INTRODUCTION
There is increasing interest among educational researchers (Mitchell & Weber, 1999; Prosser, 1998) in the possible applications of imagery among professional educators in the process of undertaking research. The use of imagery is already well recognised in the medical context (Simonton, Simonton-Matthews & Creighton, 1986) and in sport (Martens, 1987).

Imagery is being used by educators in a number of different and quite distinct ways. For some, it is being used for assisting students in accessing perspectives on themselves as educators in an autobiographical study (Whitehead & Fletcher, 1999), while others use it for facilitating learning (Leonardi et al., 1998), as well as for assisting pre-service teachers in controlling stress and providing opportunities for their pupils' creative development when they are teaching, (Fletcher, 1999). Still others find it useful as a motivating force or as a guide to further enhance learner goal-setting and self-directedness in adult learners (Childs, 1999b).

DEFINING WHAT VISUALISATION IS
Visualisation, according to Simonton et al. (1986), is a process whereby the unconscious mind is able to communicate with the conscious. In western society we are taught to value external events and objects rather than our internal environment. Meditation is an accepted part of eastern culture but is still frequently viewed with suspicion in the West. Thus we tend to ignore feelings, dreams and intuitions from our internal self-system which can provide us with resources to meet demands of the external world. Visualising is "a symbolic representation of aspects of the personality not normally available during conscious awareness" (Simonton et al., 1986, p. 198). The unconscious self, they believe, can be accessed in a kind of "guided daydream" where there can be a dialogue between the conscious and the unconscious self. Learning to access this unconscious self can take time and patience and contact is easiest through consciously induced relaxation.

HOW VISUALISATION CAN BE USED TO ACCESS POSSIBLE SELVES
Leonardi et al. (1998) define possible selves as "conceptions of the self in future states." They are thought to derive from representations of the self in the past and to include representations of the self in the future. They are considered different and separable from the current or now selves but intimately connected to them." Similarly Markus (1989) suggests that "most goals occasion the construction of a "possible self" in which one is different from the now self and in which one realises the goal" (p. 212). These possible selves are "future orientated components of the self - system (which) represent individuals ideas of what they might become" (1989, p. 212). Others (Bandura, 1988; Burger, 1992) appear to concur with Markus' opinion that "imagining one's actions through the construction of elaborated possible selves achieving the desired goal may thus directly facilitate the translation of goals into intentions and instrumental actions." Possible selves can be consciously conjured up in the pursuit of desired goals which can be positively or negatively constituted. The implications of this for initial teacher education for mentors and mentees are far-reaching.

Possible selves are thought to influence the motivation process in two ways:

i) by providing a clear goal to strive for or to avoid if they are negative,

ii) by energising an individual to pursue the actions necessary for attaining a possible. Therefore, possible selves appear to have the potential to exert a very concrete impact on how one initiates and structures actions to realise positive selves or to prevent negative selves from such realisation.
KATHARINE'S RESEARCH EXPERIENCE

My research is a direct outgrowth of an action research project which looked at acquiring goal setting skills as a way to facilitate self-directed learning (Grow, 1991) in adult students. Among the conclusions of that initial study was the possibility of using a strong personal vision as a motivating force or as a guide to further enhance learner self-directedness (Grow, 1989). In an effort to help my adult students become more self-directed, I continually search for different ways to help them gain greater control of their learning. Through the acquisition of basic goal setting skills, I have seen a certain amount of personal causation emerge, giving those learners in my care a definite sense of achievement and "success." In some of those learners, a vision of the future accompanied by an individualized learning plan to help accomplish that vision, began to strongly emerge. Realizing that this vision could be a key to be used either as a guide or as a motivating factor for increasing self-directed learning, I began to look at visualization and related techniques as a possible means of enhancing selected goals and of seeding the mind (Gerzon, 1997).

