Self-Directed Learning:
The Missing Ingredient For School Reform

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The Problem

In the simmering context of educational reform, many recipes have been offered. Most of these include a heavy dose of back-to-basics sprinkled with the spices of increased discipline and standardized testing. Few of the "cooks" have paused to consider a different type of cuisine. Improving upon or simply adding to a conventional dish that is no longer satisfying a hungry public can only spell failure. The standard recipe remains, in the end, unchanged.

As an amateur cook and professional educator, I decided to look into new realms of cookery. Ten years before the advent of serious high stakes testing, I noticed that, almost imperceptibly, the ingredients of intrinsic motivation, self-image, and self-directed learning had crept into the educational philosophy and mission statements of some public school systems. These, of course, were listed secondarily after the main staples of academic growth and performance. However, just the inclusion of these of these kinds of self-directed goals was encouraging at the time.

Looking back at this article in today's foreboding climate of standardization and sudden death testing, we might wax nostalgic for a time when real change seemed imminent or at least possible. What has happened since these hopeful times should not diminish our struggle for schools that develop the whole person. After all, our kids deserve the best we can give them. As I put this article into perspective, I realize that we need open, democratic schools more than ever before.

Fifteen years ago, many prominent educators(Combs, 1998; Sizer, 1984) were proposing that we examine the kind of learning that was being encouraged and developed in the public school system. Some researchers (Boyer, 1983; Goodlad, 1983) had even called for an emphasis to be placed on engaging students in the learning process through the development of self-directed skills and attitudes. Adding to the alarm, futurists were warning us that empowered self-directed learning would be required for a future that marked by accelerated change (Toffler, 1970). Some went so far as to imply that the current high school graduate might be incapable of

handling life's tasks because of a lack of self-direction (Gibbons, 1976). In this light then, the charge to educational systems was to incl8ude the preparation of students for lifelong learning.

As the emphasis on self-directed learning became more of an issue for school, so did the examination of educational programs, already in place, that promoted and encouraged its development. The history of open alternative schools indicated that such progressive programs had long advocated self-direction for learning as a primary goal (Nathan, 1981). Some of the research demonstrated that the graduates of these self-directed school were better able to succeed in college (Aiken, 1942) and other adult life pursuits (Willis, 1961). Additional research revealed that these open school graduates generally appreciated their high school experience as a positive and useful foundation for life of continuous learning Hunter, 1985; Nathan 1981). These findings presented quite a contrast to those of other researchers who had estimated that as many as two-thirds of the students who had graduated from conventional high schools felt alienated and disengaged from their own educational experience (Sedlak, Wheeler, Pullin & Cusik, 1986).

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Consequently, as a researcher, I became increasingly interested in the phenomena of self-directed learning as key ingredient in the recipe for school reform. But what was self-directed learning? What did self-directed learners look like, and how did they feel about themselves? And what about these self-directed schools-how did they operate? The answers to questions became part and parcel of a research study I conducted in 1988. The study was designed investigate self-directed learning among students in an open alternative high school program (Posner,1989).

PURPOSE

The intent of the study was to examine students in an educational environment that openly promoted self-direction for learning as its major goal. The study also included an in depth look at the process (skills) and personality (attitudes and personal characteristics) perspectives of self-

directed learning as encompassed by by the research of Knowles (1975) and Tough (1971) along with the research from Gibbons (1984), Oddi (1987) and Guglielmino (1977). The study attempted to investigate students in different stages of progress in, or about to be in, a rigorous self-directed high school program.

Gibbons and Phillips (1978) has proposed that students progress through different stages of development when they entered a self-directed program. Some of these transition stages were seen as being " crisis producing" in nature as students suddenly realized the intense personal responsibility of taking over the ownership of one's education and life. Other stages were viewed as turning points or mobilization stages" wherein students began to deal effectively within the self-directed environment and develop new skills and attitudes about learning.

This framework, combined with Steele's (1988) concept of program " phases" extending from orientation through completion, helped to frame the stages for the study. Some general questions emerged: Was there something special about students the advanced stages of demanding self-directed program? What was the profile of a successful self-directed learner?

Specifically then, the purpose of the study was to determine the skills, attitudes and characteristics of students that contribute to the completion of an open alternative high school program. A secondary purpose was to investigate the relationship among perceived competence, personal orientation (intrinsic versus extrinsic) and perceived readiness for elf-directed learning. The investigation produced profiles of students I different stages of progress in a high school program designed to encourage and develop self-direction for learning.

