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# *Home Schooling and Developmental Education: Learning from Each Other*

## Background

Higher education researcher Dr. James Kulik clearly stated his position that "developmental educators who are conducting their classes in the time-honored and traditional ways may not be doing as much as they can do. There are teaching options that they might explore that have helped other teachers improve their effectiveness" (Bonham, 1990, p. 18). From this perspective, an examination of home schooling practices is not only relevant to developmental educators, it is important.

The suggestion that childhood learning may inform educators at the collegiate level is neither radical nor new. Educational psychology has long acknowledged that cognitive and emotional development are not completed in adolescence, but rather continue to evolve during adulthood. Wambach, Brothen, and Dikel (2000) point out that navigating higher education requires learners to demonstrate 'mature' self-regulation behaviors. They assert, "since there is no way of knowing when individuals are ready to make leaps in their ability to develop self-regulation skills, we must always be ready to assist them when the time arrives" (Wambach et al., 2000, p. 6). This need for constant readiness exists in the field of developmental education, as well. Boylan (1999) asserts that "Developmental education is necessary in a variety of business, industry, community, and government settings. Its philosophy and methods are applicable whenever and wherever the development of human talent is a goal" (p. 6).

## Parallels between Home Schooling and Developmental Education

Home schooling in the United States is expanding in both population and diversity. Empirical estimates of the U.S. home schooling population range from 1.23 to 1.9 million children and growing (Ray, 1990, 1992, 1997; Lines, 1998, 1999). In addition to being significant in number, home schooling families are diverse in their ideology and socioeconomic status (Tobin, Foster, & Cobb, 1997). Numerous studies have independently affirmed that home schooling parents are drawn from all ethnic groups and are politically diverse (Nazareno, 1999; Van Galen, 1988).

An additional layer of diversity was revealed in a later study when Knowles, Muchmore, and Spaulding (1994) found that home schooling was especially appealing both to parents whose children were considered academically gifted *and* to parents whose children faced learning difficulties. This intriguing dichotomy alone suggests that the collective pedagogy of home schooling parents is dynamic enough to warrant mainstream examination.

Like home schooling students, the collective body of developmental education students is populous and diverse. According to Boylan (1999), "of the nation's more than 12 million undergraduates, about 2 million participate in developmental education during any given year" (p. 2). Given the large number of college students accessing developmental education, practitioners must be even more diligent not to over-generalize this population. Indeed, developmental education students are reflective of home schooling families in their diversity of class, ethnicity, and gender.

## Why Examine Home Schooling Practices?

Though personal views of the home schooling movement may differ, research shows that home-schooled students not only achieve academically, they consistently outperform their classroom-schooled peers. Independent studies conducted in Illinois, Oregon, Washington, Alaska, and Arkansas all support Ray's finding that home schooled students perform highly on standardized tests (Calvery, 1992; Ray, 1988; Wartes, 1990; Frost & Morris, 1988). By the 8th grade, home-schooled students perform an average of four grade levels above the national average.

This may well relate to the fact that home schooling parents are able to hand-select their curricula and assessment materials to meet the needs of their learners, and are afforded a great deal of time per student. As such, home schooling parents may be an untapped resource for developmental education practitioners seeking to adapt components of education frameworks that model 'ideal' flexibility and time constraints.

## Conversations with Home Schooling Parents

To examine this often overlooked resource, I interviewed a total of eleven home schooling parents, representing 11 families and 23 students. The students (children of participants) ranged in age from five to 17 years and have been home schooled for a period of time ranging from 1 to 11 years. Students spanned a range of academic ability (as identified by their teacher-parent) and included both students with learning difficulties and students working above their age-typical grade level. Several students have never been enrolled in public schools; others attended public schools for up to seven years.

Several of the interviewed parents home school their children primarily for religious reasons and work with religious curricula. Several others home school their children primarily because they believe that they can best motivate and meet the learning styles of their own children. Two participants avoid structured curricula altogether, self-identifying as "unschoolers" who follow a child-directed approach.

During our interviews, home schooling parents revealed their practice of teaching for complete mastery at an appropriate pace, as well as their practice of using assessment to evaluate both retention and curricula. They emphasized their children's need for prompt feedback and consideration of individual learning styles.

*Complete Mastery.* Perhaps my most striking observation was a universal emphasis on *complete* mastery of subject material. Over and over again, parents would emphasize that they assessed for complete mastery, stressing comments such as "if they are not able to do their work without asking questions, we do not move on to the next chapter," "if they finish a page without difficulty I know they have grasped the concept being presented, but if they have difficulty with a concept we do additional work," and "at the end of chapters there is a chapter review...if they get any wrong, we go back over it until they get it." The value of this process was emphasized by one parent who explained how, in a home schooling environment,

> ...We are able to look at each individual wrong answer and determine a root cause. This includes curriculum deficiencies, pacing problems, misunderstood or forgotten material, improper reading of the problem, computation or strategy errors. From here, we are able to halt forward progress and address what we need to. Retesting may be necessary before progress resumes. Anything less than 100% accuracy deserves analysis and attention.

This parent contrasted her approach with her son's one-sided experience in an online physics course administered by a well-reputed university:

> Even with his physics class, [his faculty] simply gave him a graded report for his tests. Although they knew what caused the error, they never told him what he should review, provided a retest, gave pacing suggestions, etc. To them, a B+ on a test didn't warrant corrective action. As with mathematics, physics builds upon previous concepts, so without close to 100% mastery, things get muddier as time goes on. We're currently going though an extensive physics review.

