

DOCUMENT RESUME

ED 478 792

PS 031 434

AUTHOR Glenn, Christopher M.
TITLE The Longitudinal Assessment Study (LAS): Eighteen Year Follow-Up. Final Report.
SPONS AGENCY Franciscan Montessori Earth School, Portland, OR.
PUB DATE 2003-00-00
NOTE 68p.
PUB TYPE Reports - Evaluative (142)
EDRS PRICE EDRS Price MF01/PC03 Plus Postage.
DESCRIPTORS Comparative Analysis; Creativity; *Early Childhood Education; Educational Attitudes; Educational Environment; Elementary Secondary Education; Family Characteristics; Followup Studies; Individual Development; *Late Adolescents; Lifelong Learning; Longitudinal Studies; *Montessori Method; Montessori Schools; *Outcomes of Education; Personality Development; Self Control; Student Attitudes; Student Characteristics; *Young Adults

ABSTRACT

Premised on the view that students with more years of Montessori education (MEY) would possess to a higher degree those qualities emphasized in the Montessori environment and that Montessori students would be as successful as students more traditionally educated, this report presents the final assessment for the Longitudinal Assessment Study, initiated in 1986 to assess the effects of a Montessori education into adulthood. All participants attended the Franciscan Montessori Early School in Portland, Oregon and ranged in age from 16 to 27 years at the time of this assessment. Over a period of 18 years, 6 assessment cycles were conducted approximately once every 3 years, the first 4 focusing on quantitative information from surveys and personality and achievement tests, and the later 2 focusing on qualitative information from surveys using open-ended questions. For the later two assessments, the sample was split into three groups varying in the years of Montessori education: (1) few MEY (3-5 years); (2) some MEY (6-9 years); and (3) many MEY (10-16 years). The report describes the history and previous findings and discusses the impact of participant dropout. Findings are presented for demographics (including academic attainment, academic aspiration, living situation, and career goals) and attitudes and behaviors (judgment of parents' decision to send them to a Montessori school, approach to education, and "Montessori-like" personality or behavior). The report concludes by noting that even when sample bias was taken into account, a Montessori education was a key positive factor in the participants' academic, personal, and social development and is an important factor in their current identity. Some aspects of a Montessori education were related to short-term problems. The report suggests that families come to a Montessori education with a Montessori-like life philosophy emphasizing independence, lifelong learning, cooperation over competition, understanding over memorization, and self-direction and understanding. Several participants reported that the Montessori-combined academic and social approach was important in learning how to learn beyond high school and college. (Ten appendices include the Cycle 6 survey, verbatim open-ended participant comments, and data summaries.) (KB)

PS

PSTR
0237

ED 478 792

THE LONGITUDINAL ASSESSMENT STUDY (LAS)

FINAL REPORT

(EIGHTEEN YEAR FOLLOW-UP)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Christopher M.
Glenn

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

Funded by
The Franciscan Montessori Earth School
And
St. Francis Academy
Portland, Oregon
www.fmes.org

Prepared by,
Christopher M. Glenn, Ph.D.
Director of Research
Franciscan Montessori Earth School
And Saint Francis Academy
Portland, Oregon, USA

Author Contact: cglenn@glenresearch.com
Web: www.glenresearch.com

© Christopher M. Glenn, Ph.D. 2003

031434

PS
ERIC
Full Text Provided by ERIC

BEST COPY AVAILABLE

EXTENDED SUMMARY

Dear Prospective Montessori Parent,

This open letter summarizes findings from FMES's 18 year Longitudinal Assessment Study (LAS) which assessed the effects of a Montessori education into adulthood. Many parents wonder if this alternative educational approach will prepare their children for high school, college, and the job world.

There were two premises. We proposed that students with more years of Montessori education (MEY) would possess to a higher degree those qualities which are emphasized in the Montessori teaching environment, such characteristics as lifelong learning, self-control and self-direction, personal growth, spontaneity, creativity, and the like. Our more modest proposal was that students with any Montessori education will be as successful as students who were more traditionally educated. The former premise can be summarized as "Montessori helps," and the latter could say, "Montessori does not harm."

Across the 18 years, six assessments were conducted. The first 4 involved extensive assessment of parents and teachers (using surveys), and students (using surveys, personality tests, and achievement test scores), and as the LAS students aged, the latter two assessments focused on student surveys using mostly open-ended questions in order to assess underlying feelings and beliefs. We refer to the first 4 assessments as primarily quantitative (statistics from numbers), while the latter 2 were qualitative (analysis of written comments).

From the first four quantitative assessments, we concluded that:

- > There was little or no effect related to the number of Montessori education years
- > Personality test scores were normal compared to a large national sample
- > Non-Montessori teachers of former FMES students consistently rated the LAS participant as better than classmates in:
 - > Overall academic performance
 - > Ability to work alone
 - > Ease of distraction
 - > Ability to finish a product
 - > Ability to cooperate with teacher
 - > Ability to handle stress
 - > Appropriate use of spontaneity
 - > Overall self-image

After 18 years, were the 44 remaining LAS participants (average age 22, range 17-28 years) inherently different from the maximum of 145 students in the third assessment? We added new participants for the first 3 assessments. We were surprised to find very few differences. There were no differences in achievement test scores. The other measures suggested that the final LAS participants may have had better work habits, including personality aspects that would promote such habits. We could surmise from

this that the final LAS people may have placed more value on intellectual and personal growth than LAS dropouts, and that their open-ended responses could have been slanted a little towards the positive.

From the latter two qualitative assessments, we identified one trend related to number of Montessori education years. Participants with 10 or more MEY (half of our sample which ranged from 4 to 16 MEY) were more specific in their answers and were better able to describe in writing how their Montessori education made them who they are today.

In analyzing the content of the open ended questions, participants attributed these beliefs, traits, and behaviors of their current life style to their Montessori education:

Academically, they favored:

- > Learning for learning's sake (not just a means to an end)
- > Life-long learning
- > Actively seeking knowledge
- > Personalized and self-paced education
- > Hands-on and experiential learning
- > Self-directed learning, knowing how and where to look for information, confidence in searching for information
- > Better collaborative working in groups
- > Understanding, questioning, analyzing, comprehending and discussing, not just memorization or just completing the assignment

Personality preferences included:

- > Life long self-improvement
- > Tolerance and open-mindedness
- > Self-confidence
- > Thinking before speaking, effective decision-making
- > Patience and calmness
- > Social awareness
- > Environmental awareness

Negative effects included:

- > Not working well in the self-directed Montessori environment (while at FMES)
- > Limited availability for social interactions (while at FMES)
- > Some difficulty with non-interactive teaching methods (after leaving FMES)
- > Being unprepared for large school environments (after leaving FMES)
- > Only three LAS participants concluded it was a mistake to have been sent to a Montessori school. One other participant was very mixed in opinion.

We didn't totally ignore quantitative questions. Only 2 participants were not planning on getting a college degree, and 34 (77%) were planning to attend graduate school. When participants were asked how much effect their Montessori education had on who they are today (1=no effect to 5=strong effect), the mean was 4.05, and three-fourths chose values

of 4 or 5. We asked participants if they thought their parents made the wrong (=1) or right (=10) decision to send them to a Montessori school, and the mean was a high 8.11, with half choosing values of 9 or 10, and only 5 participants chose values of 5 or less.

Addressing the two premises above, MEY appears to have had a subtle effect on the student, and these effects are consistent with Montessori philosophy. Further, Montessori rarely hurts the student in the short term (high school) or long term (college and beyond).

We presented a major conclusion in an article published in 1993 which summarized 13 studies at FMES since 1984. Families who have personal philosophies of life that are consistent with Montessori philosophy will be more satisfied with and gain more benefit from their FMES experience, now and (for the student) into adulthood. The LAS results are in agreement with this conclusion. Former FMES students who are now adults have clearly integrated many key aspects of Montessori philosophy into their lives and life styles. Probably, most of these students came from households that already had similar values; their Montessori education reinforced and further developed these beliefs.

It appeared that, regardless of number of Montessori education years, participants were more appreciative of (or better able to express their appreciation for) their Montessori experience as adults than as adolescents.

Feel free to ask the head office for a copy of verbatim responses to the three primary open-ended questions from the final assessment report (Appendices E, F, and G). Reading through these responses will provide a strong and detailed elucidation from these now mostly adult former FMES students.

Sincerely,



Christopher M. Glenn, Ph.D.
Director of Research (Consulting), FMES

I. INTRODUCTION

This is the sixth and final assessment for the Longitudinal Assessment Study (LAS).¹ The Longitudinal Assessment Study (LAS) was initiated in 1986 in order to assess the effects of a Montessori education on children into adulthood. All participants attended the Franciscan Montessori Earth School (FMES) in Portland, Oregon.

FMES is an AMI (Association Montessori Internationale) certified school with programs from Children's House (preschool) through junior high. Some LAS participants experienced high school as well, but the FMES high school program is currently not operating.

As in many Montessori programs with elementary and higher levels, a concern among parents focuses on whether this alternative educational method is preparing the student for the "real world." Many parents feel Montessori is fine for pre-schoolers, perhaps acceptable for lower elementary aged children, but many have serious doubts for its effectiveness in developmental preparation for upper elementary and older aged children. Montessorians believe it works, but little in the way of scientific proof is available for the doubters. The LAS grew out of this need to establish valid and reliable outcome research.

The primary hypothesis was that the number of Montessori Education Years (MEY) would be positively related to those qualities which are emphasized in the Montessori teaching environment, such characteristics as lifelong learning, self-control and self-direction, spontaneity, creativity, and the like. This hypothesis can be characterized as "Montessori helps."

The secondary hypothesis was that participants with any Montessori education will be as successful as the general population after leaving the Earth School. This hypothesis can be characterized as "Montessori does not harm."

History and previous conclusions. Across the 18 years, six assessments were conducted, roughly once every 3 years. Three years is considered a Montessori "cycle" in that students learn and peer-teach in the same classroom which consists of three grade levels (e.g., lower elementary is roughly grades 1 through 3). Thus, we refer to each assessment as a cycle. Cycles varied in assessment materials as the study progressed.

LAS participants were invited to join in the first three cycles. All parents of elementary aged children received invitations with project descriptions in their parent folders for them and their child to participate. Parents were asked to discuss the study with their children and get their (verbal) consent, and parents were asked to sign their consent. At age 13, student signed consent became mandatory, and signed parent consent was required for all participants under age 18. For the first assessment, after a couple of weeks, parents who did not respond to the invitation were invited again, and again two

¹ Results from the previous LAS assessments can be found in the ERIC data base: ED370679 for the third assessment, ED403013 for the fourth assessment, and ED431543 for the fifth assessment.

weeks after that, failing a reply (to either accept or decline participation). About one-third of families participated in the first cycle. Three years later, all (non-participating) parents of elementary aged children were recruited for Cycle 2, and finally one more time in the 1992 to 1993 school year for Cycle 3. After Cycle 3, no new participants were added.

At each cycle throughout the study, considerable effort was made to keep existing members in the LAS. However, due to funding limitations, we could not track participants annually. Nearly every lost LAS participant from one cycle to the next was due to loss of contact with the participant's family rather than a conscious choice to decline. We will spend considerable time discussing sample bias due to dropouts.

We will also note there was participant bias in joining the LAS, as no one-on-one recruitment was conducted. While we cannot identify what reasons led some families to decline LAS participation, we believe it was a combination of three factors; some parents believed they did not have time for such things (including reading the invitation), some parents did not 'believe in' research in a very humanistic learning environment, and, even though emphasis was placed on participating after leaving FMES, some parents did not believe they were going to stay at FMES for long enough to be 'good' participants.

Cycle 1 through Cycle 4 involved extensive quantitative testing of the participants, parents, teachers, achievement test results, and personality measure scores. These 5 sets of measures were analyzed in terms of relationships to MEY (number of Montessori Education Years). At the end of Cycle 4, we concluded that the primary hypothesis was not supported, while the secondary hypothesis was supported. This conclusion was based on the quantitative data gathered through Cycle 4.

For Cycles 5 and 6, it was decided to move the LAS to a more qualitative assessment. It was felt that the quantitative assessments were having difficulty picking up the subtle and humanistically oriented differences between Montessori and other. Also, as participants left FMES, assessments had to be conducted by mail, and aging participants were less accepting of completing protocols that took in excess of 2 hours. A third consideration was that of research time and budget; a more streamlined approach was needed.