The characteristics of a self-directed learner and the cycle of self-directed learning have been well-documented and explored in adult education literature. Most notably, researchers like Knowles (1975, 1990), Guglielmino (as cited in Tremblay, 1992), and Grow (1989) have determined certain qualities as being essential for self-direction in learning. Among these are that self-directed learners usually have well-formulated learning plans or some sort of vision of excellence to spur them on. As well, more autonomous learners set goals that are realistic and in keeping with their own understanding and plans, and are enthusiastic about their learning. Self-directed learners also take responsibility for their own learning and are aware that they are doing so - often creating learning strategies or devising tailored ways to make learning that much easier and individually more meaningful for themselves. But probably the single most important aspect that characterizes self-directed learners is that they experience "progress" and/or "success," according to their own definitions of these terms. Motivationally, then, it would appear that one of the biggest differences between self-directed learners and teacher-dependent learners is that self-directed learners have internal incentives—their own curiosity or vision of excellence, for example—to carry them on, whereas teacher-directed students seem to be primarily motivated by external rewards or punishments—such as being made to stay after school or getting good grades on a report card.

My belief is that true (that is, highly-developed) self-direction may be difficult to find in an academic system or institution which requires learners to take courses in order to earn credits towards a degree or diploma program. This echoes Grow's (1989) and Wlodkowski's (1985) concerns that when teachers set many of the requirements, tests, and even assignments for course work, they are, in essence, controlling the environment and the context for learning, thereby making it inadvertently difficult for any learner in the system to take the "primary responsibility for planning, carrying out and evaluating their own learning endeavors" (Hiemstra, 1985, p. 11, emphasis added). With this in mind, the definition of self-directed learners that I use in my previous study as well as in this one is "those who within a teacher-controlled setting, take greater charge of their own motivation, goal setting, learning, and evaluation" (Grow, 1989, p. 203).

CONTEXT

This action research project is being carried out at an Adult Learning Center in the Eastern Townships of Quebec, with adult learners enrolled in my classes and in my care, but most specifically with the ten learners under my direct supervision in my position as mentor. As a part of these services, the Adult Education Center offers full-time and part-time academic programs in a self-contained academic setting to those adults wishing to complete their studies leading to the high school diploma (DES) or the professional vocational diploma programs (DEP). These programs are open as well to people who wish to upgrade their academic credentials. This academic year over 62% of our learners are 20 years old or younger. These young adults exhibit many of the characteristics of
the teacher-dependent learner and have radically different needs and seem to require a completely different “approach” than our slightly older/more experienced adults. Most specifically, there seems to be a lack of student involvement and interest in their own learning.

My belief is that if I could help learners to acquire effective, appropriate goal-setting skills, they would become more self-directed in their learning. I worked out a very simple seven-step plan for use in working on goal-setting with each mentee in our individual mentoring sessions (Childs, 1999a). This plan a modification of the Personal Planning Portfolio used by mentors and learners at the Adult Education Centre.

THE PLAN STARTS WITH A VISION
1. The plan starts with a vision, a vision of what the learner wishes to accomplish perhaps a “long term goal” or a dream. We try to commit this vision into words and onto paper as best we can, because dreams can’t become goals or even reality until they are put into words.

2. We take stock of where the mentee is, where he sees himself as going, what he is already doing well, and what he needs.

3. The actual goal setting begins after taking stock is completed. The mentee writes down his short-term educational goal, his long-term educational goal, and his vocational goal. These goals may be very similar for many learners—for example, one’s short-term educational goal (something that can be completed fairly soon, like getting one’s high school diploma) may also be one’s long-term educational goal if further education is not seen as part of one’s future. Often, learners are unsure of their long-term educational goals or even their vocational goals. After this, I ask each mentee to write down his goal for the year. I remind each one that a goal must be very specific/concrete as well as measurable, stated with no alternates, and be growth facilitating (constructive, not destructive).

