, they attach the ends of paper to make a Moebius strip, allowing the ant to see both inside and outside the ring. In Stage 2, the learners and the instructor twist a rubber band to make a figure eight. Then, the instructor has the learners look at the band lifted in the air (three-dimensional space), shows them the shadow the figure eight cast on the table, and asks if the shadow is crossed. (This process would preferably be done among learners cooperatively after looking at a demonstration.) The learners and the instructor observe this crossing of the shadow on the table (two-dimensional space) and the instructor explains that the ant would not know which way to go at the crossing and so would view it as interference, causing the ant to get stuck (problem). They then use the NBP approach to solve the problem by taking a broader perspective, using the uncrossed rubber band in the air (three-dimensional space) which allows the ant to proceed smoothly. Thus, if they always see a shadow (two-dimensional representation) from a narrow perspective, they will not always see the full or real situation. To further this concept, they look at an image of a roller coaster, where it runs smoothly because the coaster does not cross in the air (broadening dimensions and seeing the thing from a broad perspective). In Stage 3, the instructor shows the learners a picture of Japan (narrower perspective). Using the NBP approach the instructor lets them see the Earth from space and imagine they are in space. The instructor asks them to imagine what people are doing on the Earth (broad perspective). The instructor then uses the NBP approach by showing an image of a futuristic city built underwater due to rising sea levels resulting from global warming (broadening perspectives to foresee what to do in the present for our future). In Stage 4, in relation to the setting at the beginning of the lesson, the instructor asks them what they think about their personal problems, world problems, and environmental problems and asks whether each problem is big or not.

Class Procedure: Diet and Digestion Lesson

The English lesson concerning the human digestive system uses Japanese sweets, a picture of the digestive system, and a T-shirt showing the digestive system. The themes are to understand human organs, the digestive system as a whole and their interrelatedness. I again incorporate the NBP approach in several stages of the lesson and



examine how NBP tasks would affect learners' reactions and attitudinal changes in the lesson. I designed the lesson so learners would engage in dialogue with an instructor while focusing on sudden changes in perspectives at each stage. Learners first eat some Japanese sweets and then Stage 1 learning starts when discussing the digestive organs depicted in a picture (two-dimensional representation). Then, using an NBP strategy, the instructor suddenly takes off a jacket to reveal a T-shirt depicting the digestive organs (imagined three-dimensional representation). The instructor then uses an NBP strategy again, asking what the organs look like when they are all connected. With a broadened perspective, they look like a drinking straw or tube (simplified representation and feelings of interrelatedness), and many organisms have a simple digestive tube. The concept is that each digestive organ seems separate but they are all in fact related. In Stage 3, the NBP approach involves asking learners where the sweets are that they ate at the start of the lesson. The food they had eaten had moved from the mouth to the stomach, starting the change of an external object into a part of themselves, moving from one space to the next. The concept of the lesson is that while we look different, we have the same bodily functions, which is true of everyone we meet in the world. The goal of the lesson is for the learners to feel empathy toward all organisms and be aware of their interrelatedness. Taken together, the concept is that even if things are external, once they become internal, they become part of us, changing the form. Food and the human body look different but become one. External things are related to us and change their forms in the processes of time and space to give us energy and vice versa. We coexist in the world. The process of time, such as the past, present and future, causes miraculous changes in food and generates energy. The learners' recognition of the process of the time moving from the narrow perspective to the broad perspective should enable their perspectives to be broadened.

