

**Reflection on students' self-efficacy expectancies : Paving the path
to better achievement outcomes in Higher education**

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Abstract

One of the most subtle issues that has provoked heated worldwide debates in the educational and instructional arena today is the way to enhance achievement outcomes in Higher education. The complex global mutations and the revolutionary advances in information technologies have stimulated, more than ever, academics and teachers, to ponder over appropriate mechanisms and strategies to develop a robust 'culture of quality'. This goes through articulating a broad educational philosophy that promotes the development of new modes (or habits) of learning that meet both national expectations and international exigencies. In this perspective, the focus of instruction has changed from curriculum delivery to fostering sophisticated « self-efficacious » learners ready to take responsibility for their own learning in endlessly changing societies. This would prepare students to be strategic, self-reflective and enduring learners not only able to meet the constraints of their learning but also the challenges of life.

Keywords : Culture of quality ; New modes (or habits) of learning ; Sophisticated, self-efficacious learners

This paper proposes, on the basis of a reflection made in relation to the new educational demands of the current era, a number of strategies/practices with the aim of enhancing the quality of the learning situation and ultimately the level of learners' attainment in higher education. In effect, students' achievement behavior is often the end product of a complex and interrelated types of relationships. It is the outcome of a net of hardly dissociable factors that could be either internal (i.e., relevant to the learner) and/or external (linked to the pedagogical, institutional or social background).

In an attempt to get a better understanding of the causes underlying low academic outcomes, educational psychologists have underlined the importance of coming back to the learner and investigating his/her needs and beliefs as he/she is a central component of the teaching-learning process. In this respect, one of the most prominent directions that researchers are exploring today in the area of academic motivation and achievement concerns the influence that self-beliefs play in the quality of students' academic performance. Following this trend, it has been found out that the type of conceptions (cognitions) that students nurture about themselves in a given academic field yield a strong impact upon their ultimate achievement. Thus, students who develop a positive approach about their capabilities (or what is known in the literature as high 'self-efficacy' beliefs) are said to possess the 'power' and the 'faith' needed to succeed.

Albert Bandura, credited with introducing the concept of self-efficacy in the area of social psychology has defined (2001) self-efficacy in his 'guide for constructing self-efficacy scales' as ' a conception that one nurtures about his / her own personal 'power' to achieve a given level of performance. In fact, it is more than a mere 'self-recognition' of being competent in a given domain of functioning ; it is rather linked to the persuasion that people hold about their capacity to effectively use cognitive skills in order to attain a specific goal (Pintrich & Schunk, 1996).

Self efficacy, for instance, is often confused with self-concept, in spite of the fact that they are two distinct belief systems: unlike self-efficacy beliefs which are 'context-specific' self-appraisals of capacities, self-concept is a "global description of one's personal essence" (Mavra Kear, 2000) that is, a general conception (or image), consisting of a body of attitudes and values, that one comes to develop about his/her "being" as a result of social transactions.

Moreover, Zimmerman (1995) has drawn a clear cut between the two constructs in that he relates self concept to 'normative assessment of ability' that is, self concept involves often establishing external comparisons, stimulated by the desire to outperform others whereas he associates self- efficacy with 'mastery criteria' that is, focusing rather on one's own assets and limitations and evaluating one's own personal competence to succeed in a given domain.

One of the major characteristics of self-efficacy is its « context-dependence »: self-efficacy is not « absolute » that is to say, it is not a general sense of personal confidence that one applies to all situations; it is rather « specific » i.e., it is 'a view' that one cultivates about his/her competence in relevance to a specific activity or context.

Furthermore, self-efficacy is not a 'trait' that one possesses or does not possess in a fixed quantity from birth ; it is rather a 'generative capability' (Bandura, 1997 a) that is, a capacity that is developed and shaped through time and experience and could thus be subject to change and enhancement.

In addition to that, self-efficacy is different from talent or aptitude; it is not concerned with the number of skills one has in a given domain but rather with the will and the determination 'to exploit' those skills in front of (sometimes even terrific challenges) and involves hence the active use of a number of cognitive, affective and self-regulative skills.

Sources of Self-Efficacy

According to self-efficacy theorists (Bandura, 1997 a ; Pajares, 1996, 1997), people develop their self - perceptions of efficacy from four major sources of experiences (that are listed in this context, following the theory, on the basis of their order of importance):

Mastery experience: Known also as “performance accomplishments” (Brown, 1999) or “enactive attainment” (Zimmerman, 2000), refers to the way people assess their own personal attainment in a given arena. Students who judge their own past academic results as being successful often develop a high sense of confidence about their abilities while those who view their academic outcomes as unsuccessful are likely to experience feelings of doubts and uncertainty about their own effectiveness.

