Increasing Interest and Achievement Motivation among Adolescents: An Overview
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Increasing Interest and Achievement Motivation among Adolescents: An Overview

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How can we decrease the school dropout rate and increase literacy among adolescents? How can we prepare them for self-directed learning? How can we give them a better start in life so that they can become effective, informed, productive, and literate citizens? What can school counselors and parents do to help the teacher improve learning environments? What behavioral changes must teachers, parents, and counselors make to foster self-directed learning?

This article addresses these questions and offers alternative ways of increasing interest and achievement motivation among adolescents. Some of the main elements of the article are how to: (a) prepare students for self-directed learning; (b) develop process skills; and (c) use the community as a resource for learning. It also addresses how critical thinking can be used to increase literacy. Suggestions are based on the premise that: "Students learn most effectively when they have an opportunity to respond to challenges that they know will directly and significantly affect their lives" (Knowles, 1985, p. 366). The main points explored in this paper are: (a) Bloom's mastery learning concept; (b) critical thinking; (c) challenge education; and (d) curriculum relevancy.

By implementing these ideas and concepts we will decrease the dropout rates, increase literacy among adolescents, give them a sense of self-worth, and prepare them for lifelong learning.

General Required Changes for Parents, Teachers, and School Counselors

To increase interest and achievement motivation in adolescents, we must first become iconoclasts in our approach to educating them. Second, we must realize from the outset that business as usual will not work, especially in school learning. Thinking, parenting, teaching, counseling or coaching as usual (Whitfield, 1990) will not yield literate, productive, lifelong learning citizens. This implies a change in the teachers', parents', and school counselors' ideas of children's learning. To bring about changes in our schools "requires a fundamen-

tal revision in our thinking about education" (Stern, 1993, p. 24). Change must be brought about "through actions by business and community leaders, parents, principals, and teachers—not through mandate from above but through imagination and creativity" (Stern, 1993, p. 24). If traditional teaching methods worked effectively in the past, then why does America have an estimated 84 million functionally illiterate adults who have gone through our school systems (Workinger & Ruch, 1991)?

We must change our practices about students and learning (Bloom, 1978). Bloom says that out of our practices have grown negative views about students and their learning. Views such as that there are poor learners, good learners, fast learners, and slow learners foster negative self-concept, and adversely affect motivation to learn. He points out that "many of the differences in school learning are manmade and accidental rather than fixed in the individual at the time of conception" (Bloom, 1978, p. 564). Thus, we must think differently about educating adolescents.

The view that "good learners could learn the complex and abstract ideas in a school subject, while the poor learners could learn only the simplest and most concrete ideas," is obsolete (Bloom, 1978, p. 564). To accept this construct, Bloom says, is to believe that the task of the school is to constantly weed out and eliminate the poorer learners while encouraging the better learners to get as much education as possible. We can ill-afford this line of thinking toward educating adolescents. Thus, a change in the thinking of parents, teachers, and school counselors is warranted. The mastery learning concept may help facilitate this change.

Mastery Learning Concept

Mastery learning looks at the learning tasks and the amount of time it takes to learn them. Given 10 to 15 percent more time, about 80 percent of the slower learners reach the same final criterion of achievement as approximately the top 20 percent of the faster learners. Studies done by Block and Tierney (1974), Block and Anderson (1975), and Bloom (1978) showed that "the typical result of the mastery learning studies in the school is that about 80 percent of the students in a mastery class reach the same final criterion of achievement (usually at the A or B+ level) as approximately the top 20 percent of the class under conventional group instructions" (Bloom, 1978, p. 565). Holly found that during mastery learning, which fosters cooperation, "students take responsibility for teaching parts of a joint assignment to members of their team; thus they learn the rewards of helping rather than competing" (Holly, 1987, p. 4).

From the above studies several points are relevant. First, students in the mastery classes became more cooperative in helping each other than those who were not in the mastery classes. Students who were not in the mastery classes became increasingly competitive. How does competition relate to achievement motivation? Ames points out that "students helping one another is a motivational component of cooperative structures and mediates achievement and learning" (1984, p. 194). Cooperative structures, according to Ames, foster positive interdependence among students. "In the classroom, cooperative behaviors (helping) are critical to goal attainment" (1984, p. 194).