4. An action plan then evolves in which the learner will take small steps towards this goal, each one a subject-specific goal—each with a time limit and a specific task. These subject goals will be set after consultation with his subject teacher as well as his mentor. Then, at every mentoring session (or more often, if needed),

5. We take stock again to see how things are going, and

6. Revisit the vision, constantly checking and verifying to see where the mentee is in relationship to his vision and his stated goals,

7. Always asking the question, “Am I there yet?”

The findings from the initial action research I carried out in the academic year 1998-99 revealed that learners frequently mentioned having their own “vision” of what it was like to be successful, often speaking about this vision in very concrete terms, as if they could smell, touch or feel it:

Now that I can see - really see - myself graduating, I can see all sorts of other things related to what I want to be: when I visualize myself in an office, I can actually feel myself sinking down into that cushy gray swivel chair behind a polished desk...there’s lots of those flat things that hold papers neatly, and I’ve got one of those phones - beige, or maybe it’s almond - with lots of buttons and gizmos on it... whenever I imagine it, I always come away with the feeling that my office smells like furniture polish early in the morning. But, as I said, that part is still a long ways off. [“Pauline” talking about her office]

As well, learners also frequently referred to themselves as if they were, indeed, different “selves”- past selves, present selves, and future selves, positive selves and negative selves. Interestingly enough, these possible selves were always mentioned in connection with the realization of their goals:
I already see myself as that future person, I mean, I am that operating room nurse. That's who I'll be, who I am really inside. That's the positive part that keeps me motivated and going. Now, the person I don't want to be, the person I'm afraid I'll become, is a drunk on a park bench. That's the person who'll keep me in line, who'll keep me on track, the negative image that keeps me working hard to become the person I am inside, that nurse... ["Hugh" talking about his possible selves]

SARAH'S RESEARCH EXPERIENCE
The potential of using imagery and visualisation is yet largely unrealised in education though imagery appears to be well-accepted tool for enhancing performance in sport. I decided to take Cox's (1998) three categories and adapt them to working with pre-service teachers. I have a group of 12 graduate linguist trainees who are taking a thirty-six-week PGCE course to enable them to teach in secondary schools. This combines teaching experience with university-based study. The programme is co-written by teachers and tutors and encourages the trainees to reflect upon their own professional development for improvement.

Three main foci for using visualisation in the context of my sessions with my trainee teachers parallel the three main divisions of Cox's model:
1. **Visuo-Motor Behaviours Rehearsal**
   I encourage trainee teachers to imagine how they would react in a potentially confrontational situation with an angry teenager.
2. **Stress inoculation**
   I put my trainees into a mock interview situation.
3. **Stress management**
   At the outset of the year I taught my group a number of basic stress control. Stress control has become a recurrent theme in teaching sessions and is an essential aspect of preparing pre-service trainees for teaching.

I talk about using imagery with my learners as well as encouraging them to live it out through a series of scenarios. I stress that visualization is one aspect of imagery and that some may not see internalized pictures.

TOWARDS A NEW EPISTEMOLOGY OF PRACTICE?
As Kathy and I began work on this paper, it struck me that our enquiries into the use of visualization were constituting a response, at least in part, to the challenge that Schön (1995) had set. We are both walking on the wild side of academe as we challenge accepted logic by asking our students to trust to their non-rational non-positivist insights to see. We are learning from taking notice of our own insights and those of our students. We had knowing already that through visualisation we frame how we act and what we can achieve. From this realisation, we offer others the way of knowing that is "of" each of us and is real, if yet ill formed.

In using visualization we have discovered something that already lies within practice and which we can apply to not only to access but to generate knowledge. We are enabling knowledge to arise from internalizing vision rather than using agreed theories of knowledge to dictate what we see. What an individual sees inside through visualizing is quite unique, for nobody creates the image that individual sees on the internal screen.

Visualization is a widely used technique in a number of contexts and would appear to be of benefit to educators engaged in enquiry. The challenge that awaits us as researchers is to represent the spontaneity of internal seeing and to do so with rigour and artistry while meeting the demands of academic accountability to ourselves, to our institutions and to our students. We will need to demonstrate that learning is taking place in relation to visualisation and justify the values which constitute that learning as being truly educative.

REFERENCES
NJ: Carnegie Foundation for the Advancement of Teaching.