DISCUSSION

Taking into account the work of Scheffler (1985), Field (2007), Pike and Selby (1988), Selby and Pike (2000), Deci and Ryan (1985), Ryan and Deci (2000a, 2000b), Dörnyei (2001), Gardner (1985), and Gardner and Lambert (1972), I posited that the NBP approach may play a critical role in language education and student empowerment,



promoting respect for the concepts of diversity, the ecosystem, and interrelatedness in one world. Motivation was therefore discussed in terms of integrated intrinsic and extrinsic motivation for EFL language learning, in relation to three motivational factors: interest in English, interest in topics, and willingness to attend lessons. I have observed positive results using this approach in my teaching work, where many learners seemed to accomplish their goals very early. The NBP approach may play an important role in sensitizing language learning, which may be accompanied by clear changes in motivation for all three factors. When learners succeed at gaining insight through lessons designed to incorporate NBP tasks, they may start to evaluate aspects of the world differently. Such evaluation can lead to greater perceived competence and will contribute to an increase in motivation. By attending classes incorporating strategies that reveal the interrelatedness and gap between the narrow and broad perspectives, students may find their confidence in solving problems and their potential increases, as does their overall communicative competency. Field (2007) mentions that a teacher's role is to sensitize learners and that it is what learners do after classes autonomously that counts. Scheffler (1985) notes that humans have the potential to change and reshape when going through educational processes, and the concept of NBP incorporated into language education does appear to help stimulate such change. I believe that the NBP approach can help to enhance learners' motivation, and it is the quality of their awareness that will motivate them to further themselves and start to acquire the drive to increase language ability, change problematic situations, and eventually, in some part, influence the world's future.

It is important to note the differences between the NBP approach and Pike and Selby's (1988) concept of global education. First, the NBP classes do not necessarily include issues of a global nature. For example, the Moebius strip lesson is designed to let learners notice or receive a clue to broaden their perspectives. The aim is for them to develop as a person, that is, to develop their potential, through developing their perspectives. This would contribute to the development of the world's future. Second, the NBP approach includes the process of sudden change from narrow to broad perspectives or vice versa to have learners experience awareness of the gap when broadening their perspectives. The aim was again for learners to develop as people, serving to suddenly lift or motivate them and to create new ideas. Third, the approach can incorporate any lesson



materials and can be applied to any field. Specifically in language education, it can be applied, for example, to cognitive strategies such as deduction, inference, imagery, recombination, auditory representation, key words, contextualization, elaboration, and transfer. A combination of new information and old information facilitates cognitive awareness; however, it does not comprise what perspective the information allows. Using the NBP approach allows learners to broaden their perspective by experiencing the ‘gap’ and ‘interrelatedness’ between the new and old information. Cognitive strategies help us to create the NBP approach, and incorporating the concept of this approach leads us to a cognitive state, where, for example, new information (broad perspective) is combined with old information (narrow perspective) (Oxford, 1990; Brown, 2001).

It is feasible for teachers to use the NBP approach in language education both inside and outside the classroom. The approach is to broaden the learners’ viewpoint of something to achieve understanding of broader perspectives and thus identify interrelatedness and gaps in their perception. Once learners realize how crucial it is that everything is related and interacts, their motivation may increase, helping them to enjoy living to their full potential and cultivating insight, and may potentially lead to self-actualization. Having observed positive results using this approach in my own teaching work in Japan, where many learners seemed to accomplish their goals very early, I suggest that the NBP approach shows promise in helping learners broaden their perspectives. Identifying the interrelatedness and gap between the narrow and broad perspectives can help the learner generate some clues for problem-solving, which broadens perspectives that could, in turn, stimulate autonomous motivation. Moreover, a Canadian English teacher living in Jakarta, Indonesia, who became interested in my NBP approach and tried it in his language school, told me he personally found the approach fascinating, saying, “Once you experience it, you cannot go back.” He had also received very positive feedback from his advanced students of English. As mentioned earlier, while Scheffler (1985) and Dörnyei (2001) both insist that it would be absurd to use one formula to change learners’ attitudes by motivating them or developing their potential, it is perhaps necessary to consider that learners’ experiences of learning using the NBP “formula” could be associated with marked attitudinal changes in regard to their interest in English, the world, and their future, and ultimately their potential.



Thus, the incorporation of the NBP approach into language teaching may be an effective technique to stimulate motivation and attitudinal change, which can, in turn, not only improve communicative competence but also help learners participate in the concept of global education proposed by Pike and Selby (1988).