For these latter two cycles, responses to open-ended questions were content-analyzed for common themes. In addition, we split the sample into three primary subgroups, based on the number of Montessori Education Years (MEY) they had experienced. The "Few MEY" group had 3-5 years of Montessori education, the "Some MEY" group had 6-9 years, and the "Many MEY" group had 10-16 years.

Cycle 5 results identified two major categories of differences by these MEY subgroups. Quoting from the Cycle 5 report:

The evidence supporting the second hypothesis [Montessori does not harm] was strong. Some negative effects were reported (being unprepared for large schools and for non-interactive teaching methods, e.g., lectures), but in all cases negative comments were tempered by an overall positive assessment.

There was also considerable support for the first hypothesis [Montessori helps], in two related areas: Lifelong learning and self-development.

The personal value of lifelong learning was identified as most prevalent among the Many MEY group and focused on direct experiential (hands-on) learning, one-on-one learning (and peer teaching), self-direction and control, and travel.

The striving for self-development was manifest by a strong desire for self-understanding, general personality development, self-direction and discipline, and a strong positive attitude towards social-interactive activities.

Cycle 6 also used mostly open-ended questions, but, in addition to several demographic questions, three scaled questions were considered as well. The link for the Cycle 6 survey is at the top of the sample questionnaire in Appendix A, which is the word-processed version created for this report.

II. RESPONDENT SAMPLE QUALITY (SAMPLE BIAS)

Presentation of results for LAS Cycle 6 begins in the next section. This lengthy section is more for the detail oriented and can be skipped. Conclusions about sample bias close this section, entitled 'Is our sample biased?'

Above we reported that there was probably some selection bias in the LAS, in that all parents of elementary aged children were invited to join but no one-on-one recruiting was conducted. Parents who joined the LAS may have felt they had more time for such endeavors, they may have been in favor of or neutral towards research in general, and possibly they had a little more desire to pursue a Montessori education for their child.

After selection bias comes "perseveration" bias or bias due to dropouts. A key question with any longitudinal assessment study, particularly one in which budget considerations precluded yearly tracking of participants, is sample bias. After 18 years, do the participants who remain in the LAS for Cycle 6 differ from their counterparts who did not continue to the study completion?

We will first consider the simple dropout rate over time. We will not include the first two cycles in this consideration because there were few dropouts across the first 3 years of the study. Cycle 3 is when the study really began to roll.

Numbers of participants for Cycles 3 to 6 are listed below in Table 1. Note that one participant in Cycle 6 submitted the survey too late for this particular analysis. However, she is included in the within-Cycle 6 results in the next section of the report.

From Cycle 3 to Cycle 4, and from Cycle 4 to Cycle 5, less than half of participants dropped out. For the detail oriented, if we consider only the Cycle 5 participants who participated in Cycle 6 (and ignore the 11 participants who were in Cycle 4 and Cycle 6 but not Cycle 5), the true perseverance percent from Cycle 5 to Cycle 6 was 71%.

Table 1
Number of Participants

Cycle	Sample	% Cycle 3	% Previous Cycle
Cycle 3	145	100%	129%*
Cycle 4	82	57%	57%
Cycle 5	45	31%	55%
Cycle 6	43	30%	96%

* Cycle 3 added 33 new participants.

Cycle 3 to Cycle 5 involved extensive attempts to contact by telephone based on most recent available information. The huge majority of participant loss was due to outdated contact information rather than refusals to participate. The lower drop out rate from Cycle 5 to Cycle 6 can be attributed to older participants with direct contact information; several participants had not changed their email address. Considerable telephoning of parents was conducted if the email address was no longer valid.

In Cycle 6, eleven of the 45 Cycle 5 participants did not participate (8 were “lost,” and 3 declined), but we brought back some Cycle 4 participants who missed Cycle 5, resulting in a total of 44 participants. Between Cycle 4 and Cycle 6, 52% persisted.

Statistical Comparisons. In order to assess potential sample bias, we looked at Cycle 4, the last cycle in which quantitative data was collected. Using Cycle 4 as the comparison enabled us to use the most reliable quantitative data the study has. We split the Cycle 4 participants into those participated in Cycle 6 (n=43) versus all the others (n=39).

We can offer some evidence of the inherent differences between the participants who went on to complete Cycle 6, compared to those who did not. If the significant differences are not extensive, it would offer support against sample bias. The analyses encompassed not only differences within participants but also differences assess by parent and teacher surveys as well as personality and achievement measures.

Of the 82 Cycle 4 participants, 43 (52%) also participated in Cycle 6, and these participants were compared to the remaining 39 Cycle 4 participants (48%). Table 2 summarizes the number of questions compared and the number that were significantly different, using a more relaxed, small sample appropriate, significance cutoff of .10. A few Cycle 4 questions were not included due to a small number of responses (e.g., questions for high school aged only).

Table 2
Cycle 4 Assessed Questions

Assessment Group	# of Questions	# Significant
Parent	17	4
Teacher	18	3
Student	32	1
Personality (Student)	19*	3
Achievement (Student)	6	0
Total	92	11

*One age-specific personality measure of 19 scales.

The parent, teacher, and student survey measures which indicated a statistically significant difference are summarized in Table 3, except for the one categorically significant question. Parent marital status in Cycle 4 (1996) revealed that future Cycle 6 participants were more likely to have been in married households (82% compared to 69% of other participants, significant at .057). This may mean that there was a lesser chance of these folks having moved, thus, it may have been easier to recover participants for Cycle 6 from married households.

Importantly, number of Montessori education years was not significantly different in the two subgroups.

Table 3
Significant Interactions: Cycle 4 Vs. Cycle 6

Question	Mean: Cycle 6 (2003)	Mean: Cycle 4 (1996)	Significance
Parent Survey			
School attitude (1=negative to 5=positive)	4.26	3.83	.004
Follower=1, Even Mix=3, Leader=5	3.74	3.33	.086
Student current (2003) age	21.91	20.39	.011
Teacher Survey*			
Rate of school adjustment (1=slow to 5=quick)	4.57	3.97	.011
Ability to work alone (1=poor to 5=good)	4.62	3.83	.001
Ability to finish a product (1=poor to 5=good)	4.50	3.77	.008
Student Survey**			
Compared to classmates, quality of finished work (1=worse to 5=better)	3.85	3.18	.008

* Significant after controlling for student age, number of years teacher knew student, and status (attending FMES versus another school).

** Significant only for students still at FMES. Means reported are for this subgroup only.

Parents. According to parents, participants who went on to complete Cycle 6 had a more positive school attitude and were a little more likely to be perceived as leaders than participants who did not complete Cycle 6.

Using current (2003) age, the Cycle 6 participants (21.91) were on average 1.51 years older than the other participants (20.39) who were no longer in the LAS, significant at .011.

Teachers. Several teacher survey questions were statistically significant. However, number of school years teacher knew student, as well as age of student, were related to most teacher survey questions and had to be controlled for (that is, its effect had to be neutralized).

An additional complicating factor was whether, at Cycle 4, the participant was still at FMES or had moved on to another educational environment (none continued at a different Montessori school). The 42 (51%) "stayers" were evaluated by Montessori teachers, while the 40 (49%) "leavers" were evaluated by non-Montessori teachers.

Years teacher knew student was also significant by this variable; the teachers of stayers (2.41 years) reported more years than those of leavers (1.50 years, sig. .003).

After controlling for these variables, for all 3 reported interactions, participants who completed Cycle 6 were rated by their teachers (who were comparing their LAS students with their other students) as able to more quickly adjust to the school environment, to work alone, and to finish a product than LAS participants who dropped out before Cycle 6.

Student. Only one of 32 student survey questions showed variation, where students who went on to complete Cycle 6 said they had a better quality of finished work as compared to LAS participants who did not do Cycle 6. However, this was only true for participants who were still attending FMES during the Cycle 4 assessment.

Personality Measure. Three different age-specific versions of the same personality measure were used (Children's Personality Questionnaire (CPQ) for elementary ages, High School Personality Questionnaire (HSPQ), and the 16PF for adults). Each version had different numbers of questions, and some versions did not use some scales which were inappropriate for some age groups. As a result, full sample analysis was not possible. Rather, participants were analyzed by test version, excluding the 16PF because there were only six participants of adult age at Cycle 4. Differences reported below are relative. All scale means were not far from the published population means.

While some of the scale descriptions below appear to be negative, please note this is not necessarily the case. For example, the last scale we discuss is a relaxed vs. tense scale, with low drive being associated with relaxed. A successful student would need some tension in order to succeed, so scoring on the tense side of the scale may be a good thing.

There were 20 participants of elementary age who took the CPQ, six went on to complete Cycle 6, and 14 did not. With small subgroup sizes, with caution, we can suggest one personality measure showed a significant difference. Factor O is a scale that measures feelings of apprehension versus security. Low scorers are described as untroubled, self-confident, cheerful, and resilient, while high scorers are described as guilt-prone, worrying, anxious, and depressed. The population norm tables report a mean of 3.18. Our Cycle 6 participants had a mean of 4.17, and the non-Cycle 6 folks had a mean of 2.86 (sig. at .076). Again, with small subgroup sizes, and also with a significance above the traditional .05, this interaction is suggestive only.

Adding some support to this suggestive interaction, the same scale was significant within the 57 HSPQ people, of which 34 were Cycle 6 and 23 were other. The norm table reports a population mean of 9.36, while our Cycle 6 participants were at 9.65, and our non-Cycle 6 people had a mean of 6.83 (sig. at .008). Cycle 6 participants were well balanced, being near the population mean, while the non-Cycle 6 participants scored as a little untroubled and self-confident.

Two other HSPQ scales reached significance. Factor I is a sensitivity scale, where low scorers are characterized as tough-minded, self-reliant, and logical, and high scorers tend to be tender-minded, sensitive, and intuitive. The population norm was 10.37. Cycle 6 participants were a little on the sensitive side (13.85), while the other participants were near the midpoint on the scale (10.61, sig. at .010).

Factor Q4 is a tension scale; low scorers tend to be more relaxed, unfrustrated, and with low drive, while high scorers tend towards being more tense, frustrated, and with high drive. The population mean was 10.38, the Cycle 6 mean was 9.26, and the non-Cycle 6 mean was 7.30, sig. at .059. Apparently, non-Cycle 6 participants may have been more relaxed than Cycle 6 people, but the Cycle 6 people were also on the relaxed side.

In sum, it appears that the participants who completed Cycle 6 tended to be more worrying and troubled, intuitive and sensitive, and not quite as relaxed and unfrustrated as the participants who did not do Cycle 6.

Achievement test scores. None of the 6 achievement test scores showed significant differences. Participants in Cycle 6 had the same levels of achievement as LAS dropouts.

Is our sample biased? While the evidence presented is only suggestive, it is surprising that so few identifiable differences were noted. Only 11 of the 92 assessed variables (12%) showed statistical differences. Also, two parent survey questions were significant below the traditional .05 level, and the one student survey question was significant only for participants still at FMES, and of course, none remain at the school now.

In sum, compared to participants who dropped out of the LAS before Cycle 6, our sample of Cycle 6 participants:

Parent Survey:

- > May have been more likely to come from married households
- > Were on average 1.5 years older
- > Had a more positive school attitude
- > May have been a little more likely to be leaders

Teacher Survey:

- > Had a faster rate of school adjustment
- > Had a better ability to work alone
- > Were better able to finish a product

Student Survey:

- > Had a better quality of finished work (only for participants still at FMES)

Personality Measure:

- > Were not quite as untroubled, worry-free and self-confident (mostly high school ages)
- > Were more intuitive and sensitive
- > May have been not as relaxed or unfrustrated

Collectively, it is likely that Cycle 6 participants had better school work habits (results from all three surveys, listed in Table 3), were a little older, but did not differ in terms of academic performance (achievement test results). It is possible that these factors are related to staying with the LAS; better work habits may relate positively with accepting the commitment for the full LAS study. We would like to conclude from the three significant personality measure scales that Cycle 6 participants may have been a little more ready for the rigors of the real world (mostly college, in terms of participant age), by being “normal” in terms of worry and anxiety and by not being particularly relaxed.