Vicarious experience (observational): It relates to the self-evaluation that individuals derive from observing and comparing themselves with a given ‘social model’ (classmate, a friend etc). When students observe a given model- that they view as compatible with them- in terms of traits and skills – succeed at handling a certain situation or solving a given task, they are likely to feel able too to meet a similar challenge. By the same token, watching a similar model fail in accomplishing the task at hand might undermine their self-confidence.

Verbal persuasions: The conceptions that people develop about their capacities in a given field are likely to be influenced by the verbal and ‘tacit’ output they receive from others. Note, yet, that verbal and non-verbal messages (like a facial expression, for instance) become particularly influential when they are emitted by persons that are regarded as “credible persuaders” (Zimmerman, 2000) and “believable evaluators” in their own environment such as parents, teachers, experts...etc.

Physiological states: self-efficacy estimates might also be affected by “somatic and emotional states” (Bandura, 1993). Yet, it is not always the negative emotions such as stress, anxiety or fear per se that negatively affect performance but it is rather the faulty interpretations that students make about the purported causes of those psychological states. For example, students might develop a low opinion about their competence in a given field when they judge (wrongly) the ‘normal’ states of tension that usually accompany certain important academic events (like exams) as an indicant of incompetence and inefficiency.

Effects of Self-Efficacy

In line with the theory, self- efficacy beliefs affect students’ academic attainment due to the effects they produce through four “psychological processes (Bandura, 1993) namely, the *cognitive, motivational, and affective* and *selection* processes:

At the cognitive level: the nature of beliefs students hold about their abilities in relation to a given task influences the way they perceive their prospective future academic results. Students who believe in their abilities visualize successful positive outcomes while those who do not trust their capacities are likely to suffer from what Bandura (1997 b) names ‘cognitive negativity’ (A state where they become somewhat ‘obsessed’ by their shortcomings and too skeptic about their capacity to succeed in the face of challenging learning situations)

At the motivational level: a high sense of self –efficacy increases students’ readiness to invest efforts in their learning, serves them well to persist when facing difficulties and helps them to recover more quickly after a negative attainment. Conversely, a perceived sense of inefficacy diminishes students’ interest in their learning, lessens from their capacity to resist when facing impediments and undermines their commitment to achieving their goals.

At the affective level : a strong perceived sense of competence is likely to reduce the amount of stress students might experience in the course of their learning whereas a low self-estimation of capacity might result in high levels of anxiety and agitation that often lead to 'irrational' thinking that ultimately impair their cognitive and intellectual effectiveness.

At the selection level: the conceptions that students develop about their academic abilities are likely to influence the type of decisions they take, the environment they opt for and the kind of choices they select. It is often the case that students often engage in activities in which they feel efficacious while they avoid those in which they feel less competent.

These findings might bear significant implications for both the teaching and the learning enterprise in Higher education: if one assumes that students' self-beliefs constitute a critical force in their academic achievement, might it not be that enhancing the quality of learning would necessarily go through understanding the nature of self-related epistemological beliefs that students develop about their learning in a given discipline and developing remedial strategies to correct distorted and narrow learned self-beliefs?

Following this thread of thought, might it not be also that the wide scope of low-quality outcomes recorded in some learning situations in Higher education result from some negative, self-limiting ideas that students might hold about their abilities? Could it not be that some of the difficulties that university teachers face such as students' de-motivation, lethargy and disengagement are, as proposed by Ehrman (1996) (in Arnold and Brown, 1999), the consequence of students' disbelief in their capacities to cope with the learning challenge?