The following questions were proposed:

1. What are the demographic and background factors that influence levels of program completion?
2. Do students with higher levels of perceived scholastic competence and global self-worth have higher levels of program completion?
3. Do students with high levels of intrinsic orientation have higher levels of program completion?
4. Do students with high levels of perceived readiness for self-directed learning have higher levels of program completion?
5. Are there significant relationships among perceived competence, personal orientation and perceived readiness for self-directed learning.

SAMPLE

The sample for this study included 149 students from five stages of development in a public. open alternative high school (total population =240). The school clearly stated that the development of self-directed learning was one of its central goals (Steele, 1988).

It was also noted that students at the school had to progress through three distinct phases on their way to becoming self-directed learners(Steele, 1988). Phase One was viewed as an other-directed stage in which students were gradually introduced to experiential and self-directed learning concepts. Phase Two was described as a teacher-advisor influenced stage in which students formed support groups from among peers and staff. Students in this phase also learned to develop individualized educational in conjunction with their advisors.

Finally, in the Third Phase, students began to plan and implement personally challenging self-directed projects called Passages. These projects were , in fact, opportunities for students to demonstrate their abilities to use self-directed skills they had developed in the earlier stages.

The school did not give grades or grant credits. Therefore, evaluations for performance were the responsibility of the learner with the support of his/her advisor and advising group. Demonstrations of competence took place in Passage committees and frequently in front of the entire school community.

In their final year, students would have completed six Passages ranging from a career exploration to a logical inquiry using The Scientific Method. Each student would then write a narrative transcript of his or her growth in the personal, social and intellectual domains as record of their school experience. The Passage curriculum was based on the rites-of-passage or Walkabout developed by Maurice Gibbons in 1974. The intent of this modern version was to facilitate the transition from adolescence to adulthood.

It should also be noted that all of the self-directed skills as outlined by Tough(1971) and Knowles(1975) were required to complete the rigorous Walkabout Program. It was assumed that students who had successfully completed their Walkabout were, in fact, self-directed from a process or skills perspective. The next step was to find out if these same students would exhibit different attitudes and preferences than those students at the less developed levels of the program.

The stages of development used for the study were formulated from the Three Phase Model (Steele, 1988) as well as the Gibbons and Phillips(1 978) framework for the transitional stages in a self-directed program. The stages of development in the open high school used in the study were:

Stage 0- Students who had made a choice to attend the high school at the Start of the next school year. These students either came from conventional schools or from a 'feeder school' based on a similar open educational philosophy.

Stage 1- Students who had completed the orientation phase of the open high school program but had not completed a Passage.

Stage 2- Students who had completed one Passage.

Stage 3- Students who had completed two or more Passages, but did not intend to graduate school that year.

Stage 4 Students who had completed or were about to complete the six Passages and Final Transcripts and intended to graduate during that school year.

METHODS

Data were collected from a demographic and background information sheet, The Self-Perception Profile for Adolescents (Harter, 1988), The Scale of Intrinsic Versus Extrinsic Orientation in the Classroom (Harter, 1980) and The Self-Directed learning Readiness Scale (Guglielmino, 1977).

Self-directed variables investigated included: preferences for challenging learning situations, independent mastery of learning materials and the utilization of one's interests and curiosities as motivation for learning. Independent judgment about what to do in order to learn and internal criteria for success or failure were also examined. Additionally, perceptions of scholastic competence and global self-worth were assessed light of their relationship to the elements of self-directed learning as outlined in the literature. Finally, an overall measure of perceived readiness for self-directed leaning was analyzed with an emphasis on responsibility for one's own learning and a general view of learning as a joyous, lifelong pursuit.

Data were analyzed by means of one-way analysis of variance followed by multiple comparisons in order to detect the differences in profiles across the specific stages. The relationships among the study variables were investigated using Pearson Product Moment correlation analysis.

RESULTS

The results of the study indicated that there were some consistent patterns of comparisons among the five stages of development. Students in the upper two stages of development (stages 3 and 4) displayed significantly more positive self-directed characteristics and attitudes than those students in the first three groups. For example, students who had completed two or more Passages felt significantly more positive about their scholastic competence than hose students in the lower stages (see Figure 1).

Comparisons of the means for global self-worth, motivational self-evaluation and self-directed readiness variables followed very similar patterns. The most dramatic differences among the stages appeared in the areas of preference for challenging learning situations and self-directed learning readiness (see Figures 2 and 3).