Second, most learners in the mastery classes became very similar in learning ability, rate of learning, and motivation for further learning when provided with favorable learning conditions. Favorable learning conditions, which are based on mastery learning as defined by Wlodkowski and Jaynes, are conditions that have: "(1) varied, quality instruction that will help students to learn if they try to learn; (2) concrete evidence that student effort makes a difference; and (3) continual feedback regarding the progress of learning" (1990, p. 71). This is relevant to fostering in students a desire to learn how to learn which is essential to lifelong learning.

Third, the mastery group tended to improve in learning on each subsequent learning task, while the control group tended to remain the same or decline over subsequent learning tasks. The mastery participants experienced competency and success, which build self-confidence.

Increased self-confidence enables the student to get the necessary energy and motivation to find solutions while otherwise he or she would give up very quickly (Bloom, 1978). Bloom states that when mastery learning is used widely in major academic courses or subjects, students appear to show major gains in that elusive quality termed "learning to learn" (Bloom, 1978, p. 567). As Herbert Gerjuouy states: "Tomorrow's illiterate will not be the man who can't read; he will be the man who has not learned how to learn" (Gordon, 1989, p. 25). According to Bloom, this approach results in about four-fifths of students achieving at the same level as the upper one-fifth of students typically taught by the same teacher.

When mastery learning is used in introductory courses (arithmetic, science, reading, social studies, languages, etc.), the students tend to maintain the desire to learn in subsequent courses in the same field with less and less need for further special help or extra time. Mastery learning, therefore, increases the learning effectiveness of students by helping to evidence high levels of cognitive achievement on tests.

This is supported by the evaluation of results from The Chicago Effective School Project (CESP), where students were taught using mastery learning (Chicago Board of Education, 1983). The CESP schools, targeted especially because they had the achievement scores among the lowest of the city schools, began "catching up" to citywide results. The reports further point out that during school year 1981-82, CESP schools had gained an average of 8. 1 months in reading comprehension, in comparison to 6. 1 months in the previous year.

Jones supports this: "There is increasing evidence that mastery learning instructional and testing procedures facilitate reading achievement on both criterion-referenced and norm-referenced tests" (1982, p. 1). Wood strongly suggests: "If any school system is to increase the expectations for students' achievement, it must change from a norm-referenced placement and competitive grading and instructional model, to a mastery methodology" (1985, p. 1).

Students also succeed on measures of retention and higher mental processes when compared to the top one-fifth of the control group of students. And ultimately they learn how to learn. It builds confidence in students' learning capabilities, which helps students to find more intrinsic rewards in learning itself, and raise their self-efficacy (Nicholls, 1984). Self-efficacy for learning refers to students' beliefs about their capabilities to apply effectively the knowledge and skills they already possess and thereby learn new cognitive skills (Schunk, 1989, p. 14). This also increases perseverance. Those learners with little confidence in their ability to learn are unlikely to persevere very long in any efforts to solve problems (Bloom, 1978). Gaining confidence in their abilities, students will more willingly cope with school demands.

"To put it bluntly, repeated success in coping with the academic demands of the schools appears to confer upon a high proportion of such students a type of immunization against emotional illness" (Bloom, 1978, p. 568). Mastery learning improves the mental health of students because it is success-oriented. Bloom says that the evidence is increasing that repeated success in school over a number of years (especially in primary schools) appears to increase the chance whereby students can withstand stress and anxiety more effectively than those students who experience repeated failure.

If teachers, parents, and school counselors realize that most of the positive or negative emotional consequences are associated with grading and judging rather than with the results of standardized tests, they would perhaps consider this approach more seriously rather than maintain the status quo.

Teachers in particular need help if they are to provide an ambience of favorable learning conditions for their students (Wlodkowski & Jaynes, 1990). However, the grand change for teachers is that they exercise less judging and less grading on what students learn by a particular date, and do more to see to it that students learn what they need as preparation

and performance for the next learning task. Successful performance helps build students' self-esteem (Holly,1987).