III. CYCLE 6 RESULTS AND ANALYSIS

Above, we established that, over 18 years, our LAS sample has surprisingly little bias. The primary difference between participants who completed Cycle 6 and those who did not was that Cycle 6 participants may have better general work habits and, related, a stronger persistence in completing an (up to) 18 year commitment. This conclusion was based on results from parent, teacher and student surveys, personality measures and achievement test results.

Demographics

In this sub-section, we will briefly review some demographic questions then consider some demographically related open ended questions.

Appendices B through G contain verbatim open-ended comments (with minor spelling and grammatical corrections to improve readability and identifying information altered or removed), and responses have been sub-divided into three categories of number of Montessori education years (MEY). Appendix H contains frequencies and means for the closed-ended Cycle 6 questions, and Appendix I compares a similar question across three assessments.

As with Cycle 5, number of Montessori Education Years (MEY) was divided into three subgroups; “Few” (4-5 years), “Some” (6-9 years), and “Many” (10-16 years).

The mean age of our sample was exactly 22 years (range 16.5 to 27.5 years). As all participants have graduated high school or were in their final year, the final mean for MEY was 8.95 years (range 4 to 16 years). Grouped, 21% (n=9) had 4 or 5 MEY, 30% (n=13) had 6-9 MEY, and 50% (n=22) had 10-16 MEY. These are the Few, Some, and Many MEY groups. Participant age was not related to MEY (21 to 22 years of age for the three MEY subgroups).

By education achieved, two participants had not yet graduated high school (they were in 12th grade), 7 had only a high school diploma, 30 (68%) were in or had completed an undergraduate program, and 5 had attended graduate school (3 had masters degrees). Collapsed, 55% did not have a 4-year college degree and 45% did.

When considering how far they wanted to go in school, two of the 7 participants with only a high school diploma did not plan to continue to an undergraduate degree, an additional 8 participants were planning for an undergraduate degree, one wanted to attend graduate school but did not plan on gaining a degree, 23 (52%) desired a masters degree, and 10 (23%) were planning on working towards a doctorate degree. Collapsed, 25% of our sample wanted an undergraduate degree or less, while 75% were planning to achieve a graduate level degree. There may have been a gender interaction; 86% of females, but only 56% of males, planned to attend graduate school, but significant at only .067.

While income may not be a valid variable in this sample due to the college student nature of the sample, the median break was near \$4,000 (52% earned under 4K, and 48% earned 4K and over).

Our sample was mostly unmarried (91% single, never married and 9% (n=4) married). One LAS participant recently had a baby, but she does not plan to send her infant to a Montessori school.

Participants were asked to briefly describe their living situation, including housing type and relationship to room mates if any (Appendix B). A tally revealed half living with others in a non-romantic situation (20% in college dormitories), about a quarter were living with their girl/boyfriend or spouse, about a fifth lived with their parent(s), and a few were not categorizable by this analysis. There were no identifiable MEY differences.

There were 26 participants (59%) who reported currently being in college (Appendix C). Eighteen of these were attending a college in the Pacific Northwest.

Participants were asked unaided for their professional or career goal (Appendix D). While it is difficult to characterize these responses, it appeared that overall the full range of possibilities have been stated, and these do not stand out in comparison to what may generally be considered 'normal.' There may have been a subtle MEY effect, but perhaps only for people who were looking for such an effect. It was possible that participants with many MEY were a little more likely to desire or choose careers in the humanities.

We asked this same question in Cycle 5, and Appendix D-1 compares, by participant, their Cycle 5 and Cycle 6 responses. Considerable within-participant variation can be expected at these ages, of course. Most interesting here is seeing how vocational preferences changed over the 4 years between the two cycles, but there did not appear to be any noteworthy conclusions.

We did ask participants to make their own estimates as to the numbers of Montessori education years (MEY) per level. This question was asked mostly out of this researcher's curiosity, since actual MEY was available. The correlation ($r=.895$) between participants' estimated MEY and actual MEY was highly significant. Ignoring the 2 participants who did not offer estimates, twelve participants (29%) were off the official number by more than one MEY (8 by more than 2).

Attitudes and Behaviors

We deal now with the questions which focus on opinions, feelings, thoughts, and actions. We asked three scaled questions. See Appendix H for the frequencies and means.

Participants were asked how often they thought of FMES, and responses showed a very even distribution; 8 participants (18%) chose never or rarely, 25 (57%) chose sometimes, and 11 (25%) chose often or very often. The mean (1=never to 5=very often) was 3.09. This interaction may have been significant by MEY (number of Montessori education years); participants with many (10-16 years) MEY said they think of FMES more often than participants with some (6-9 years) MEY (3.32 to 2.69, but significant only at .080). The few (4-5 years) MEY participants (3.11) had a mean that was not different from the other groups, but that subgroup may have been too small to reveal significance.

Participants were asked how much effect on who they are today they would attribute to a Montessori education, and two participants chose no effect, one said a small but not important effect, 8 (18%) said some effect, 15 (34%) chose a medium effect, and 18 (41%) said a strong effect. The mean (1=no effect to 5=strong effect) was 4.05. By MEY, participants with many MEY attributed a stronger effect of Montessori education on who they are today than did participants with some MEY (4.45 to 3.54, .028). Few MEY people had a mean of 3.78, not significantly different from the other MEY subgroups.

Participants were asked to rate if they thought their parents made the very wrong (=1) to very right (=10) decision to send them to a Montessori school years ago. The mean of 8.11 reflects a skewed distribution where half of all participants chose values of 9 or 10 (86% chose values of 7 or more). This was significant by MEY; participants with many MEY were more likely to say their parents made the right decision than participants with some MEY (8.68 to 7.00, .054). Few MEY participants had a mean of 8.33, not different from the other subgroups.

Do you think your parent(s) made the right decision long ago to send you to a Montessori school? Why? Verbatim responses with ratings can be found in Appendix E. There appeared to be a noteworthy MEY effect where the many MEY group was more specific in responses than the some or few MEY groups. These participants frequently mentioned the personalized, independent, self-paced, self-directed learning style, and the experiential, hands-on, approach, and a strong positive effect in the area of social learning. This latter was exemplified by frequently mentioning the earth experiences (for elementary ages) and Erdkinder and aboriginal (for junior and high school ages). These experiences are conducted away from FMES and focus on both traditional education (e.g., *in-situ* biology, history, etc.) and personal/social development. Elementary students have a week-long experience, while junior high school students have multiple experiences. In addition to academics, junior high students create a “pocket community” and are responsible for preparing meals and all other daily chores.

Negative comments were made, of course, but in the same proportion within the three MEY levels. About a third of each subgroup made some negative comment mixed in with mostly positive comments.

There were two types of negative comments; academic and social. Negative academic comments usually came from a sub-set of participants who were in attendance during the first few years of the junior and senior high program (St. Francis Academy or SFA) and cited little help or direction in learning core subjects (math was usually mentioned). Since that time, the SFA approach has been modified due to feedback from the general SFA population.

Negative social comments cited the limited availability for social interactions (i.e., too few students in the program), and this too was more prevalent during the first years of SFA while the program was growing in size, although it remains an issue today.

A few participants said they needed an external structure in order to learn. Considering the positive comments related to self-directed learning, it is very possible that students who come to Montessori with personalities that are capable of learning to be self-motivated, independent, learners were better able to flourish in such an environment. Montessori teaches one to be a self-directed learner, but if one does not have this capability, s/he would not be as successful in such an environment.

Think about the ways you approach your own education in general (not just in school). Does your approach to your education differ from the approaches of your friends? In what ways? Appendix F contains verbatim responses to this question. No matter how strongly this researcher controls his pro-Montessori bias, he continues to be amazed by LAS participants' comments regarding how they learn.

Regardless of number of Montessori education years (the only difference being participants with Many (10-16 years) MEY tended towards greater specificity), an overwhelming number of participants mentioned, compared to their non-Montessori educated friends:

- > Learning for learning's sake and not just a means to an end (*"I'm a lot more serious about learning material for the sake of understanding it, not just for getting a good grade on a test"* *"I view education as something to be experienced, not endured for the sake of results"*)
- > Life-long learning and self-improvement (*"Learning is forever"* *"I think of education as self-improvement, which is ongoing throughout life"*)
- > Understanding, questioning, analyzing, comprehending, and discussing over memorization or just completing the assignment (*"I look for the reason something is how it is rather than accepting it as face value"* *"I have to understand before I can memorize"* *"I look for more content and application to my learning whereas friends simply memorize and forget"* *"They competed with one another; I competed with the material I was learning. They focused on the facts and details of their learning; I focused on its purpose and value"*)

- Actively seeking knowledge (*"I generally read [leisure] books or magazines that I believe have great educational value as well as allure (Sartre rather than Harry Potter)"*)
- Self-directed learning, knowing how and where to look for information, confidence in searching for information (*"I am also very good at recognizing other topics I need to learn, developing my own curriculum, following through on my self-education, and ultimately applying what I have learned to work"*)
- Being more open-minded (*"I also think I'm a very open-minded & tolerant person."*)
- Better able to work in groups (*"I also learn much better in groups and get much more satisfaction out of collaboration than I do from solo studying"*).

Four participants said their approach does not differ from their friends (3 in the some (6-9 years) MEY group, 1 in the few (4-5 years) MEY group). One of these had a positive slant (*"they place a high importance on the value of a good, strong education as I do"*), one said he dislikes school as much as his friends, and two did not explain their responses.

Are there any aspects of your personality or behavior that you would consider "Montessori-like?" Don't be too concerned over the definition of Montessori. Just use your remembered impressions of what Montessori promotes in terms of one's personal life. Verbatim responses are in Appendix G.

This question grew out of an article that summarized 13 research projects at FMES since 1984² which concluded that families who were more "Montessori-like" in their values and behaviors were more likely to continue at FMES ("stayers"), while less Montessori-like families were more likely to leave FMES ("leavers").

As with the two previously addressed open-ended questions, participants with many (10-16 years) MEY (Montessori education years) were more specific and better able to describe their opinions. Unlike the two previous questions, but identified in Cycle 5 in several qualitative questions, participants with some (6-9 years) MEY were less positive and less specific in their comments than participants with many and few (4-5 years) MEY (three of 4 negative comments were from the some MEY group). Also recall above that the three quantitative questions showed participants with many MEY were rated significantly 'better' than those with some, but that participants with few MEY had mean ratings between these two MEY groups. The sample size (n=9) for few MEY was too small to reach significance, but the same quantitative trend was identified in previous cycles. If this is a real difference, it was suggested in Cycle 5 that it is possible that families with few MEY left FMES due to philosophical differences (they were less Montessori-like), while families with some MEY left due to financial reasons.

² Glenn, C.M. (1993). Market research at a Montessori school: Reasons for choosing, staying, and leaving, Montessori Life, 5, 13-14.

Personality and behavior aspects which participants frequently mentioned about themselves as Montessori-like included:

- › Life-long learning
- › Understand how and why, fully understand issues, find the importance in things
- › Independence
- › Patience, calmness, thinking before speaking
- › Self-confidence, understanding, self-stability
- › Effective decision making
- › Tolerance, being open-minded
- › Working with others, small groups, social awareness
- › Concern for others and community
- › Concern for environment

Some noteworthy quotes included:

There is a certain quality to myself and the way I think that I consider purely Montessori, it's hard to put into words. I consider myself not just educated in a method or technique called "Montessori," I consider myself a Montessori person.

Being not more self-aware, but better able to articulate my self-awareness -- than most of my non-Montessori contemporaries.

Cooperation and collaboration over competition. This theme in Montessori education has been with me my entire life. I work best when I'm working in a team and collaborating on projects. While I like to do well on things it is more from a desire for personal satisfaction rather than a competitive approach.

IV. DISCUSSION AND CONCLUSIONS

Previously, we identified a limited bias among our sample of Cycle 6 participants, compared with participants from Cycle 4 that did not continue to Cycle 6. Cycle 6 participants may have had better work habits, including personality aspects that would promote them. From this, we could surmise that the Cycle 6 sample placed more value on intellectual and personal growth than other LAS participants, and that their open-ended responses could have been slanted a little towards the positive.

We also identified that the many MEY (10-16 Montessori Education Years) group was more specific in their comments than the other MEY groups. We also identified as a Montessori value those qualities which would result in being more fully able to understand and describe one's opinion. Thus, the greater specificity may indeed be a byproduct of more years of Montessori education.