The investigation of background variables revealed that females from this sample appeared to be more intrinsically motivated and self-directed than males. Also, students with previous open school experience (for example, students who came from open junior high schools versus conventional settings) tended to be more intrinsic, better at self-evaluation and more positive about their scholastic competence than their conventional school counterparts. Even more emphatic, these open school students felt more self-directed.

Results of the correlation analysis of the study variables indicated that all of the coefficients , with the exception of global self-worth with preferences for independent mastery, were significantly different from zero at the p<.. 001 level (see Table 1). The relationships among perceived scholastic competence, preference for challenge and self-directed learning readiness were particularly robust.

CONCLUSIONS

1. The development of self-directed skills, attitudes and characteristics in an open educational setting appears to be gradual in the early stages of the program. The critical point of development occurs when students have completed more than one self-directed project.
2. Positive perceptions of scholastic competence contribute to the completion of a self-directed high school program and are strongly related to a more intrinsic motivational orientation.
3. Intrinsic motivational components that contribute to the completion of a self-directed program include: a preference for challenging learning situations, independent mastery of learning projects and a reliance on one's curiosity and interests for motivation.
4. Positive perceptions of one's global self-worth and a sense of internal control over outcomes also contribute to the completion of a self-directed high school program.
5. Positive perceptions of one's readiness for self-directed learning contribute to the completion of an open altenative high school program.
6. Educational settings conducive to the development of self-directed learning are characterized by strong support systems, student and teacher empowerment individualized learning plans and an emphasis on a variety of domains.
7. Females who choose to enter or are enrolled in an open alternative high school program are more likely to perceive themselves as intrinsically motivated than males from this sample. Also, students who have entered the open high school program from open educational settings are more likely to perceive themselves as self-directed than those students from conventional settings.

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DISCUSSION

The focus on self-directed learning as a key ingredient in educational reform led to the investigation of related self-directed skills, attitudes and characteristics of students in an open alternative high school. It was

assumed that students who had successfully progressed in a rigorous self-directed program were , indeed, competent self-directed learners. It was hoped that the development of a profile of the successful self-directed learner would help to delineate the particular kinds of skills, attitudes and characteristics we need to develop and encourage to effectively engage students in their own education.

The results of this study indicate the highly competent self-directed learner is one who has redefined scholastic competence in self-directed terms. The pursuit of grades or just " playing the game" no longer seem important. The idea that being smart is being responsible for one's own learning appears to be a key factor in this redefinition process.

Self-directed learners also seem to need to develop their own kind of self-directed confidence through the successful completion of demanding personal projects. As they build this sense of effectiveness and competence, they begin to prefer to meet challenging situations head-on. They *want* to be tested and pushed to their limits. They also learn how to use their curiosity and interests as powerful personal motivators. Finally, they learn to master subjects interdependently while recognizing the inherent personal, social and intellectual aspects involved in the learning process.

Moreover, the competent self-directed learner has the confidence to use independent judgment and internal criteria to evaluate his or her progress. This appears to be a very sophisticated self-directed skill that requires much practice and guidance. Support systems are critical for supplying feedback and confirmation. The tests of self-direction, therefore, appear in the from of personal demonstrations of competence wherein one compares oneself not to others, but to one's own standards of excellence. Te non-graded, project oriented curriculum tends to guide and strengthen this concept of self-assessment.

Another attitude that seems to develop related to self-directed learning is a sense of global self-worth or what constitutes a general judgment of one's worth as a person. The competent self-directed learners in this study felt significantly more positive about their worth than those students in the less developed stages. This seems to confirm the relationship between self-actualization (which implies a positive view of one's worth) and self-direction as proposed by Maslow(1954) and Rogers(1977). Fact, global self-worth might be viewed as the end product of the competent self-directed learner- a view of one's self as a successful, worthwhile person.

Another outcome of this development can be seen in the concept of a readiness for self-directed learning. Successful self-directed learners, who have effectively dealt with challenging learning situations, feel differently

than their less developed counterparts about learning itself. The highly competent self-directed learner recognizes the natural joy in learning and views it as a lifelong pursuit. Graduation does not signal the end of learning as it might for the other-directed learner who has sometimes mastered nothing more than the art of " getting through" high school.