We Must Build Their Self-Esteem

If learners have positive self-esteem they have a favorable opinion of themselves. As White points out, "They see themselves, for instance, as having worthwhile ends in view and the necessary dispositions and capacities to pursue them; or as having achieved something worthwhile; or as the possessors of some desirable attribute, like good looks, talent, or as coming from a 'good family'" (White, 1987, p. 57). White says that those with low self-esteem may see themselves as unworthy, valueless, or useless. "They may have a poor opinion of themselves, too, because they feel they have accomplished little or nothing of any worth or because they see themselves as personally unattractive or lacking in social status" (1987, p. 57). Not only is low self-esteem unhealthy, but it also affects ability perception and impedes learning. Kohn says that self-esteem "might be thought of as the *sine qua non* of the healthy personality" (1992, p. 98). The self-worth theory of motivation "stresses ability perceptions as a primary activator of achievement behavior" (Covington, 1984, p. 8).

The mastery learning approach to teaching, when done well, helps to build self-esteem because learners have opportunities to demonstrate competence and receive frequent feedback. Once positive self-esteem is present in learners, they may become more motivated to learn. How do we build self-esteem? The second concept that can help build self-esteem is challenge education (Knowles, 1985), especially when it is melded with mastery learning.

Challenge Education (Community, Counselors, and Parents)

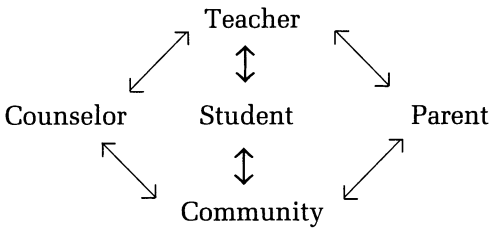
"For schools to succeed, we must look beyond their classrooms to our communities and families. Schools will never be much better than the commitment of their communities. Each of our communities must become a place where learning can happen" (U. S. Department of Education, 1991, p. 2). Challenge education is a form of schooling in which all students learn to voluntarily and independently pursue excellence, within and without the classroom (Knowles, 1985, p. 367). It is a process where students challenge themselves to learn and accomplish as much as they think they can master in academic, practical, creative, social, and physical pursuits. It is a process where responsibility is shared by the teacher, the student, the parent, the counselor, and the community, with each having specific roles. It is andragogy (the art and science of helping adults learn) applied to teaching adolescents.

The outcomes of challenge education are that: (a) students will be ready to function in independent but mature ways; and (b) graduates will have the skills to easily transition from childhood to adulthood and to pursue lifelong learning. When challenge education is practiced, students are challenged to become self-directed and are challenged to help manage their education. Through individualized challenges, they develop their own activities in the five elements of a challenge program: adventure, creativity, service, practical skills, and logical inquiry (Knowles, 1985, p. 369).

1. Adventure—a challenge to students' daring, endurance, and skill in an unfamiliar environment, such as rock climbing, sailing, wilderness hiking, and some forms of self-exploratory, meditative, or spiritual adventures.
2. Creativity—a challenge to explore, cultivate, and express their imagination in some aesthetically pleasing form, such as sculpture and painting, handicrafts, poems, plays, gourmet foods, computer art, films, or music.
3. Service—a challenge to identify a human need for assistance and provide it; to express caring without expectation of rewards. This may include volunteer work with the elderly, ill, infirm, or disabled; construction of playgrounds, hiking trails, parks, or clean-ups of eyesore lots.
4. Practical skills—a challenge to students to explore a utilitarian activity, to learn the

knowledge and skills necessary to work in that field, and to produce something of use. This may include finely honed secretarial skills, stock market analyses and estimates, computer programming, a travel guidebook for high school students, a repair service for home appliances, or a collection of movie reviews written for the local newspaper.