A key concern expressed by many parents is whether a Montessori education will prepare their children for the "real world," usually meaning the competitive, be on top, be

successful world (whether they personally value this or not). Our sample reported only limited problems from being Montessori educated, and they reported many benefits.

Even taking sample bias into account, comments across all questions revealed that experiencing a Montessori education was a key positive factor in their academic, personal, and social development, is an important factor in who they are today, and will affect how they embrace their futures.

Some aspects of a Montessori education may for a few have short term problems; an emphasis on understanding over memorization, self-direction, and learning for the sake of learning could make it more difficult to meet public or traditional parochial high school requirements. However, a Montessori educated person might see the value in an alternative (in this case, traditional) education approach and might decide, with self-direction, that s/he would benefit from it. In other words, choosing to leave the Montessori environment may be a Montessori-like thing to do. This was also noted in a series of focus groups conducted at FMES (separate groups for SFA students and their parents) when discussing aspect of “leavers.”

The greatest caution must be addressed towards families who do not have a philosophy of life which is consistent with the theories of Montessori. While to a limited extent such a person could learn to become more Montessori-like, it is more likely that people come to a Montessori education with this life philosophy already extant to some degree. If at a young age one’s parents value independence, life-long learning, cooperation over competition, understanding over memorization, self-direction and understanding, then such values are reinforced, grow, and flourish in a Montessori environment. Parents whose values focus on external motivation, getting a good grade, getting a good job, and being on top in a competitive environment may not be as satisfied with the Montessori approach.

Another key difference appears to be in the area of personal growth. Traditional education does not focus on this. Montessori does not separate the personal from the academic; both deserve attention for the student to learn and grow.

It may be that the long view is beneficial in choosing Montessori. Several participants reported that the Montessori combined academic and social approach was important in learning how to learn beyond high school and college. Being able to collaborate in groups was important in college and could be considered a vital job skill in most occupational areas. Self-direction is usually valued in the workplace.

We asked one similar open ended question in Cycles 4, 5, and 6. In Cycles 4 and 5, we asked, “How has your Montessori experience affected who you are today?” In Cycle 6, this question was rephrased to “Are there any aspects of your personality or behavior that you would consider Montessori-like?” Appendix I collected, by participant, the three responses to these questions over the three cycles.

The primary conclusion this researcher found when reviewing the comments was that age seemed to have given the participants a great deal of insight into their personal values and beliefs, how those relate to their Montessori education, and it gave them the vocabulary to express this. In many cases, we can read a comment in Cycle 4 and see this expand in Cycle 6 to a consistent and eloquently expressed reply. Only a few (perhaps 4, but an even more critical analyst may prefer to add a few more) comments were in clear disagreement, comparing Cycle 4 and Cycle 6.

Former Montessori students who are now adults often appear to appreciate their Montessori education more than when they were younger. It may be that when the participants were younger, they did not have as much self-insight (or maybe the ability to express such insight) as to how Montessori interacted with their personalities. Even after a decade or more away from a Montessori education, and even with few years of Montessori education, these people are able to clearly identify the parts of their personalities and behaviors which express the Montessori-consistent values they hold today.

APPENDIX A

The Survey (Best Viewed At: <http://www.glenresearch.com/cycle6survey.html>)
This is a text version of the survey. To see the formatted version, click on the link above.

See Appendix H for the frequencies and means for the quantitative questions.

Franciscan Montessori Earth School and St. Francis Academy

Longitudinal Assessment Study (LAS) Cycle 6 Survey (Final Survey)

Most of you joined the LAS 15 or 16 years ago (a few joined three years later), in order to assess the effects of a Montessori education on development into adulthood. I would like to take this opportunity to thank you for your years of participation. Results from Cycles 3, 4, and 5 have been published through ERIC (Education Research Information Clearinghouse), as will be Cycle 6. You can find the citation information at www.glenresearch.com/Pubs.html.

As in the past, all your answers are confidential; I only report group results. Your responses to the open ended questions are pasted into appendices, and any identifying information is changed or deleted.

The first two questions are required so I can keep track of who responds and follow-up if I am confused by a response. They will be stripped from the final data base in order to further protect your confidentiality.

First, the demographic questions.

1. What is your name? (Required)
2. What is your email address? (Required)
3. What is your phone number?
4. How far have you gone in school?
 - Less than high school
 - High school graduate or GED
 - Undergraduate, attended, no degree
 - Undergraduate, 2 year degree
 - Undergraduate, 4 year degree
 - Graduate, attended, no degree
 - Masters Degree
 - Doctorate Degree

5. What is your marital status?

- Single-never married
- Married
- Separated
- Divorced
- Widowed

6. How many children (adopted or birthed) do you have?

7. Briefly describe your living situation (what kind of housing, who else lives with you and your relations to them, etc.).

8. What was your total income (before taxes) in 2001? Please do not count anyone else; I just want to know your own personal income.

- Less than \$1,000
- \$1,000 to \$1,999
- \$2,000 to \$2,999
- \$3,000 to \$3,999
- \$4,000 to \$4,999
- \$5,000 to \$5,999
- \$6,000 to \$6,999
- \$7,000 to \$7,999
- \$8,000 to \$8,999
- \$9,000 to \$9,999
- \$10,000 to \$14,999
- \$15,000 to \$19,999
- \$20,000 to \$24,999
- \$25,000 to \$29,999
- \$30,000 to \$34,999
- \$35,000 to \$39,999
- \$40,000 to \$44,999
- \$45,000 to \$49,999
- \$50,000 and over
- Refuse to answer

9. How far do you plan to go with your formal education?

- Less than a BS or BA (undergraduate degree)
- Undergraduate degree (BA, BS)
- Graduate school - attend but no degree
- Graduate school - Masters degree (MA or MS)
- Graduate school - Doctorate degree (Ph.D., Ed.D. etc.)

10. If you are in college, what is the name and city of your college?

11. What is your professional or career goal?

12. To the best of your memory, how many years in each of the following levels did you attend ANY Montessori school?

- Children's House
 - Lower Elementary
 - Upper Elementary
 - SFA/Junior High
-

Now, the interesting Questions.

13. How much effect would you say your Montessori education has on who you are today?

- No effect
- A small but not important effect
- Some effect
- A medium effect
- Strong effect

14. How often do you think of FMES?

- Never
- Rarely
- Sometimes
- Often
- Very Often

15. Do you think your parent(s) made the right decision long ago to send you to a Montessori school?

Very Wrong Decision...>....>....>....Very Right Decision
1 2 3 4 5 6 7 8 9 10

16. Why?

17. If you have children, are any enrolled (or are planning to enroll) at a Montessori school or a non-Montessori private school?

- Enrolled in a Montessori school
- Enrolled in a non-Montessori private school
- Planning to enroll our infant in a Montessori school
- Planning to enroll our infant in a non-Montessori private school

18. Think about the ways you approach your own education in general (not just in school). Does your approach to your education differ from the approaches of your friends? In what ways?

19. Are there any aspects of your personality or behavior that you would consider "Montessori-like?" Don't be too concerned over the definition of Montessori. Just use your remembered impressions of what Montessori promotes in terms of one's personal life.

Thank-you! Please make sure you have answered the first two questions before you submit this survey.

APPENDIX B

Briefly describe your living situation (what kind of housing, who else lives with you and your relations to them, etc.).

(MEY: Number of Montessori education years;
Few: 4-5, Some: 6-9, Many: 10-16 years)

Many MEY

I live in a rented townhouse with my husband.

Shared student apartment or dormitory housing.

I have my own apartment.

Living with parents at their home.

My boyfriend/ partner and I live in a house co-owned by myself and my parents. Another couple is living with us temporarily, until they get married next year. We have our dog, their dog and our cat living with us. Very full house.

I rent a house with 2 friends

I live with [name] (also an FMES/SFA graduate) and his family. I moved into their home because of its proximity to my place of work.

I continue to live with my parents.

I live in a duplex and I have one room mate

I am currently enrolled at ASU and am living on campus at the dorms. I have a roommate who is a freshman at ASU as well. I have not met her yet though.

University of Oregon residence halls . . . one roommate (female), no relation to her.

I live in a house near the college campus where I am going to school. It is a three bedroom house. I have two roommates, both good friends; one a school friend the other someone I met here in town. It is a fairly laid back living situation and we more or less share all bills, responsibilities, and food.

Currently sharing 2 bedroom apartment with roommate.

I live with my girlfriend and 3 roommates in a commercially zoned storefront. the space allows us to work on art projects, music, and crafts. All of us are working artists in some capacity, though none of us depend solely on art for our livelihoods.

I live in the Asian Studies Interest House at Whitman College. I live with two native Chinese speakers, another Whitman student interested in Chinese, and an Indian Resident Assistant interested in Indian Culture. We live in a house together and do activities together as well as plan Asian cultural activities for the campus.

I live in a college apartment with two other girls my age who are also design students

I am in a dorm room with one other female roommate, who is now a very good friend.

I live with my boyfriend in an apartment in Seattle

I live in an apartment with my husband not far from my college campus.

Mother's home with mom.

I rent a ranch styled house which is off campus. I live there with my boyfriend. We were living there with a roommate, but we found out that we could not live together and they moved out. Since it is such a nice house and so close to school for me the two of us decided to stay here for a bit.

I live in a co-op apartment (2 bedroom). I live alone with a cat.

Some MEY

I will be moving back to school in January (I have been on a medical leave of absence and have been living at home.) At home, I live with my parents and thirteen year old sister in a farm house.

This past summer my boyfriend and I bought our first home. Just the two of us reside in the home. Since that time we have become engaged to marry.

I live with my girlfriend in Portland. My dog passed away a year ago but I have two replacement cats to make up for the space.

Shared apartment with friend from college.

I live in a house that I am renting for the year with two other girls who are also undergraduate students at the University of Oregon.

I live in an apartment with a roommate who is also a friend from graduate school.

College dorm room with a roommate who was a friend of mine in high school - we get along very well.

I am currently living in the dorms at the University of Oregon. My roommate is from California. We hadn't met prior to this year.

I live with my mother and my sister, our relationships are pretty good, we have good communication and are very supportive of one another.

I live in a house with my boyfriend. Which also occupies my step-mom. I move in February.

I live in an apartment with two friends from school.

My husband and I live with our daughter in a three bedroom ranch style home on the outskirts of Junction City.

I am currently enrolled at and living in the dorms at Western Washington University.

Few MEY

I live with my mom, older brother, and younger sister.

Living in a 5 bedroom house with 4 other (all male) law school students.

My wife and I share a one bedroom apartment.

I'm currently sharing a townhouse with two other students.

I live in the dorms with 2 roommates. When I'm not there I live at home with my parents and my older sister.

I just moved to Boulder, Colorado and I am living in a wonderful family until I get a job. I graduated a year and a half ago, moved to Durango, Colorado and then traveled Europe for 12 weeks in the fall, 2002. After spending some time with my family back in Washington I am back in Colorado and on the job hunt.

I live with my mother and two younger brothers in a 2-story house, which we have lived in for about 10 years.

I live in a co-ed house with 5 other college students which we rent from Whitman College. My housemates are friends of mine - all seniors and science majors attending Whitman (We will all graduate in May 2003).

I'm currently living with my parents (mom and dad) at their house.

APPENDIX C

If you are in college, what is the name and city of your college?

Arizona State University
Bowdoin in Brunswick Maine
California State University, Hayward
City College of San Francisco (community college)
Monterey Institute of International Policy Studies
Oregon State University, Corvallis, OR
Oregon State University, Corvallis, OR
Pacific Lutheran University, Tacoma, WA
Pacific University and PCC fire science
Portland State University, Portland, OR
Portland State University, Portland, OR
Portland State University, Portland, OR
Pratt Institute Brooklyn NY
Reed College in Portland, Oregon
Rice University, Houston TX.
The Evergreen State College, Olympia WA
The Rhode Island School of Design (Graduated 2001)
University of Oregon School of Law, Eugene
University of Oregon, Eugene, OR
University of Oregon, Eugene, OR
University of Oregon, Eugene, OR
University of Oregon, Eugene, OR
University of Washington, Seattle
Western Washington University
Whitman College, Walla Walla, WA
Whitman College, Walla Walla, WA

APPENDIX D

What is your professional or career goal?