In effect, How could one expect university students to reach their potential when they are not (themselves) persuaded that they possess the competence to succeed in a highly complex and demanding world? How could one expect them to achieve well in their learning when students are not assisted in altering inaccurate self- efficacy perceptions and in improving their 'calibration' that is, their awareness about what they know and what they do not know ? (Pajares, 1997)

Teachers' Role In Developing Students' Self-Efficacy

Research findings on self –efficacy have demonstrated that self-efficacy, is characterized by its responsiveness to variation in personal experience and attainment and its sensitivity to teaching techniques and instructional strategies (Zimmerman 2000). Self-efficacy, unlike other psychological constructs that have a trait-like stability, is ‘a *malleable construct*’ that could be enhanced through providing students with motivational assistance and guidance. (Bandura, 1986)

This might underline the crucial role that teachers play in instilling positive self – perceptions of efficacy in their students through training them to make use of a variety of learning strategies such as Goal – setting, strategy training, modeling and feedback (Schunk, 1995)

A • Goal setting: Teachers should make their students aware about the goals that need to be attained in their courses and provide them with feedback on goal progress. It might be motivating also for students to be allowed to self-set “proximal” goals that is, near in time as it is likely to enhance their commitment and help them avoid putting things off.

B • Strategy training: Teachers should develop instructional programs that train students on the use of certain strategies to improve their performance. This might be achieved through using ‘strategy verbalization’ or ‘think aloud’ procedures (Schunk, 1995). The latter consists of having a student to explain verbally the different steps he /she follows at the moment of solving an activity .This might keep students alert to the basic elements of the task, activate their encoding and retention abilities , help them to be more systematic in their work and more in control of their learning .

C • Modeling: Teachers are likely to remedy to ‘the learning and motivational deficiencies’ that their students might have by modeling cognitive strategies and self-regulatory techniques (Zimmerman, 2000). Providing students with a model (one of their classmates, for example) that uses a given cognitive strategy for solving an exercise, for instance, is likely to have a positive effect on students’ motivation and learning.

Note that modeling strategies are likely to be more ‘fruitful’ when applied with students who have little experience in the domain under investigation and/ or those who perceive themselves as similar in competence with the modal in question . (Pajares, 1997)

D • Feedback: Teachers should provide their students regularly with immediate specific feedback as regards their attainment as it indicates to the students that they are making progress in their learning and raises hence their self-efficacy beliefs and enhances ultimately their academic achievement. They should provide students with constant feedback about their performance in the different courses they have to give them the opportunity to assess their progress in their learning. They can make use of many types of feedback such as *effort feedback* which emphasizes students’ effort like in: “you have been working hard” ; *ability feedback* which stresses students’ ability such as “ you are good at this” ; *performance feedback* which indicates that students are making progress in their learning like “you are making progress”. (Schunk, 1995)

Moreover, they should help students develop ‘healthy attributions’ about their performance in English such as attributing, failure, for instance, in an English examination to insufficient efforts. By providing ‘attributional feedback’ to students, that is, relating their academic attainment to the perceived causes underlying it , teachers would encourage them to view ability as ‘a controllable’ and ‘a changeable’ aspect of development that is, to perceive competence as a skill that could be acquired with effort and persistence. (Pintrich & Schunk 1996)

In addition to that, teachers should aim, in the process of transmitting knowledge to their students, they should make students aware about the fact that ‘ability’, ‘knowledge’ and ‘efficacy’ represent three different, though compensatory, facets in the learning process. They should make them aware that success is not always systematically equated with innate ability but is rather within everybody's reach when 'effort' and 'self-discipline' are exerted. (Bernat, 2006; Rahemi, 2007)

Students are not insensitive to the outcomes of their learning but rather assess their academic results and try to understand their causes. They develop ‘epistemological theories’ about their learning which are some implicit assumptions they hold about the nature of knowledge and learning. (Phan, H.P, 2008) Knowing the type of outcomes that students expect from their results would be telling since it is often the case that students regulate the level and the distribution of their effort in accordance with the effects and the impacts they believe will accrue from their performance.

Therefore, teachers should put students in O’keefe’s terms’ (1996) in a positive light’ and help them develop positive explanations about their academic results in English since the way students react or feel about their performance and the kind of evaluative interpretation they develop about it influence the level of their academic attainment in the future.

They should help them on the one hand avoid, ‘the illusion of incompetence as it undermines students’ intellectual effectiveness and leads to irrational thinking (Pintrich & Schunk, 1996) and on the other hand develop in them 'a pro-active' attitude through training them to assess their outcomes in reference to their own personal targets rather than comparing their results with those of their classmates. (De Andrés, V., 1999; Pajares, 2003; Pajares & Schunk, 2001)

Teachers should know, yet, under which conditions (students’ level, stage of learning) it is beneficial to opt for this rewarding system since an excessive reliance on grades might be detrimental to students' performance: they might generate, on the part of the students, a short-term motivation that stimulates them to attain credentials rather than to acquire a life-lasting knowledge that could be used efficiently and creatively in the future. Teachers should aim, through what and how they are teaching –at developing ‘*mastery learners*’ that is, students who are primarily motivated by the need to acquire ‘competence’ rather than to strive only for social approval and recognition (O’keefe, 1996).