5. Logical inquiry— here students can be challenged to explore their curiosity, to formulate questions or problems of personal importance, and to pursue answers or solutions systematically and, whenever possible, by investigation. For example, how does a starfish bring about the regeneration of a lost arm? How does one navigate in space? What are the ten most important questions we ask but can't answer? (Knowles, 1985). For challenge education to be actuated effectively, however, it requires the participation of the student, the teacher, the parent, the school counselor, and members of the community (businesses and other agencies). The picture below shows theoretically how this model looks.



With these five participants working in harmony, the following effects are expected to help students: (1) the preparation for self-directed learning; (2) developing process skills (instead of teaching content only); (3) educational brokering; (4) involvement of parents; (5) a new role for teachers; (6) networking; and (7) contract learning (Knowles, 1985).

Here is where the teacher's role changes. One of the most important roles of the teacher in challenge education is to organize the resources, specifically the human resources, necessary for the program to work effectively. This includes a support system that must have, as a minimum, the following units (Knowles, 1985, p. 372).

1. *Student advisory committee.* This committee consists of the student, a teacher, at least one parent, and the school counselor, who would help to guide students through their contracted projects. Activities may include advising the student on what experiences to seek, negotiating learning contracts, checking on progress, and establishing contact with business agencies in the community. This is an opportunity for the school counselor to help in this program.

2. *A people-and-places brokerage.* This would consist of a list of experts willing to work with adolescents and teach them their specialty. It also includes sites where students can do such activities as on-the-job training, research, adventure, and volunteer service. The teacher, with the advisory committee members, would organize this market and then act as broker between the student and the volunteer or site sponsor.

3. *School and community agencies interface.* The teacher selects from the list of agencies and services available in the community those that are relevant to the student's goals and to the program, and organizes them so that agents will come to the school and the students can go to them. Examples include: training in mental health agencies for working with patients or staff; social workers running workshops on interactions skills; and police and others taking students along for " a day in the life" experiences.

4. *Self-education network.* It is important that teachers establish a network that includes school officials and people in the community committed to challenge education. Officials should be kept informed about the program and should be given every possible good reason for feeling supportive toward it. Supporters in the community can be very helpful to the program, both politically and educationally.

To bring this to fruition: (a) the teacher will need help; (b) it may require a restructuring of the school (Brandt, 1990); and (c) it may require an overall restructuring of the teaching profession. If we accept this approach, then we

should address the questions of curriculum relevancy.

Curriculum Relevancy

A key question concerning motivation and achievement is: Are curricula relevant? We must realize that people sit around a different hearth nowadays—the electronic hearth (Postman, 1985). That means that parents, teachers, and school counselors should realize that much of the current curriculum will not work as well as is expected.

To make this point clearer, Postman invites us to look briefly at the electronic era. The printed page is not as popular as in the past. We are into visual imagery icons and cartoons. This requires a different literacy.

> "[We] can no longer rely on our mastery of traditional skills. As communicators, as performers, as creators—and as citizens—[the electronic revolution] requires a new kind of literacy, it will be a visual literacy, an electronic literacy, and it will be as much of an advance over the literacy of the written word we know today as that was over purely oral tradition of man's history" (Postman, 1985, p. 4).

If we accept this theme, we can see that traditional curricula and traditional teaching methods might not be as effective as we think. Challenge education is a viable approach to help adolescents attain these skills because it suggests teaching processes as well as content. Specifically, learners should be taught the processes involved in designing, implementing, and managing their own learning in the challenge areas (Knowles, 1985). These skills are essential because: (a) they are prerequisites for students' learning; (b) they increase students' power to function independently; and (c) they will be used for the rest of their lives. To give a rich balance to their learning, Knowles suggests the following process skills.

1. Access skills — these include how to get access to knowledge. Knowledge is not just reading, speaking, and writing, but is also how to do manual searches, computer searches, and how to use different data bases for information.

2. Mastery skills — essential to these skills are: studying, problem solving and organizing to be able to master a body of knowledge. More specifically, students should be taught how to scan information, not only in written media but electronic media as well; how to break a problem into parts, synthesize it and organize a solution lucidly, in written form.