(MEY: Number of Montessori education years;
Few: 4-5, Some: 6-9, Many: 10-16 years)

Many MEY

To advance and improve in my current career - mechanical design engineering, perhaps advancing into management.

Medicine.

To teach math at the college level

Unfortunately after 23 years of life on this planet, I'm still not sure. Either teacher (ESL or high school) or lawyer. Want to do something that helps people-this is my real goal.

Teaching cross cultural education.

Improve my skills as a software engineer

I intend to own and manage my own company, which will be a part of the creative or entertainment industries.

I have none. I'm just going to keep doing what I'm doing now until I die.

I am majoring in business, but have not yet decided which specific direction I am taking my major. I plan to start my own business by opening up a coffee shop within the next ten years.

Foreign Correspondent for newspaper

I am intensely immersed in the theatrical arts, primarily as a performer but also as a director and tech designer (lights mostly). It is my goal to do theatre professionally and to run my own company.

To become a newspaper or magazine journalist.

Undecided. My passions are music and musical electronics. I would like to support myself with something related to these someday, but for now, just performing around town and modifying my own (and friends') gear is satisfying.

Most likely something medical, perhaps biomedical research, possibly physician.

I will receive an Interior Design degree and plan to study art history at the graduate level. I would like to practice professionally in both fields. I would like to be very free and prepared to pursue multiple career directions.

Major in Aerospace/Aeronautical Engineering and eventually work at Boeing or NASA.

I'd like to get my masters either in Public Health or to become a Nurse Practitioner.

Editor of children's literature.

To be a structural fire fighter.

I plan to go to law school and go into contract law. I would like to work with art museums and artist, writing contracts for them when they borrow a piece for another museum, or doing contracts for artist who sell their work on consignment to galleries. Lately I have been thinking about changing my major to engineering, as a child I loved to build things, always wondering how they worked. I really think that I would enjoy building a structure and turning it into a piece of art.

I would like to be a writer, both fiction and non-fiction.

Some MEY

I am interested in working in genetics right now, but I plan on studying immunology and possibly pursuing a career in public health.

Geologist/GIS specialist

Own my own company and teach at the collegiate level.

At the moment, I dream of a Ph.D. in Legal History. With this degree, I would like to teach, write, and/or work for a progressive organization such as the ACLU.

I am uncertain of what I would like to do. I am currently majoring in biology with interest in the areas of genetics, disease, and physical therapy.

I want to work for the state department.

To graduate college and get a career in my major, forestry.

I would like to become a Psychologist, either sports or child.

Film Production.

Ask me later, I still don't know what I want to do when I grow up.

Get into writing philosophy on whatever level I can.

I plan on continuing in the field that I'm currently working in which is banking.

To find a field and career that I enjoy working in.

Few MEY

Not decided yet.

Currently plan to continue on to get an additional graduate degree in forensic psychology or criminology. Also considering the FBI as well as more traditional legal jobs.

To work in software development and/or information technology.

I don't really have one yet. I think I may major in environmental studies and possibly go to law school afterwards and become an environmental lawyer, but this is very up in the air.

My career goal is to find a job that I enjoy. I am hoping to find a group of people who are kind, creative and want to make a difference in the world. Currently I am pursuing a position as a marketing and technology consultant for a medium sized firm. I am not sure if this is the field me, but I'm going to give it a try.

Computer Engineer, specifically in the area of programming.

Probably a physician, or maybe a pilot - my career goal is really to find a job that I love doing.

I'm still trying to figure that out. Urban Planning is at the top of the list right now.

APPENDIX D-1

What is your professional or career goal? (Comparison With Cycle 5)

(MEY: Number of Montessori education years;
Few: 4-5, Some: 6-9, Many: 10-16 years)

Cycle 5 responses are indented and follow Cycle 6 responses.

Many MEY

To advance and improve in my current career - mechanical design engineering, perhaps advancing into management.

To be a mechanical engineer and to one day own my own engineering firm.

Medicine.

I want to be an astronaut.

To teach math at the college level.

I want to be a mathematics teacher in a jr. high or high school.

Unfortunately after 23 years of life on this planet, I'm still not sure. Either teacher (ESL or high school) OR lawyer. Want to do something that helps people-this is my real goal. Some sort of position within the field of international studies- something including travel.

Teaching cross cultural education.

I know I am looking at social work and photo journalism. Travel and writing must be involved in what ever I finally decide to do. I feel though that I have a real calling, if you will, for social work, specifically with youth.

Improve my skills as a software engineer.

I hope to become a software designer.

I intend to own and manage my own company, which will be a part of the creative or entertainment industries.

My realistic long term goal is to work for a highly successful company, such as Lucas Arts or Pixar. Specifically I wish to make a lot of money for using my creative talents in such a way that the results of my creativity are highly appreciated. A more fantastical goal would be to own my own company, making computer games or animated movies. This company would be very successful and I could work creatively without worry of financial support.

I have none. I'm just going to keep doing what I'm doing now until I die.

[Did not participate in Cycle 5.]

I am majoring in business, but have not yet decided which specific direction I am taking my major. I plan to start my own business by opening up a coffee shop within the next ten years.

[Did not participate in Cycle 5.]

Foreign Correspondent for newspaper.
[Did not participate in Cycle 5.]

I am intensely immersed in the theatrical arts, primarily as a performer but also as a director and tech designer (lights mostly). It is my goal to do theatre professionally and to run my own company.

I am interested in Theatre, mostly as an actor, but perhaps eventually I will try my hand at directing. Also music has of late become a major interest, one that I intend to pursue.

To become a newspaper or magazine journalist.
To become a (print)journalist and/or a published author.

Undecided. My passions are music and musical electronics. I would like to support myself with something related to these someday, but for now, just performing around town and modifying my own (and friends') gear is satisfying.
[Did not participate in Cycle 5.]

Most likely something medical, perhaps biomedical research, possibly physician.
To become an herbalist and work in a foreign country.

I will receive an Interior Design degree and plan to study art history at the graduate level. I would like to practice professionally in both fields. I would like to be very free and prepared to pursue multiple career directions.
I am studying to be a fashion designer.

Major in Aerospace/Aeronautical Engineering and eventually work at Boeing or NASA.
[Did not participate in Cycle 5.]

I'd like to get my masters either in Public Health or to become a Nurse Practitioner.
[Did not participate in Cycle 5.]

Editor of children's literature.
To be a reconstructive surgeon.

To be a structural fire fighter.
To explore all my interest as best as I can.

I plan to go to law school and go into contract law. I would like to work with art museums and artist, writing contracts for them when they borrow a piece for another museum, or doing contracts for artist who sell their work on consignment to galleries. Lately I have been thinking about changing my major to engineering, as a child I loved to build things, always wondering how they worked. I really think that I would enjoy building a structure and turning it into a piece of art.
Since I have not narrowed it down to one single profession, my goals at this time is to go to school and expand my mind. I am looking forward to college and have ideas on what I would like to study such as philosophy, anatomy, anthropology, American history, art history, painting.

I would like to be a writer, both fiction and non-fiction.

I want to graduate with a BA in psychology and go on to get a Masters and possibly PHD.

Some MEY

I am interested in working in genetics right now, but I plan on studying immunology and possibly pursuing a career in public health.

I want to go into a career involving health sciences or engineering, I am not yet sure where specifically.

Geologist/GIS specialist.

At this time I am starting to apply to graduate schools to study either Hydrology, Soil Science, or Environmental Studies. I am currently thinking of starting grad. school in the winter of '00, and continue working for the City of Portland until that time and during that time is I attend a school in Portland.

Own my own company and teach at the collegiate level.

To become wealthy and happy enough to do the things that I want to do when I want to do them.

At the moment, I dream of a Ph.D. in Legal History. With this degree, I would like to teach, write, and/or work for a progressive organization such as the ACLU.

Ideally, I would like a job that does not have a regular 40hr. work week and that involves many different types of personal responsibility. For instance, I could see myself working on one of those smaller Sailboat Schools or as a free-lance photographer, as a doctor in a program similar to Doctors without Borders, a radical environmental group, or for National geographic (my dream job)

I am uncertain of what I would like to do. I am currently majoring in biology with interest in the areas of genetics, disease, and physical therapy.

My goal is to have a steady job that I like following college, however, I do not know yet what I want that job to be.

I want to work for the state department.

A foreign service agent.

To graduate college and get a career in my major, forestry.

[Did not participate in Cycle 5.]

I would like to become a Psychologist, either sports or child.

[Did not participate in Cycle 5.]

Film Production.

I want to be a pediatrician.

Ask me later, I still don't know what I want to do when I grow up.

Stay alive.

Get into writing philosophy on whatever level I can.

I plan on studying science and possibly medicine.

I plan on continuing in the field that I'm currently working in which is banking.
[Did not participate in Cycle 5.]

To find a field and career that I enjoy working in.

Right now I am interested in going in to law enforcement or the political field. My choices will probably change before I am out of High School though.

Few MEY

Not decided yet.

I would like to go to college and get a masters degree in something having to do with technology. I am not sure at this point in time exactly what because I have a long time until I need to think about that.

Currently plan to continue on to get an additional graduate degree in forensic psychology or criminology. Also considering the FBI as well as more traditional legal jobs.

I would like to finish college, go on to graduate school, and eventually become a psychologist, although I'm quite certain that other exciting career opportunities may present themselves along the way, changing my plans...

To work in software development and/or information technology.

Some sort of system administration or consulting (for the computer science side of me)
Professional touring and recording musician (for the musical side of me - this is a serious goal which I fully expect to achieve).

I don't really have one yet. I think I may major in environmental studies and possibly go to law school afterwards and become an environmental lawyer, but this is very up in the air.

To complete college and get a job in math or science. At the moment I think I would like to go into Botany.

My career goal is to find a job that I enjoy. I am hoping to find a group of people who are kind, creative and want to make a difference in the world. Currently I am pursuing a position as a marketing and technology consultant for a medium sized firm. I am not sure if this is the field me, but I'm going to give it a try.

I want to travel the world helping/teaching people about system software.

Computer Engineer, specifically in the area of programming.

I have always been interested in everything in life, so it is very hard for me to make any kind of decision on what I want to do. But, since 7th grade, I have been forced to choose something as a career. These decisions have just been small assignments, and are definitely not set in stone, but they troubled me all the same. To say what my more possible careers could be, I would say that I have always been interested in art and computers. Possible careers in this area for me could be drawing comics; animating movies, or special effects in real-people movies; computer-animation (Like in Toy Story), or clay-mation (Like Wil Vinton's movies); video or computer game designing and programming. I believe that I am able to understand computers well, and I think that this is good, since computers are becoming very important in our society.

Probably a physician, or maybe a pilot - my career goal is really to find a job that I love doing.

I like to become a sports medicine doctor, orthopedic surgeon, or a radiologist.

I'm still trying to figure that out. Urban Planning is at the top of the list right now.

I plan on becoming a structural engineer. Working mainly with building design.

APPENDIX E

Do you think your parent(s) made the right decision long ago to send you to a Montessori school?

(Scale: 1=Very Wrong Decision to 10=Very Right Decision)

Why?

(MEY: Number of Montessori education years;
Few: 4-5, Some: 6-9, Many: 10-16 years)

Scale rating precedes each response.

Many MEY

(10) Because Montessori teaching focuses on helping children grow into healthy adults. They do not only teach you how to read and write, but they teach you how to cook, how to properly put something away after you have used it, how to garden, how to work hard play a bit and have a good time. I feel that when I was interested in something all it took was me to get started, my teachers were there to guide and make sure the important things got in there as well.

(10) Better personalized education, strong relationships, hands on learning. Multiple experiential events. School supported my adventures and ideas.

(10) I loved the freedom of being able to work at my own pace, and the best was getting to help other people with their work (I am becoming a teacher after all...)

(10) I was able to advance at my own pace, develop independence in terms of studying and interest in learning, and participate in great experiences, especially the camping trips, Erdkinder, and trips abroad.

(10) Since I was almost out of school, I could see the differences between myself and people who had left Montessori, or never went at all. I'm not saying that every person who does not understand Montessori is doomed, but I believe that Montessori gives you a set of tools not found anywhere else. These tools are extremely helpful when you venture into the real world and must deal with it.