In effect, the grading process is one of the most challenging issues that yield strong effects upon students' perception of competence and feelings of self-worth. Marks, which could be an important extrinsic motivator for students, are highly influenced by social factors. This would behoove researchers to ponder over the introduction of criterion-referenced practices to the E.F.L classroom instead of solely relying on normative types of assessment in an attempt to vitiate the effect of external social comparisons and reinforce students' concern about their own progress and improvement.

Teachers should make their students aware of the fact that motivation is a factor that provides an incomplete explanation about academic attainment. Motivation –though is basic to initiating action –might not always be rewarding unless it is sustained by the use of self-regulatory skills. Thus, a successful academic performance does not merely require a high motivation from the part of the students to study but it needs also strong will to control their learning from all potential distractions.

They are called to extend their craft to prepare students for the challenges of life beyond university through developing skills which are paramount to self-direction and self-regulation. (Huit & Cain, 2005; Okeefe, 1996; Sagor, 1996) This might underline the importance for teachers to critically examine the components of self-regulated learning as postulated by Bandura (1986) namely, self-observation, self-judgment and self-reaction in order to develop more effective strategies to help students acquire self-regulatory skills, utilize them and ultimately reach their potential. Enhancing student self-regulation would enable students to be more effective in organizing, rehearsing and encoding information and more successful in controlling their motivation, setting up a productive work environment and using social resources. (Kerlin, 1992; Wongsri et al., 2002)

This might underline the importance of including the teaching of « Volitional strategies » in Higher education curricula in order to train students in managing more effectively their academic work. According to Corno (1986), examples of these strategies include, for instance : (See Kerlin, 1992)

1. **Motivation control strategies:** involving “self-reinforcement and self-imposed penance” that is, anticipating the potential positive and negative results (outcomes) of one’s actions.
2. **Emotion control strategies:** involving “self-talk strategies” that aim basically at reducing from the anxiety one might face during the learning process.
3. **Environmental control strategies:** entailing adopting “self-helps strategies’ that are invoked for controlling one’s learning environment from stimuli that might distract one’s attention and motivation.

Besides, teachers should also think about introducing the teaching of study skills such as time - management to help students become better self-regulators i.e., more able to organize ‘strategically’ their own study schedules and to balance thus between their academic and social life. For instance, students should be taught how to make schedules when they get engaged in problems –solving or research activities including an estimation of time requirement, an appraisal of resources available and the choice of the adequate procedures to complete the activity within hand.

Moreover, teachers should encourage students to engage in ‘metacognitive processes’ (that is, to think about their own thinking) in order to become able to self-direct their learning. For example, teachers should teach students to pose their own question when reading, listening or discussing in the target language like: “Do I understand completely what I am hearing / reading? If not, what gaps exist? What do I need to question the speaker about? (Barell, 1995)

Illustratively, one way to developing metacognition and promoting students' clarity of thought would be through keeping a 'thinking journal'. A thinking journal is a sort of diary where students reflect upon their own thinking and talk about the difficulties and ambiguities they might face when reading a material, for instance. (Blakey et al., 1990)

Teachers play a significant role in creating what Dufen (1994) termed "an adequate affective framework" for language learners through creating for them healthy and stimulating classroom environments where they can feel willing to express themselves and defend their ideas. Granting attention to the nature of beliefs students develop about themselves is of a tremendous significance for positive academic outcomes. It has been found that teachers – through their actions and words –strongly influence students' feelings of self –worth. When students are equipped with strong 'motivational resources' namely, strong feelings of adequacy, they are likely to approach more confidently the various activities presented to them in the courses. (See Arnold & Brown, 1999)

Teachers should encourage cooperative learning and promote understanding and mutual support between the group members through organizing "group activities". This might stimulate students' interest in learning, reinforce their "affiliative" needs, increase their awareness of group membership and provide them with ample opportunities to exchange ideas and widen the scope of their knowledge. This might help teachers as well to identify students in the group who show little motivation in relation to taking part in group work activities and investigate the reasons that lie behind their reluctance to participate in social activities (A high sense of social anxiety, an introvert personality profile, a sense of perceived social inefficacy ...etc).