3. Planning skills—these constitute decision-making skills. Examples are how to decide about one's learning program, or how to decide which media to tap, use or consult, to become more competent in a body of knowledge, i. e. , geography, biology, etc. Planning also includes how to decide what goals, what experiences, what means of evaluation are appropriate for learning performance.

4. Management skills — these are skills necessary for managing themselves, efforts, media, and other resources that facilitate learning.

5. Interpersonal skills — with these skills the students are taught how to learn to relate to people of different ethnicity, ages, backgrounds, and how to assume different roles successfully (p. 371).

Though challenge education is different from traditional education, it gets the students involved in their education more; it prevents them from having every minute of their time designed and directed for them, as in traditional education. It helps to balance their mastery learning in that it affords a chance to practice what is learned in the classroom. Critical thinking can further balance their learning.

Integrating Critical Thinking

To survive economically, we need generalized thinking skills (Paul, 1987) that cannot become obsolete with the ever-changing demand for new specialties and the obsolescence of old ones. Paul suggests that to survive politically and personally, we need skills that help us to penetrate the complex nature of information, misinformation, and disinformation. Critical thinking provides these skills and helps adolescents to prepare to meet the various challenges of their world.

What is meant by critical thinking? As a working definition, it is defined as "reasonable and reflective thinking that is focused on deciding what to believe and do" (Paul, 1987, p. 1). It involves three principle elements: (1) an attitude of being disposed to consider in a thoughtful, perceptive manner the problems and subjects that come within one's range of experiences; (2) knowledge of the methods of logical inquiry and reasoning; and (3) skills in applying those methods. It means assessing the authenticity, accuracy, and worth of knowledge claims, beliefs, or arguments. This means teaching adolescents to think for themselves, rather than to look to the teacher to think for them.

It helps learners to gain the capacity to think critically and communicate effectively; it helps them to draw inferences, to argue, and to write persuasively; it facilitates comprehension, interpretation, and evaluation of what they see, read, and write. It also helps learners to listen effectively and discuss ideas intelligently. Armed with these skills, adolescents will not be at risk. But to continue thinking, teaching, parenting, and planning curricula as usual, we educators are not helping adolescents, but rather hindering them and keeping them at risk.

Critical thinking fosters intellectual curiosity, namely, seeking answers to various kinds of questions and problems, investigating the causes and explanations of events, asking why, how, who, what, when and where. Examples of these types of questions are: (1) How do media control the forms, distribution, and directions of information? (2) What effect does the microcomputer have on both thought and behavior? (3) What are the most dominant forms of discourse in our cultures? And why? (4) Why does light behave as particles sometimes and waves at other times?

This engenders open-mindedness, garnering a willingness to consider a variety of beliefs as possibly being true, making judgments with minimum bias or prejudice; it amplifies intellectual skepticism where students are taught to postpone the acceptance of a conclusion as true until adequate evidence is presented; it triggers persistence that helps students in seeking ways of resolving disputes, and in supporting certain points of view without giving up the task of finding evidence and argument; and it considers respect for other viewpoints which implies a willingness to admit that one may be wrong and that other ideas one does not accept may be correct, and implies listening carefully to another viewpoint and responding accurately to what has been stated.

There are other attitudes that critical thinking fosters. Critical thinking helps to increase learning how to learn skills and improve literacy. Just as computer literacy became a societal issue during the seventies and eighties (Whitfield & Bishop, 1986), functional literacy has become a societal issue during the 1990's.

Summary

With Bloom's mastery learning concept, challenge education, critical thinking, and relevant curricula, teachers, parents, students, and the community can conjointly produce informed, self-directed, lifelong-learning, and literate citizens. However, a shift in thinking, teaching, planning, parenting, and counseling is essential to bring this to fruition. The United States can ill-afford to continue education as usual.

References

Ames, C. (1984). Competitive, cooperative, and individualistic goal structures: A cognitive-motivational analysis. In R. E. Ames & C. Ames (Eds.), *Research on motivation in education: Vol. 1. Student motivation.* New York: Academic Press.