The results of this study indicate that these self-competence, motivational and attitudinal variables are positively related to each other and , therefore, form an excellent composite of the effective self-directed learner. What educational programs can do to encourage and promote these characteristics is evident from the literature on environments conducive to the development of self-directed learning. Educational settings characterized by strong support systems (advising), ownership and empowerment of the learner regarding learning itself and a focus on a personalized, non-graded curriculum tend to produce self-directed learners.

But do we really want self-directed learners? I think we do. If we concentrate on the supposed outcomes of a quality education, do we not want students who love to learn new things, who actually prefer to be challenged, and who honestly believe that they will never stop learning? Of course! The quality of life depends on it.

Ask the citizens of countries that have changed from autocratic dictatorships to fledgling democracies if they feel that self-direction is required in a rapidly changing world of tumbling hierarchies. Obviously, their self-determination has led them from an other-directed to an inner-directed existence. The ability to take control of one's own life is no less important to the high school student who faces a world that requires more than a perfunctory understanding of algebraic formulas or the rote memorization of historical dates.

Finally, we have examined the heretofore missing ingredient in the stew of educational reform. We need to use it deliberately and consistently if we want real change to take place. Obviously, the old recipes are lacking. Today's tastes should be for self-direction and self-determination. What we really need is a heavy dose of the characteristics and attitudes of self-directed learners as outlined in this study. In fact, the future depends on it!

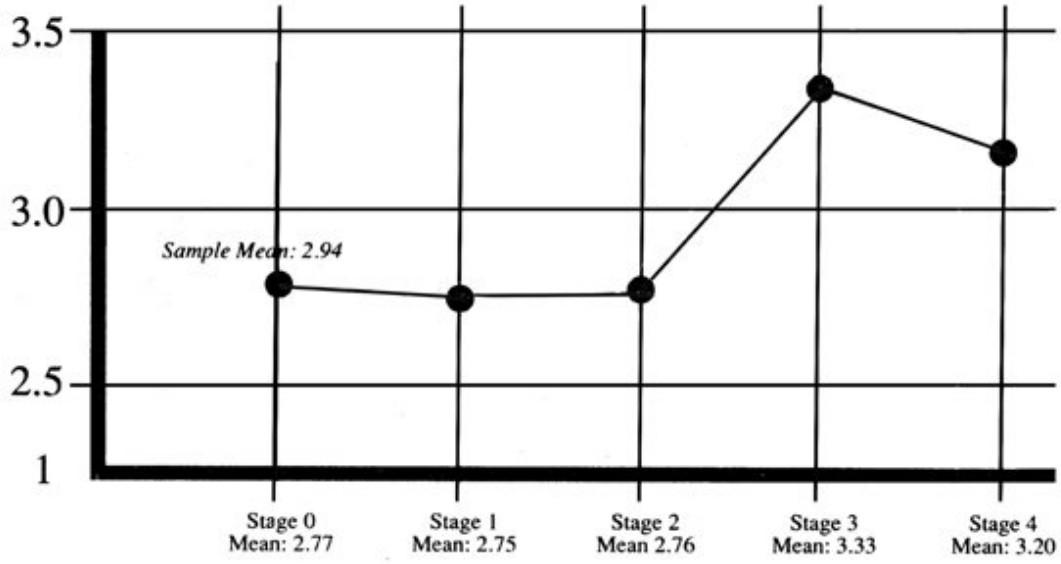

Figure 1. Perceived Scholastic Competence by Stages of Completion

Note: Although subscales scores from the Self-Perception Profile for Adolescents (Harter, 1988) may fall below 2.5, none of the results from this study resulted in means below 2.5. Range = 1 to 4.