(10) Superior, thoughtful education.

(10) The hands on education and the push to be an individual, but still part of a community provides strength.

(9) Because of the genuine interest in learning that I believe it instilled. In addition, growing up, I think in the context of other peers (outside of FMES) I was more responsible and independent (and may, in a few ways, still be).

(9) I feel like I am far more independent than many of my peers are today. Also, Montessori, especially the camping trips, helped me to realize the difference between needs and wants, which has made me a much more frugal person than I would have otherwise been.

(9) I think the first two or three stages (Children's House + Lower Elementary and perhaps Upper Elementary) of the Montessori school system are ideal and I'm glad my educational career began this way. However, I've come to hesitate endorsing SFA for two reasons - its limited number of students (therefore limited social exposure), and its incompatibility with the educational systems of other institutions (i.e. other high schools and most colleges).

(9) I value my education greatly. In looking back and talking to others from a different educational setting I realize that I had opportunities that others did not. I was able to get more excited about school than most of my peers. I believe that Montessori prepared me to be much more self driven and motivated and to work in "real world" setting that many of my friends and peers who went to more traditional compulsory institutions. The only down side I see is that I did not have many of the social experiences that I would have liked to experience. Also, I still can't spell.

(9) The Montessori teaching helped make me who I am today and prepare me for what is ahead of me. I am able to notice at times how Montessori's teaching has enabled me to come as far as I can. I have always appreciated the one-on-one level that it carried. I switched to a public school my sophomore year in high school and found that I was much farther ahead than most of the other students. When I reach my senior year I had more than enough credits to graduate. The hands-on teaching has been very beneficial in my techniques of learning. Montessori taught me how to carry on a relationship and interact with people. Montessori has been the best teaching for me and I am grateful for the opportunity growing up, though I was not aware of it at the time.)

(8) Because I understand how I learn and take control of my own learning process better now than I think I otherwise would (a useful skill in college). I also think that it was good for me to be able to learn at my own pace because I wasn't bored in school and I think I otherwise would have been.

(8) I like Dr. Montessori's theories and I feel like I notice their positive effects on my personality. I was in parochial school between children's house and upper elementary and I look back on those years as being frustrating, intimidating, and repressive. Montessori not only allowed me to feel comfortable exploring and learning within the classroom, but encouraged individual processes, which in effect placed much less pressure on me to conform or to "measure up" socially and scholastically. While this did enable me to procrastinate, it also showed me to a certain degree that I was responsible for my own rewards. also that failure was not something to fear, but something to examine and learn from. I did not say 10 because I feel like at FMES I was isolated from exposure to my

cultural peers, due to its small size and suburban locale. this had a negative impact on my social development, in that I saw myself as an outsider among "normal" children.

(8) I liked attending FMES, although my time at SFA was not that great. FMES helped me to grow and to learn about things at my own pace, and since I have ADD, that meant studying about five subjects at once. I liked not learning in a "traditional school," although SFA was run by teachers who did not have the student's best interests at heart.

(8) I think Montessori was a great choice for me for the following reasons: 1) A lot of personal attention from adults who had known me for years and believed in my ability to learn and overcome challenges. 2) The ability to make choices about what/how to learn. This worked well for me because I was an independently motivated learner (probably thanks to a combination of parental influence and personality trait). I don't think this freedom worked well for everyone-and I don't think it inspired me to push myself in the subjects that were a challenge like math and physics.

(8) It gave me a safe environment in which I could discover and extend my abilities without feeling hampered. The teachers were exceptional. I never had to worry about discrimination, violence, or drugs.

(8) It gave me a set of unique experiences, and the chance to be my own person.

(8) This might sound strange but sending me to FMES thankfully allowed me to be exposed to a world other than my own. I mean this in the sense that neither of my parents finished college and their sphere is very working class. They are beautiful people, don't get me wrong, but thank god they sent me to FMES where I was exposed to a more, if you would allow, "cultured" existence. The Earth Experiences, trips to Oregon Shakespeare festival etc. are all things I NEVER would have been exposed to if I hadn't attended FMES. Plus most who attended FMES parents were professionals and had gone to college etc. It helped to subtly reinforce my parents desire for my brother and I to attend University and such. FMES was also (at least when I attended) a very open place, and the Montessori philosophy itself was not rigid, and helped some of us to start to think out of the box if you will. Also [teacher name] of Sr. Division helped us in this regard tremendously. This I consider to be the greatest benefit of my Montessori education, that is, the desire (and hopefully ability) to begin to think critically.

(7) I believe that FMES was a good choice of school for my early education. However I believe that it did more harm than good after eight grade.

(7) I would say that it was a very right decision to send me to a Montessori school in the beginning, but I am not convinced it was a very right decision to keep me there when the grades got higher and increasingly less Montessori. I think my early Montessori experiences shaped my world view in a very positive and peaceful way. I also believe it taught me the value of community and personal responsibility.

(6) My mother is a Montessori teacher, but I believe that it was beneficial in my intellectual as well as emotional development as a small child.

Some MEY

(10) I think my Montessori education has had a very big impact on the way I feel about learning and the method that I learn best with. Without my background in Montessori school, I think I would not have been so successful in school (I was my high school's valedictorian) and I don't think I would have such high goals for future achievement.

(10) The education I got there put me years ahead of most of my peers. In math especially, it wasn't until high school that I felt like I was learning new material.

(9) I believe that my education at FMES has given me a significant advantage in my ability to learn and think critically as compared to my peers.

(9) It has made me an independent worker and learner.

(8) I am very impressed with the quality of education I received at the Earth School. I remember having fun in almost every learning activity that we worked on. Over the years I have recognized that some of my peers do not have certain basic knowledge such as knowing the parts of speech that are extremely important to understand. They have never been presented with the information. I can still remember sitting down on the carpet diagramming sentences with black triangles and red circles. I think FMES provided me with a solid foundation. In a plant biology class last year, we learned about all of the different parts of a flower. I was reminded of coloring and labeling these same parts back in lower elementary. Back then I was just having a good time coloring and didn't realize that that knowledge was sticking with me even when I wasn't aware of it. Whenever I am reminded of something like this, a smile crosses my face as I think of my days at FMES.

(8) Socially speaking, FMES was great. Academically speaking it was great for me through upper elementary. After that academics lacked severely. When I attended SFA I was simply handed a math book and expected to teach myself. That is not how one should approach education with Math, Science, and subject. At a young age it's fine because kids need the developmental aspect. But when at SFA age, a child needs structure and lessons on how to use processes. Because of that I have been effected negatively with the rest of my schooling.

(7) I enjoyed the freedom and flexibility of the Montessori method and believe that it helped me develop my sense of intellectual curiosity.

(7) I really enjoyed my time at FMES. I made great friends that I still have and hope to keep forever. However, I don't think that the FMES method teaching method prepares its students adequately for college in terms of basic subjects like math and English.

(7) I think they knew what was right for people & education but not always right for me.

(7) It helped me to become a very visual learner. It also taught me the importance of being involved in activities both in and outside of school.

(5) I believe that the non-structured learning environment and approach to learning as a creative, exploratory adventure helped foster my curiosity about the world and love for learning.

(3) I wasn't exactly a model student. I left before 6th grade started.

(1) Because it was not structured at all, they went with the independent learning...and in doing that nobody learned any core basics. It took me three years of a "normal" school to get semi caught up on math/english because of what Montessori did not provide me, and because of their below average teachers.

Few MEY

(10) Attending Montessori school shaped my learning style, I am a more visual and kinetic learner. This has helped me have the ability to understand concepts in different ways from other people. Montessori school also helped develop my love of learning.

(10) FMES had a special place in my heart. The teachers wanted to help us learn, and the environment catered to that. I learned to be patient and responsible with others and things. I learned to challenge myself and to explore my abilities. Most of all, I was surrounded by good people who cared about each other.

(10) I enjoyed it and it gave me confidence that I could do well in school - it provided me with a strong foundation for my education.

(10) I had a really good time at FMES. I made a lot of friends there, although I'm not in touch with them anymore, they did make a big impact on my life. I also learned a lot and I think my teachers really helped me in the education process. I also think that the way I learned, in terms of group learning along with freedom to choose what I did, has really shaped the way I learn and made me want to learn for learning, not for a grade.

(9) I like the system of education and agree with its philosophies.

(9) The Montessori method of education was an important foundation for the rest of my school-life because it was very different when compared to public schooling. I was fortunate to have begun in Montessori, so that no matter where I went later, those habits and methods of learning would stay with me.

(8) I remember the years I was in Montessori as mostly positive, while the following years in public schools ranged from medium to bad. I believe that during these young years in my life I was forming habits that I would carry with me for the rest of my life. In

Montessori I learned good learning skills, which I carried with me through public school, college, and now to work. I do not give a score of 10 because even though I learned good learning skills, I suspect I didn't learn good social skills, especially the skills useful for dealing with the majority, non-Montessori population.

(5) Although I loved Montessori school while I was there, I think my parents made the right choice in switching schools when we did. I've always been a lazy learner. If it was something I was interested in, there was no stopping me. But if it was something I was less than inspired by (math or history come to mind) I wasn't very motivated to pursue the topic. In fact, I remember spending day after day in Montessori school doing little more than reading by myself...I wasn't active or energetic or enthusiastic or independent enough to pursue a wide variety of projects. Instead, I just stuck with what I already knew I liked. I think the freedom and self-responsibility I was given in Montessori school would have been to my detriment over the long run if I hadn't left when I did, simply because I was too lazy to be the kind of self-motivated learner that the Montessori method works best for.

(4) I believe the styles of teaching and lack of basics such as reading and spelling affected me greatly in a negative way throughout the rest of my schooling.

APPENDIX F

Think about the ways you approach your own education in general (not just in school). Does your approach to your education differ from the approaches of your friends? In what ways?

(MEY: Number of Montessori education years;
Few: 4-5, Some: 6-9, Many: 10-16 years)

Many MEY

I definitely have more of an education for education's sake philosophy than some of my friends. I think it is so useful for opening one's mind (but not always, unfortunately, there can also be indoctrination). I've never been one for going to school strictly to obtain a certain job or career or whatever. Although, I'm currently jobless with a degree in Sociology and Spanish, so maybe I should rethink that one! ;)

I don't think in terms of grades as much as my friends do. I was shocked to learn that my husband was graded in subjects at first grade ... to me, grading students at such an early age seems harsh.

I have to understand things to learn them, so sometimes it takes me longer because I have to understand before I can memorize. I think that in contrast to my friends I go more in depth before I start memorizing stuff, because otherwise it doesn't work. Once I learn things through, this method usually results in my knowing the material better than most people.

I look for more content and application to my learning whereas friends simply memorize and forget.

I tend to place generalities first, specifics later...somewhat uncommon. I view education as something to be experienced, not endured for the sake of results.

I think about it a lot more, I mean how to go about doing it. What do I really need out of it? etc.

I think I'm a lot more serious about learning material for the sake of understanding it, not just for getting a good grade on a test. Still, my friends are also studious for the right reasons. My approach to education was shaped so much during high school that it is difficult to tell whether my current study patterns reflect those from FMES or from SMA [St. Mary's Academy].

I think it does a bit. I'm very hands on. That's just how I learned to learn. I also learn much better in groups and get much more satisfaction out of collaboration than I do from solo studying, where as I hear a lot of people groan when a professor mentions group work. Also I have found that I am much more comfortable being self directed and taking

charge of my own education, where many people I knew and know still look for or wait for some external motivator or instructions. This is not so much true at Evergreen, it being a school where one must be self motivated to succeed, but that has been my general observation of friends at other schools, back in high school, and even out of the class room in everyday life.

I think of education as self-improvement, which is ongoing throughout life. Many people think of education as a means to an end, a job. I think of it more as an opportunity for you to find and increase your personal strengths and interests, and you can find ways to use your strengths to better mankind in some way.

I think that both my parents and my teachers at FMES have taught me that learning is forever, not just something that starts and ends in the classroom. I was encouraged to question and discuss vs. memorize and repeat back. Of course, we did have to memorize things but I think Montessori made us question and analyze what we were learning at an earlier age than other schools.