Teachers of English should help students to foster a strong sense of personal competence through identifying, valuing and utilizing dispositions and 'habits of mind' such as developing a readiness to accepting responsibility for one's success or failure; developing strong determination to persist when facing difficulties; opting for deliberateness rather than

impulsiveness and learning to be cooperative with others and open to their ideas and opinions. This could be achieved, for instance, through organizing class discussions and interviews on these issues in order to help students become aware about the crucial role that these dispositions play in their motivation to approach or avoid learning challenges.

It is often the case that students, due to an association of idiosyncratic factors such as personality profile, home education, personal beliefs and so forth, hold different perceptions, interpretation (schematas) and reactions to the various facts and phenomena that might exist in their social surrounding. Hence, teachers should be aware of the fact that the nature of conceptions that students develop about themselves and about their academic potentialities are vulnerable to the influence of the family structure and cultural environment.

Learners should be seen primarily as social partners that might be put in complex and threatening social circumstances. Their success or failure in their academic life is related, in addition to environmental opportunities, to the extent to which they 'believe' they 'can' succeed in their learning in spite of social impediments. There is ample evidence to think that students with 'fragile egos' who do not feel able to manage their anxiety when going through dissuading social situations are unlikely to achieve much in their learning.

It should be pointed out that some students might feel discouraged and decide not to invest themselves in their learning as they often lack -what Bandura terms "the incentive to act" - even if they feel inwardly able to succeed and are practically capable of doing it whereas other students might feel challenged-by what they perceive to be 'unfair' social practices and beliefs- to do their best to succeed in order to affirm themselves and gain social recognition.

In addition to that, teachers should create for their students learning contexts, along the different courses they take, that match their expectations, challenge their analytical abilities and enable them to learn new skills, providing them hence with 'mastery experiences' that would enhance their self-schemata of personal efficacy. Students may have little reason to enjoy their class- time when they feel unable to conceive the goals of the course (Barell, 1995) or when they feel overwhelmed by negative emotions at perceived inability to deal with task requirements presented during the lecture.

Last but not least, teachers also need to maintain awareness about the power of verbal persuasions that is, the messages they send deliberately or non-intentionally to their students as regards their ability across various courses. It is often the case that students, as displayed by other research, get influenced by negative fulfilling prophecies and end up losing faith and interest in their learning. (Madon, S., et al., 1997)

It is our contention that the concern for learners' intellectual development should not be dissociated from concern for their social and psychological well-being. (Pajares & Schunk, chap in press). Indeed, one of the major objectives of Higher education, in this area of tremendous development in telecommunication technologies, should be thus developing student's self-efficacy and 'global literacy'. The latter defined by Nakamura (2002) as "*cross-cultural competence/sensitivity with multicultural, transcultural and transnational perspectives*" (p.68) includes cognitive, affective and social skills that help students to transcend, in Fantini's terms (2001) the 'limitations' of their own world view and to ultimately achieve harmonious existence on the globe.

Acquiring 'intercultural' or 'cross-cultural' competence which includes basically values such as respect, empathy and flexibility, empowers learners to integrate opposing values, to develop tolerance for ambiguity and hence to manage diversity in a 'hybrid' world where they are bound to face a multitude of novel and at times even unexpected learning situations. This might pave the path for nurturing a genuine culture of quality that promotes a more permanent and autonomous learning in Higher education.

REFERENCES

- Arnold, J., & Brown, H.D. (1999). A map of the terrain. In J. Arnold (Ed.), Affect in language learning (pp.1-24). Cambridge: Cambridge University Press.
- Bandura, A. (1986). Social foundations of thought and action: Selected passages. Retrieved January 26, 2000, from <http://www.emory.edu/EDUCATION/mfp/guide.html>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Educational Psychologist, 28, 117-148.
- Bandura, A. (1997 a). The nature and structure of self-efficacy. In Self-efficacy: The Exercise of Control (PP .36-78). New York: Freeman
- Bandura, A. (1997 b). Cognitive functioning. In Self-efficacy: The Exercise of Control (PP.212-258). New York: Freeman.
- Bandura, A. (2001). Guide for constructing self-efficacy scales. (Revised). Available from Frank Pajares, Emory University, Atlanta, GA, 30322.
- Barell, J. (1995). Critical Issue: Working toward student self-direction and personal efficacy as educational goals. Retrieved June 15, 2002, from <http://www.ncrel.org/sdrs/areas/issues/student/learning/lr200.htm>
- Bernat, E. (2006). Assessing EAP learners' beliefs about language learning in the Australian Context. Asian EFL Journal, vol.8, Issue 2, p.202-227.
- Blakey, Elaine, Spence & Sheila. (1990). Metacognition. Developing metacognition. ERIC Digest. ERIC clearinghouse on Information Resources, Syracuse, New York, 1990. (ED 32728)
- Brown, B.L. (1999). Self-efficacy beliefs and career development. ERIC Digest. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, the Ohio State University.
- De Andrés, V. (1999). Self- esteem in the classroom or the metamorphosis of the butterflies. In Arnold, J. (Ed.) Affect in Language Learning. Cambridge: Cambridge University Press, 87- 102.
- Fantini, A.E. (2001). Exploring Intercultural Competence: A construct proposal. A paper presented at NCOLCTL Fourth Annual Conference. Retrieved February 27, 2000 from <http://www.councilnet.org/papers/Fantini.doc>.