Block, J.H. & Tierney, M.L. (1974). An exploration of two correction procedures used in mastery learning approaches to instruction. *Journal of Educational Psychology, 66*(6), 962–967.

Block, J.H., & Anderson, L.W. (1975). *Mastery learning and classroom instruction.* New York: Macmillan.

Bloom, B. S. (1978). New views of the learner: Implications for instruction and curriculum. *Educational Leadership, 35*, 563-568, 570.

Brandt, R. (1990). Restructuring: Where is it? *Educational Leadership, 47*(7), 4.

Chicago Board of Education (1983). *The Chicago effective schools project: Vol. 1. A report of evaluation results—fiscal 1983.* (Report No. UD 023 476). Chicago, IL: Chicago Board of Education. (ERIC Document Reproduction Service No. ED 242 822)

Covington, M. V. (1984). The self-worth theory of achievement motivation: Findings and implications. *The Elementary School Journal, 85*(1), 5-20.

Gordon, J. (1989, September). In search of lifelong learning. *Training,* 25-34.

Holly, W. J. (1987). *Students' self-esteem and academic achievement.* (Report No. EA 020 121). Alexandria, VA: National Association of Elementary School Principals. (ERIC Document Reproduction Service No. Ed 296 461).

Jones, B. F. (1982). *Maximizing reading achievement for low achieving students: An argument for learning strategies and mastery learning instruction.* (Report No. CS 006 919). Anaheim, CA: California Reading Association. (ERIC Document Reproduction Service No. ED 258 954)

Knowles, M. S. & Associates. (1985). *Andragogy in action.* San Francisco: Josey-Bass.

Kohn, A. (1992). *No contest: The case against competition.* New York: Houghton Mifflin.

Nicholls, J. G. (1984). Conceptions of ability and achievement motivation. In R. E. Ames & C. Ames (Eds.), *Research on motivation in education: Vol. 1. Student motivation.* New York: Academic Press.

Paul, R. W. (1987, August). *Critical thinking, moral integrity, and citizenship: Teaching for the intellectual virtues.* Paper presented at the Seventh Annual & Fifth International Conference on Critical Thinking and Educational Reform, Sonoma State University, Rohnert Park, CA.

Postman, N. (1985). Critical thinking in the electronic era. *National Forum: The Phi Kappa Phi Journal, 65*(1), 4-8.

Schunk, D. H. (1989). Self-efficacy and cognitive skill learning. In C. Ames & R. Ames (Eds.), *Research on Motivation in education: Vol. 3. Goals and cognitions* (pp. 13-44). San Diego,CA: Academic Press.

Stern, B. (1993). Transforming America's schools. *American Counselor, 2*(1), 22-38.

U. S. Department of Education. (1991). *America 2000: An education strategy.* Washington, DC: U. S. Department of Education.

White, P. (1987). Racism, self-esteem and the school. In G. Haydon (Ed.), *Bedford Way Papers: Vol. 30. Education for a pluralist society: Philosophical perspectives of the Swann report* (pp. 57-66). London: Institute of Education, University of London.

Whitfield, D. (1990). *A 1990's management and leadership concept.* Paper presented at the Norddeutschland's Supervisory/Professional Secretary's Annual Meeting, Bremerhaven, Germany.

Whitfield, D. & Bishop, L. A. (1986). Attitudes and literacy of college instructors and high school seniors regarding the use of microcomputers in education. *The High School Journal, 69,* 228-237.

Wlodkowski, R.J. & Jaynes, J.H. (1990). *Eager to learn: Helping children become motivated and love learning.* San Francisco: Jossey-Bass.

Wood, W. R. (1985). *Habituated obsolescence or the pursuit of individual excellence? Comparative variations between norm-referenced and mastery learning.* (Report No. SP 026 346). Tucson, AZ: Rocky Mountain Psychological Association. (ERIC Document Reproductive Service No. ED 258 954).

Workinger, R. K. & Ruch, K. E. (1991). Work Force Literacy: Problem and solutions. *Human Resource Development Quarterly, 2,* 251-261.