I want to learn new things all the time. When I have a question of how something works, I alone will answer my question through research. I notice that I read quite a bit more than my average friend. Not many of them enjoy reading just to read. I find that many people feel that learning is what you have to do at school and it involves multiple choice test, I feel that learning is something that I will never stop doing. I also notice that many of my friends don't feel that they need to college. While I agree that college is not for all, and that some people do have the stuff it takes to make it in the world with out a degree, I truly feel that college is a natural step after high school to continue your education.

It was only when I transferred to public school at the beginning of my sophomore year in high school that I noticed a difference in my perception of education compared to that of my friends. I tended to think of formal education as a way that I could learn about my mental capabilities, regardless of subject, and how I could extend those capabilities. My friends tended to think of education as a challenge that they were forced to meet - a task that required completing. They competed with one another; I competed with the material I was learning. They focused on the facts and details of their learning; I focused on its purpose and value.

My approach differs from my friends in that if I have time to read I generally read books or magazines that I believe have great educational value as well as allure (Sartre rather than Harry Potter). Additionally, the college sponsors outside professors to come and discuss academic subjects on campus, depending on the subject matter, I occasionally attend these talks. Such presentations are generally poorly attended; sometimes professors offer the incentive of extra credit to increase student attendance. To me, it appears, that more than my peers I am interested in increasing my general base of knowledge about the world.

My approach differs in that I am in school without an educational goal outside of education itself. I will probably pick a major soon, but I will probably not base it on a

career goal. The principle of learning for learning's sake was stressed to me by my senior division instructor. Perhaps this falls outside the realm of the study.

My approach to education differs from that of my friends in that I don't view education as a means to an end (like a degree or a job). Education is a part of me and affects how I view all aspects of my life, day-to-day problem solving, decision making and planning. I believe that education is a continual process that lasts a lifetime.

My approach, which I notice most in mathematics, is different in that I look for the reason something is how it is rather than just accepting it at face value. Montessori taught me to do that in all aspects of both education and life, but in mathematics is where I notice it most often.

My education approach is slightly different than my friends who have attended public school their whole lives. But not necessarily better or worse. I believe that both types of education have advantages, and the perfect balance needs to be found, or at least a better balance.

Some of my friends (myself included) had very little concern for their education. A few didn't care at all. I already knew what I wanted to do in life, others seemed to be lost. My approach was always: do just enough to get by, spend all the rest of my time working on things that actually interested me. The friends who were unsure about their future seemed to be much more focused on learning a medium amount about everything in life. I was always focused on one, two or three specific items, none of which had anything to do with my education at the time.

YES! I am not as focused on grades and what I can get for myself out of a teacher and school. I am much more disturbed by cheating and ass-kissing. I am much more affected for better or worse by the attitudes of my fellow students. I am more interested in non-career related learning. I have a harder time dealing with deadlines and tests.

Yes, I learn best with a hands-on approach or seeing things set up visually. I am much more goal oriented than most of my friends. Pursuing school after high school has never been a second thought for me. For many of my friends they've never really thought about college. I see furthering my education as very beneficial to me. I believe that anything can be accomplished, but there are certain tools that open more doors and make it easier for you to achieve your goal. I believe that going to college is one of these tools for me.

Yes. Many of my friends have no inherent desire for continued education beyond college (or high school, in some cases). This includes graduate school, but I'm thinking about continued education in general, inside a classroom or otherwise. Also, I've noticed many of my friends from other educational backgrounds tend to embrace new ideas with less ease than myself (let's be honest here; they're not very open-minded). This may be a personality trait or a result of the way I was raised, but it may also indicate something about the effect of encouraged questioning and curiosity at younger ages.

I am always actively seeking knowledge. With or without a formal education or degree. I plan on continuing to explore the world and continuing to learn through experience, interaction, and reading as well as observing life.

Some MEY

I am a much more independent in how I learn material, I do better if left alone with the material and have access to a person or resource to ask questions of rather than having the material talked at me.

I can't say that I can attribute this to the small amount of Montessori education that I have had, but I think that I was generally a more self-directed and disciplined student than many of my peers.

I don't believe that my approach to education varies greatly from that of my friends. I believe that they place a high importance on the value of a good, strong education as do I.

I feel that I am more open minded in approaching different methods of education than others, specifically those who do not have knowledge of Montessori method.

I take it more seriously.

I'm certainly more open and willing to discuss all aspects of education rather than a set, state-run system.

Is some ways. I think a lot more about what I am doing. But I have very poor study skills. FMES didn't stress studying at home at a young age. That has had a profound effect on me and my secondary education.

Most of my friends view education as a means to an end, as a way to get ahead in life. I tend to view education as an experience and journey.

My approach to education definitely differs from the people around me. In high school, I was often the only person who would complete reading assignments or finish work the teacher had recommended in addition to homework. Most of my friends were attending class in order to earn a grade rather than to increase their understanding of the subject. Even in college, I found many students who were in school to get a degree, and therefore a good job, rather than to experience new ideas and indulge in thoughtful lines of inquiry. Though I cannot say I have always been dedicated to school, I have always considered education my first priority, not only for future success, but for personal satisfaction.

My approach to education is drastically different from my peers. My learning style is very independent, probably to a fault, because my personal studies win out over school work. Most of my friends don't understand that there might be something called education outside of school. The independent learning we did at FMES has added to my ability to be self motivated.

We all seem to have a similar take on school. We dislike it but do it because we have to and know that it will pay off in the long run.

What kind of question was that? I have lots of friends, I don't attend college.

Few MEY

I am a more experiential learner than my friends. I need to be able to see things before they make sense to me. Sometimes this is an advantage and other times it is not.

I approach things very methodically and carefully, and I have a finely tuned sense for detail. I am also very well rounded in the different areas of learning - science, math, writing, language, and art are all strong points.

I see my approach to my own education to be much different than others around me. When I got to college, where students are expected to be much more self-motivated and organized, I really started to notice the difference. Other serious students tend to take detailed lecture notes, compulsively study, and stress. I, on the other hand, have always had a real skill for understanding what key ideas are critical for understanding a subject, and how those key ideas are used to derive the bulk of other material in the subject. In class I would take sparing notes, learn quickly and form relationships in my mind as I learned, and study painlessly and effectively. (This worked great for what I was learning (computer science), but didn't work for the occasional "brute memorization" subject.) I am also very good at recognizing other topics I need to learn, developing my own curriculum, following through on my self-education, and ultimately applying what I have learned to work. I am as comfortable doing this as I am learning in a classroom.

No.

I tend to not "weigh" the things I need to learn in school. That is, instead of consciously deciding how much time to devote to each subject/project depending on how much it's worth, I tend to simply concentrate on the subject at hand, giving equal weight to everything I'm doing. I don't tend to treat 10 point assignments differently than 100 point assignments. I think my philosophy is that I'm supposed to learn the material...and there's no such thing as only half learning something. Learning is worthwhile for its own sake. Also, I think this philosophy has provoked me to develop good study habits; if I find myself reading the same text over and over, and not completely processing things, I'll stop and go on to something else, rather than continuing on at only 50 or whatever % comprehension. I think I'm able to realize exactly when I'm not understanding things at my full ability level, and I have no qualms about stopping rather than forging ahead. In my mind, these two topics are kind of related--both stress the importance of comprehension above anything else. I think that these things might stem from early exposure to a Montessori approach to learning.

I'm not sure how much I differ from my friends in my learning process. I think I may be more willing to spend time exploring how to do something if I can't figure it out. Like if there's a math problem I don't understand I have the patience to look through the book and try different methods.

My approach doesn't usual differ that much, but only in that I don't always do what the majority of the population is doing. I can make my own decisions.

My approach to education differs from my peers in these ways: - I am more thorough than most of my peers - I am always seeking knowledge and understanding, I do not write a report just to complete an assignment. - I would never turn in an incomplete assignment or miss a deadline. - Grades are very important to me - I want to use my abilities to their fullest potential.

Obviously, my methods differ because all people are different. Seriously, though, when I want to solve a problem, I like to know everything about it; I like to completely understand it, so that I can make an intelligent decision. And that feeling isn't limited to problems. If it were in my power, I would learn everything about everything and then just keep on going. That was a dream I had a long time ago in Montessori school, and it still colors everything I do.

APPENDIX G

Are there any aspects of your personality or behavior that you would consider "Montessori-like?" Don't be too concerned over the definition of Montessori. Just use your remembered impressions of what Montessori promotes in terms of one's personal life.

(MEY: Number of Montessori education years;
Few: 4-5, Some: 6-9, Many: 10-16 years)

Many MEY

Decision making is the first thing that comes to mind. I can remember way back when Mother Francine would give educational hints to parents, pointing out things like giving your child a choice of what to wear and then letting them decide, guiding the child instead of just pushing decisions on them. The ability to listen and then respond based on what you heard, instead of what you were already thinking.

Everything I do is Montessori-like. I am the ultimate Montessori product.

Hopefully, a concern for other people, for the environment and community at large. Also, although I think this is just my personality no matter what, I think I'm very independent. I like to rely on myself and am reluctant to look for fulfillment as coming from a source outside myself-like in romantic love or even a certain career. I like to just roll along.

I am a life-long learner for sure. I also believe in allowing people to pursue that which inspires them most in life (follow the child).

I am not content to just see THAT something works, but I need to know and understand HOW and WHY it works. I am confident in my work, and prefer to do things myself than to let others do them for me. I enjoy teaching and helping others whenever I can.

I believe my desire to "think before I speak" and to fully understand issues before forming thoughts and opinions about them comes from my Montessori education. I think am a more thoughtful person because of my Montessori education. When a subject interests me so much that I explore it exhaustively, I am reminded of my Montessori education.

I handle situations very calmly and address the important issues of it. I said earlier that I learn easier seeing things visually. With all of my work, I set up graphs or systems to help me better understand what I'm learning. I am very personable and do well one-on-one with others. I pay attention to detail in my work. I really cannot think of much else right now. But, at random times I realize that I did something or am the way that I am because of my Montessori teaching.

I know who I am and where I am going. I know what I stand for and what I will not. I push in my chair and carry it in the Montessori way. I respect others' differences, and know that no one is perfect, including myself.

I really like experiential learning (such as through travel) and I like interdisciplinary academic work.

I think of myself as a very open minded person. I like to argue but really as a way to flush out other ideas and views. I think the environment of Montessori established this for me. I also attribute my hands on approach to life and learning to Montessori, education does not stop in the classroom, in fact sometimes the classroom is just a prolog to learning. There is a certain quality to myself and the way I think that I consider purely Montessori, it's hard to put into words. I just really liked my education, and the ideas that it promotes stick with me. I consider myself not just educated in a method or technique called "Montessori," I consider myself a Montessori person. My approach to life is much like children's house: I see something interesting and I examine it, question it, try to understand it. If everyone looked at life as a learning process and stopped taking themselves so damn seriously all the time I think the world would be a much happier, interesting place.

I would consider behaviors to be Montessori like, but again I don't know if that is the best behavior to have. I believe that Montessori "shelters" their students from too much of the real world. It can be a rude awakening when faced with social, political, religious, etc. situations.

I'm not really sure. I think that I try to enjoy my education as opposed to earning good grades, which could be considered Montessori-like.

I'm very affected by my environment. I enjoy civilized debates. I like adventures and new experiences. The respectful care of people and spaces is very important to me.

Independence and self stability. Working with others constructively to accomplish a task. Being dissatisfied with simple answers.

Let's see, I'm patient and calm. If I have many tasks to get done, I let one activity be a "vacation" from the others. I work well in small groups, and see great value in being able to teach something I have learned to someone else.

Montessori has left its mark on my personality in the sense that I enjoy group work and don't feel intimidated by people with different opinions from my own. I also like to see a practical, real-life application for the things that I learn in school/books.

My communication style is passive in groups, which may simply be due to natural introversion. My impression is that Montessori encouraged me to be a listener. I don't often speak in class (or in social settings for that matter) unless I'm called upon. I'm also technically inclined and logical. I'm not sure if this is simply my personality, but I often

relate it to the children's house exercises which emphasize physical experience of mathematical relationships.

Sharing an apt. has made me conscious I think there's a "right" and "wrong" way to do things (e.g. dishes, general housekeeping)...a holdover from Practical Life lessons no doubt. Definitely an inclination to observe first and not to feel I've mastered a skill till able to perform it unaided, in all aspects of life. Being not more self-aware, but better able to ARTICULATE my self-awareness-- than most of my non-Montessori contemporaries.