Huitt, W., & Cain, S.C. (2005). An overview of the conative domain. Educational Psychology Interactive. Valdosta, GA:Valdosta State University. Retrieved June 20, 2006 from <http://teach.valdosta.edu/whuitt/brilstar/chapters/conative.doc>

Kear, Mavra. (2000). Concept Analysis of Self-Efficacy. Retrieved February.26, 2008 from <http://www.graduateresearch.com/kear.htm>.

Kerlin, B.A. (1992). Cognitive engagement style, self-regulated learning and cooperative learning. Retrieved July 14, 2000, from: http://www.lhbe.edu.on.ca/teach2000/onramp/srl/self_reg_learn.html

O'Keefe, B.A. (1996). A teacher's interpretation of motivational strategies: Tools to help students succeed. Retrieved June 25, 2001 from <http://edpsycherver.ed.vt.edu/resources/motivation1.html>

Pajares, F. (1996). Self-efficacy beliefs in academic settings. Review of Educational Research,66 (4), 543-578.

Pajares, F. (1997). Current directions in self-efficacy research. In M.L. Maehr & P.R.Pintrich (Eds.), Advances in motivation and achievement (vol. 10, pp. 1-49). Greenwich, CT: JAI Press.

Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. Reading& writing Quarterly, 19 (2), 139-158.

Pajares, F. & Schunk, D.H. (2001). Self-beliefs and school success: Self-efficacy, Self-concept, and school achievement. In R.Riding & S.Rayner (Eds.), self-perception (pp.239-266).London: Ablex Publishing.

Phan, H.P. (2008). Multiple regression analysis of epistemological beliefs, learning approaches, and self-regulated learning. Electronic Journal of Research in Educational Psychology, N 14.vol 6(1),2008.ISSN:1696-2095.pp.157-184.

Pintrich, P. & Schunk, D. (1996). The role of expectancy and self-efficacy beliefs. Motivation in education. Englewood Cliffs, NJ: Prentice –Hall.

Rahemi, J. (2007). Self-efficacy in English and Iranian senior high school students majoring in humanities. Novitas-ROYAL, vol 1 (2),pp 98-111.ISSN:1307-4733.

Sagor, R. (1996). Building resiliency in students. Educational Leadership, 54(1), 38-43. Retrieved July 26, 2001 from <http://ericae.net/ericdb/EJ530629.htm>

Schunk, D.H. (1995). Self-efficacy, education and instruction. In J.E. Maddux (Ed.), Self-efficacy, adaptation, and adjustment: Theory, research, and application (pp.281-303). New York: Plenum.

Madon, S., Jussim, L. & Eccles, J. (1997). In search of the powerful self-fulfilling prophecy. Journal of Personality and Social Psychology, 72 (4), pp.791-809.

Nakamura, Koji (2002). "Cultivating Global Literacy through English as an International Language (E.I.L). Education in Japan: A new paradigm for global education". International Education Journal 3 (5).p 64-74.

Wongsri, N, Cantwell, R.H. & Archer, J. (2002). The validation of measures of self-efficacy, motivation and self-regulated learning among Thai tertiary students. Paper presented at the annual conference of the Australian Association for Research in Education, Brisbane, December 2002.

Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura (Ed.), Self-efficacy in changing societies (pp. 202-231). New York: Cambridge University Press.

Zimmerman, B.J. (2000). An essential motive to learn. Contemporary Educational Psychology, 25 (1), 82-91.