Happily, the need to pursue mastery is widely understood by developmental education professionals. We must act on this knowledge, striving for mastery in our daily expectations of the students we assist. As Smittle (2003) points out,

> ...Since developmental education is providing the foundation for more advanced learning, mastery of the content is important. If students fail to master one set of skills, concepts, or knowledge before they move on to the next level, gaps similar to the problems the students are already experiencing are created (p. 11).

The same parent who looked for "100% accuracy" explained how her approach is really two-sided. When her son is not yet demonstrating complete mastery, she doesn't move forward. Conversely, when her son demonstrates such mastery she *must* move forward. She does not believe that her son's former elementary school teachers embraced this philosophy.

> When my son was in grade school, his teachers were pleased to point out that the standardized testing put him in the top 1%, yet never allowed him to move forward faster or never provided more open-ended material to challenge him. This allowed for more clothes to be cut to shreds and more glue sticks to be eaten...

When asked to elaborate on the advantages of learning and assessing in a home environment, almost every participating parent cited pace as being most

significant. The ability to control the pace of learning and assessing is valued equally by parents of both academically advanced children and children with learning difficulties.

The logistics of pace are particularly relevant to developmental education professionals. Prager (1991) asserts that learning centers "should incorporate...self-paced individualized instruction... [and] individualized self-paced learning" (p. 3). Why is self-paced learning so important? According to MDRC, one reason is purely economical, considering that many college students "exhaust their financial aid before declaring a major or choosing an occupational certificate program" (MDRC, 2003, p. 2). It stands to reason that allowing students the flexibility to complete developmental education requirements in only the time they personally need could decrease the number of semesters spent enrolled in developmental education coursework. Another reason to allow for student self-pacing may be found in the common belief that success in higher education requires, at some point, self-direction. Wambach et al. (2000) assert that "students who are self-regulating will adequately identify areas where their skills must improve and seek the means to improve them...these students should make rapid progress in developing the specific skills needed to reach academic goals" (p. 3). Allowing students the opportunity to make 'rapid progress' when they are able provides positive reinforcement for effective self-regulation.

*Retention.* Interview participants reported using assessment materials and results to evaluate their students' long-term retention of concepts. This process was outlined by one parent:

> There is a tremendous need to reassess weeks and months after a concept is learned. With this, we have learned how important it is for him to cycle through some material several times to reach long-term retention...This allows us to determine whether or not acquired information has made it into long-term memory...We use different sources of testing materials, including college pre-testing materials (from the web) used to place students in the appropriate class, ACT & SAT and TIMMS practice tests.

Halpern and Hakel (2003) stress that "*The single most important variable in promoting long-term retention and transfer is 'practice at retrieval'*" (p. 38). They further explain how "*spaced* practice is preferable to massed practice" (p. 39). Recognizing the need to "cycle through" content to encourage retention is critical for all educators, including but certainly not limited to home schooling parents and developmental education practitioners.

*Curriculum Evaluation.* In addition to using assessment tools to measure complete mastery, home schooling parents report using assessment to measure the comprehensiveness of various curricula. As one parent explained,

> By using several different sources [of assessment] we can determine if our core mathematics curriculum has any deficiencies. If so, we can easily augment with supplemental material. Curriculum varies widely – it's amazing. Assessment helps us find the right curriculum and learning method to make it stick.

The symbiotic relationship between assessment and curriculum is interesting; well-designed assessment instruments can be used to identify well-designed curricula, which lend themselves to the creation of even more dynamic assessment activities.

For home schooling parents, it appears that the assessment process is not limited to the mere completion of a test. Rather, it continues through parent evaluation and feedback for the child. As one participant explained, time is of the essence:

> The more immediate the feedback on homework, tests, etc., the more engaged he is. If he has to wait a day or two before finding out what problems he missed, it's as though it happened during a previous lifetime. He loses his zeal.

Understanding the critical importance of feedback is important for developmental education practitioners. As Wambach et al. (2000) explain, "The primary means for a developmental education environment and its educators to be responsive is to deliver timely and useful feedback...students need feedback early and often" (p. 11).

*Learning Style Accommodation.* During our interviews, home schooling parents reported carefully choosing learning tools to accommodate the individual learning styles of their children. One parent shared her understanding that "knowing the type of learner the child is can be very helpful. This will help determine if manipulatives would work or if another approach would be better." As Boylan and Saxon (1999) outline in an appropriately blunt fashion, "Students in remedial courses have been lectured in the past without much effect. If traditional teaching methods had worked for these students, they would not be taking remedial courses" (p. 3). By embracing this reality in daily practice, we as developmental education professionals may stand the best chance of truly reaching our students.

## Final Thoughts

Several practices of home schooling parents revealed in this study deserve the attention of developmental education professionals. Home schooling parents' frequent use of varied assessment materials to simultaneously evaluate their students' retention *and* the effectiveness of their curricula is interesting, and warrants our consideration. With some exceptions, higher education institutions tend to view the assessment of individual student learning and curriculum evaluation completely separately; the wisdom of this traditional approach should be carefully reconsidered. Also, considering the documented academic success of home schooled students, the ways in which home schooling parents encourage complete mastery of content while acknowledging their students' individual learning styles deserve further attention.

Seeking out the best practices in education is a common sense goal for all developmental educators. By seeking out new expertise, by sharing, adapting, and practicing, we make ourselves more valuable to our students. Rigorous studies, both qualitative and quantitative, should be conducted to seek out and reveal the best practices in assessment, curriculum design, curriculum evaluation, and teaching techniques of educators in domains outside of mainstream higher education.

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