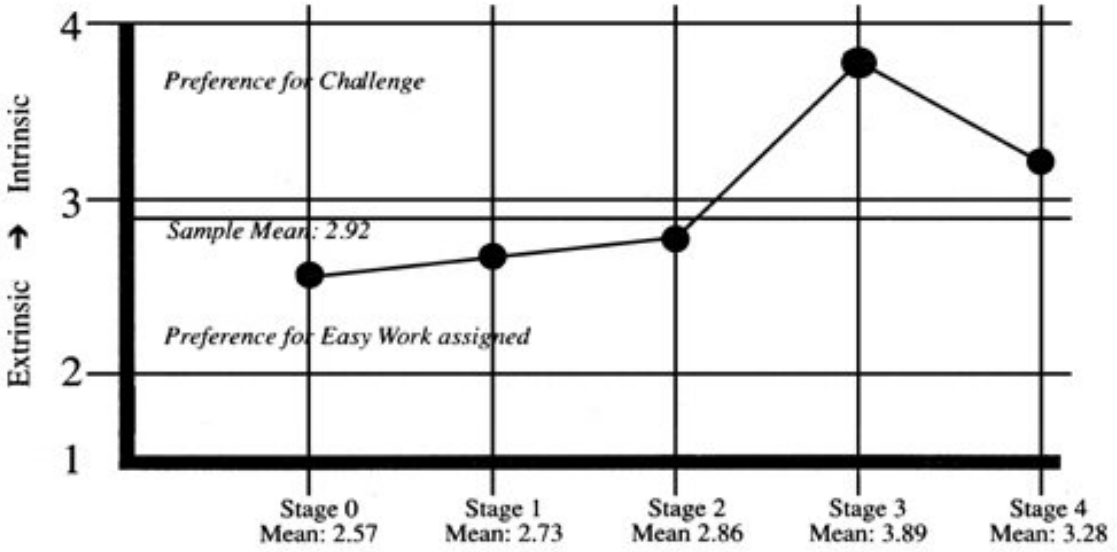

Figure 2. Preference for Challenge by Stages of Completion

Note: Although subscales scores from A Scale of Intrinsic versus Extrinsic Orientation in the Classroom (Harter, 1980) may fall below 2.0, none of the results from this study resulted in means below 2.0. Range = 1 to 4.

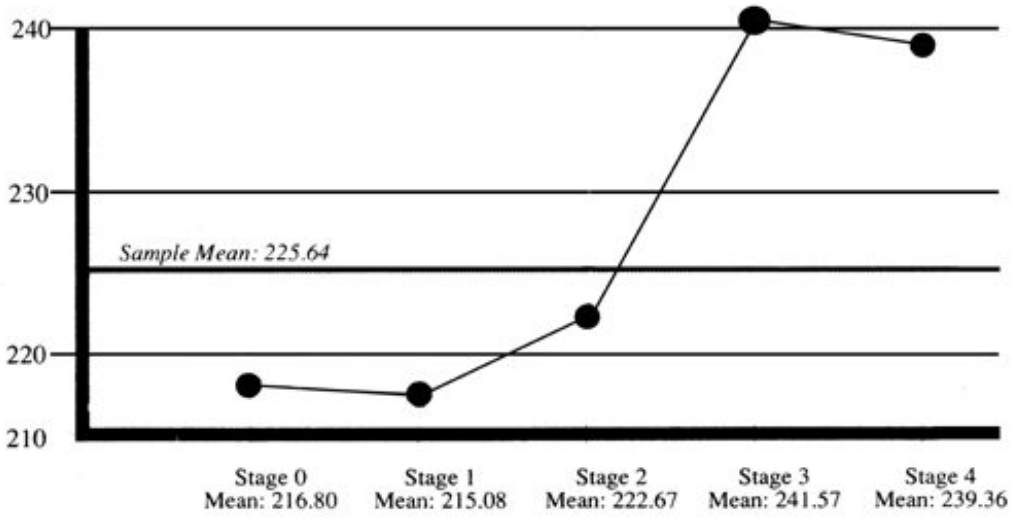

Figure 3. Self-Directed Learning Readiness by Stages of Completion

Note: Although subscales scores from the Self-Directed Learning Readiness Scale (Guglielmino, 1977) may fall below 210, none of the results from this study resulted in means below 210. Range = 100 to 300.

Table 1
Pearson Product Moment Correlation Coefficients for the Five Orientation Factors, Perceptions of Scholastic Competence, Global Self-Worth, and Self-Directed Learning Readiness

	Independent Mastery	Perceived Global Self-worth	Perceived Scholastic Competence	Curiosity for Learning	Internal Criteria	Independent Judgment	SDLRS
Preference for Challenge	.67***	.51***	.57***	.76***	.68***	.29***	.81***
Independent Mastery		.47***	.54***	.59***	.61***	.17†	.56***
Independent Judgment			.57***	.51***	.39***	.28***	.54***
Internal Criteria				.62***	.54***	.34***	.64***
Curiosity for Learning					.61***	.34***	.79***
Perceived Scholastic Competence						.43***	.69***
Perceived Global Self-worth							.37***

SDLRS=Self-Directed Learning Readiness
*** p<.001
† p<.05

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