CONCLUSION

My teaching emphasizes the fact that it is significant to view things from a broadened perspective, as looking at things from more than one aspect can help us to grasp the whole and identify solutions to problems. Broadening our personal dimensions as well as those of others dynamically causes some change in ourselves and the world; going through the process of moving from a narrow to broad perspective will help us to grasp the broader perspective and identify various solutions to personal and global problems, making us truly global in attitude. Understanding further the concept behind the strategies used in the NBP approach, let us consider two concrete examples that can be incorporated into language learning, even for beginners, serving to sensitize their language learning.

Taking the case of wars, broadening our perspectives might help us to regard them as nonsensical because we all live on a connected Earth (interrelatedness); if all the seawater were removed, we would see that all the land is connected and all living things are on the connected Earth. On the other hand, if we observed this from a narrow perspective, we would not notice such a fact, and instead see separate land masses and countries.

Taking environmental problems as another example, in our day-to-day lives these problems are usually invisible to us here on Earth, but if we looked at the Earth from a distance, we would notice that the ozone layer has been alarmingly depleted and in the future we may need to live underwater or build cities above rising sea levels. Being able to take a different perspective would enable us to determine what are critical and what are non-critical matters. Being aware of the gap between the perspectives would motivate us to take action in some way. Broadening our personal dimensions as well as those of others dynamically causes some change in ourselves and the world; going through the process of moving from a narrow to broad perspective will help us to grasp the broader



Accents Asia

perspective and identify various solutions to personal and global problems, making us truly global in attitude.



References

- Benson, P. (2001). *Teaching and researching autonomy in language learning*. Harlow: Pearson Education.
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). White Plains, NY: Prentice Hall Regents.
- Bohm, D. (1980). *Wholeness and the implicate order*. London: Routledge & Kegan Paul.
- Collins Cobuild English Dictionary for Advanced Learners (2001). Glasgow: HarperCollins.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Edinburgh: Cambridge University Press.
- Dörnyei, Z., & Ottó, I. (1998). Motivation in action: A process model of L2 motivation. In *Working papers in Applied Linguistics*, 4 (pp. 43-69). London: Thames Valley University.
- Field, J. (2007). Looking outwards, not inwards. *ELT Journal*, 61(1), 20-29.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Arnold.
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.
- Gardner, R. C., & MacIntyre, P. D. (1991). An instrumental motivation in language study: Who says it isn't effective? *Studies in Second Language Acquisition*, 13, 57-72.
- Holec, H. (1981). *Autonomy in Foreign Language*. Oxford: Pergamon.
- Keller, J.M. (1983). Motivational design of instruction. In C. M. Reigeluth (ed.) *Instructional Theories and Models: An Overview of Their Current Status* (pp. 386-433). NJ: Lawrence Erlbaum Associates.
- Little, D. (1991). *Learner autonomy, 1: Definitions, issues and problems*. Dublin: Authenik.
- Moebius Band. Retrieved on May 21, 2004 from <http://www.ne.jp/asahi/sun/set/miscera/mebius.htm>
- Oxford, R.L. (1990). *Language learning strategies. What every teacher should know*.



- Boston: Heinle & Heinle.
- Pike, G., & Selby, D. (1988). *Global teacher, global learner*. London: Hodder and Stoughton; in association with the Centre for Global Education, York University.
- Richardson, R. (1985). The world studies story: projects, people, places. In *PEP Talk (newsletter of the Peace Education Project, Peace Pledge Union)*, 8, 4-16.
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54-67.
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Scheffler, I. (1985). *Of human potential: An essay in the philosophy of education*. London: Routledge and Kegan Paul.
- Selby, D., & Pike, G. (2000). Civil global education: relevant learning for the twenty-first century. *Convergence*, 33, 1-2, 138-149.
- VanPatten, B. (1994). Evaluating the role of consciousness in second language acquisition: terms, linguistic features and research methodology. *AILA Review II*: 27-36.
- Vansteenkiste, M., Lens, W., & Deci, E.L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41, 19-31.