The aboriginal really affected me-it seems like nowadays I have a definite connection with nature. I also have lots of memories from Erdkinder. I am still a bit shy, but nothing like I was in my earlier years. I am not sure, however, if this was caused by FMES.

When using public spaces I almost always return them to the condition in which I found them (leaving the communal kitchen clean). I am respectful of others' space and belongings. I try to understand my body and the earth in terms of natural order and function.

Yes. I constantly can't stand when people do not put things away when they are done with them. I like my house to be clean, and for everything to have it's own space where it is to go. I also find that I am interested in many different things and am trying to take classes in every subject, just to have an educated taste of everything that I am interested in. I find that I am a strongly visual person when it comes to learning. I remember things best when I touch them, see them, or physically do something while being introduced to a new idea. I find that I am very task oriented and do well on my own.

I was the "Montessori" child and therefore have become the "Montessori" adult. To think outside the box, to question everything, to learn from life, to see myself evolving and be able to analyze my growth, intellectually, emotionally, physically, to recognize my own potential and talents and let that be my journey in life.

Some MEY

Curiosity and independence.

I am very social. I am very mature, which Montessori promotes.

I believe that my Montessori education fostered an ability to learn in different ways and made me able to understand many things well. I find I can pick up something that I have no background in and I can begin learn about it by approaching it from different sides, and experiencing it in different ways. Recently, I was trying to understand the difference between the two and four stroke internal combustion engines. Though I have very little knowledge of automobiles or mechanics, I was able to understand the concepts by looking at diagrams, reading about combustion, and watching a car engine. Learning

through experience, not just through reading and reciting, is something I have always tried to do, and I associate this with my Montessori education.

I did not learn any of my personal attributes from Montessori or the Montessori program...other than a respect for what actual learning is rather than what they provide. I do not remember what is considered "Montessori-like" though, but I wouldn't give them any credit towards my present self.

I have very little idea about what Montessori promotes in terms of personal life, but I feel that I am really an individual. I am able to do things on my own and be my own person. I take care of things on my own, am very responsible and know how to use time wisely. Some of these qualities may be due in part to how Montessori runs things--giving students their own responsibility and accountability.

I left when I was, 11ish? That school had no effect on me. Had I known what I know now, I would have asked my mom to be sent to a boarding school in Switzerland!

I think I approach a lot of situations, especially in the work environment in a more creative less "structured" method than those around me. I have a difficult time dealing with people who can't see out of their structured "boxes" and who don't learn new concepts quickly and on their own. I attribute my own ability to learn this way to my Montessori education.

Independence seems like the big one. It requires not only the ability to think, but also the ability to decide what to think about; what is important. That ability for valuation is something not common among most people and to whatever degree I have it, FMES deserves credit.

Inquisitive and socially aware.

Most significantly, I remember the process of creating as being central to my experience. My friends and I had a tremendous amount of freedom to come up with skits, presentations, to draw pictures and make maps or otherwise expand-on and interpret what we were learning.

No.

Yes, especially when I'm doing something new or unique. I want to know everything about whatever I'm doing, I have tremendous thirst for knowledge that I think is partly due to my Montessori education.

Few MEY

Cooperation and collaboration over competition. This theme in Montessori education has been with me my entire life. I work best when I'm working in a team and collaborating on projects. While I like to do well on things it is more from a desire for personal

satisfaction rather than a competitive approach. This quality was instrumental in helping me choose my college.

From what I can remember of "Montessori-like" I would probably say that I am accepting of other people, with completely no regard to their financial status, race, or other factors.

I am independent, self directed, organized, confident, and detail-oriented.

I like doing group work a lot. I really enjoy hearing other people's thoughts on a project and I also think that the assignment gets done in a better way when more people can work on it. I think that this definitely came from all the group work I did in Montessori when my teacher would teach a small section of us a lesson. I also think that I procrastinate a lot. I'm not sure if this came from Montessori or not, but I think having that freedom in elementary school made me less concerned with deadlines and grades. I like to do work for me not for my teachers and I think that emphasis on individuality at Montessori has really shaped who I am today.

I think I'm interested in a very wide variety of topics...perhaps more so than many of my peers. I tend to get engrossed in random topics, and often find myself reading beyond what is required of me in school. I also think I'm a very open-minded & tolerant person. I'm not easily surprised & often just sit back and watch things. I don't often get excited about things, and it's difficult to provoke a heated response in me. I'm also very non-competitive. These are all characteristics that I remember developing during Montessori school. I'm not saying that attending Montessori school produced these traits in me...it's more like I directly associate these things with my Montessori school years.

I'd say mostly what I mentioned above: to learn any subject to its fullest, and to learn as many subjects as possible. I remember doing many different activities in Montessori school, and they were all integrated together; it wasn't just learning subjects, it was a learning experience.

Lot's! Montessori taught me to be caring and thoughtful in all I do. Characteristics of my personality which may be attributed to Montessori are as follows: I care deeply about others. I am responsible. I want to succeed. I want to enjoy helping other. I take time to do my best.

Probably my ability to work through things very carefully with patience.

APPENDIX H

Cycle 6 Sample Frequencies and Means

AGE (JANUARY, 2003)

N	Valid	44
	Missing	0
Mean		21.9973
Median		22.4545
Std. Deviation		2.6358

NUMBER OF MONTESSORI EDUCATION YEARS: FINAL

N	Valid	44
	Missing	0
Mean		8.95
Median		9.50
Std. Deviation		3.40

NUMBER OF MONTESSORI EDUCATION YEARS: FINAL (GROUPED)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Few (4-5)	9	20.5	20.5	20.5
	Some (6-9)	13	29.5	29.5	50.0
	Many (10-16)	22	50.0	50.0	100.0
	Total	44	100.0	100.0	

EDUCATION

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than high school	2	4.5	4.5	4.5
	High school graduate or GED	7	15.9	15.9	20.5
	Undergraduate, attended, no degree	13	29.5	29.5	50.0
	Undergraduate, 2 year degree	2	4.5	4.5	54.5
	Undergraduate, 4 year degree	15	34.1	34.1	88.6
	Graduate, attended, no degree	2	4.5	4.5	93.2
	Masters Degree	3	6.8	6.8	100.0
	Total	44	100.0	100.0	

MARITAL STATUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single-never married	40	90.9	90.9	90.9
	Married	4	9.1	9.1	100.0
	Total	44	100.0	100.0	

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$1,000	9	20.5	20.5	20.5
	\$1,000 to \$1,999	4	9.1	9.1	29.5
	\$2,000 to \$2,999	3	6.8	6.8	36.4
	\$3,000 to \$3,999	7	15.9	15.9	52.3
	\$4,000 to \$4,999	2	4.5	4.5	56.8
	\$5,000 to \$5,999	1	2.3	2.3	59.1
	\$9,000 to \$9,999	3	6.8	6.8	65.9
	\$10,000 to \$14,999	3	6.8	6.8	72.7
	\$15,000 to \$19,999	4	9.1	9.1	81.8
	\$20,000 to \$24,999	2	4.5	4.5	86.4
	\$25,000 to \$29,999	1	2.3	2.3	88.6
	\$30,000 to \$34,999	1	2.3	2.3	90.9
	\$35,000 to \$39,999	1	2.3	2.3	93.2
	\$45,000 to \$49,999	1	2.3	2.3	95.5
	\$50,000 and over	2	4.5	4.5	100.0
Total	44	100.0	100.0		

EDUCATION GOAL

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than a BS or BA (undergraduate degree)	2	4.5	4.5	4.5
Undergraduate degree (BA, BS)	8	18.2	18.2	22.7
Graduate school - Attend but no degree	1	2.3	2.3	25.0
Graduate school - Masters degree (MA or MS)	23	52.3	52.3	77.3
Grad. school - Doctorate degree (Ph.D., Ed.D. etc.)	10	22.7	22.7	100.0
Total	44	100.0	100.0	

EFFECT OF MONTESSORI EDUCATION TODAY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No effect=1	2	4.5	4.5	4.5
	A small but not important effect=2	1	2.3	2.3	6.8
	Some effect=3	8	18.2	18.2	25.0
	A medium effect=4	15	34.1	34.1	59.1
	Strong effect=5	18	40.9	40.9	100.0
	Total	44	100.0	100.0	

Mean	4.05
Median	4.00
Std. Deviation	1.06

HOW OFTEN DO YOU THINK OF FMES?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never=1	1	2.3	2.3	2.3
	Rarely=2	7	15.9	15.9	18.2
	Sometimes=3	25	56.8	56.8	75.0
	Often=4	9	20.5	20.5	95.5
	Very Often=5	2	4.5	4.5	100.0
	Total	44	100.0	100.0	

Mean	3.09
Median	3.00
Std. Deviation	.80

PARENT DECISION TO SEND TO MONTESSORI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Wrong Decision=1	1	2.3	2.3	2.3
	3	1	2.3	2.3	4.5
	4	1	2.3	2.3	6.8
	5	2	4.5	4.5	11.4
	6	1	2.3	2.3	13.6
	7	6	13.6	13.6	27.3
	8	10	22.7	22.7	50.0
	9	9	20.5	20.5	70.5
	Very Right Decision=10	13	29.5	29.5	100.0
	Total	44	100.0	100.0	

Mean	8.11
Median	8.50
Std. Deviation	2.04

APPENDIX I

Cycle 6: Are there any aspects of your personality or behavior that you would consider "Montessori-like?"

Cycle 5 and Cycle 4: How has your Montessori experience affected who you are today?

(MEY: Number of Montessori education years;
Few: 4-5, Some: 6-9, Many: 10-16 years)

Notes:

Comments are listed by participant. A "no comment" is used as a placeholder when the participant did not respond in one of the three cycles.

Cycle 6 response is first, followed by Cycle 5 then Cycle 4, incrementally indented in a different size and font.

Preceding the Cycle 4 comment, participant age (at the time of assessment in 1996) is provided so the reader can consider the comment given the age of participant. Cycle 4 responses are from junior and senior high aged students and older.

Many MEY

Decision making is the first thing that comes to mind. I can remember way back when Mother Francine would give educational hints to parents, pointing out things like giving your child a choice of what to wear and then letting them decide, guiding the child instead of just pushing decisions on them. The ability to listen and then respond based on what you heard, instead of what you were already thinking.

No comment.

(17) I think I am a better person.

Everything I do is Montessori-like. I am the ultimate Montessori product.

In every way. I am who I am due to the choices I made in my education, the guidance and encouragement I received from teachers and staff at school, and I see my Montessori education show its affects in random ways: I seminar about everything, I ask lots of questions. I don't ask people to do things for me, but I ask for assistance or advice. My mind and view is extremely wide open to new ideas. These are just a few general ways in which Montessori has affected my life.

(19) I can plan and prepare how to approach and solve situations. I feel confident that my school work is done well because I received an interactive education. In many ways I feel more advanced or mature in seeing the way my peers and I look at a situation. In work [participant is in college and works part time as a counter person at a sandwich shop], I feel a little frustrated because I go at my own pace of learning and improving as I can, like I learned in Montessori. Often the employer in annoyed that I'm not quick and "mechanic" in my thoughts and actions. However, I've been told that I am positive, and I feel

that I can work well with people because I'm not so "mechanic." All this, I feel, is a direct result of my Montessori education.

Hopefully, a concern for other people, for the environment and community at large. Also, although I think this is just my personality no matter what, I think I'm very independent. I like to rely on myself and am reluctant to look for fulfillment as coming from a source outside myself-like in romantic love or even a certain career. I like to just roll along.

Made it easier to adapt to new situations.

(16) My Montessori education has allowed me to experience many independence boosting opportunities (from camp outs when I was small to a full time internship at the present time).

I am a life-long learner for sure. I also believe in allowing people to pursue that which inspires them most in life (follow the child).

I believe that I am an open-minded person, interested in philosophical/spiritual matters as well as day-to-day concerns. I know a great deal about how and why I learn. Both of these points are a result of FMES and SFA. However, I was not as comfortable as I would have liked with the vast numbers of people in college. This is due to the incredibly small number of people involved as students in the Montessori program (at least in Portland.)

(17) It has evoked some startling negative and positive reactions within me.

I am not content to just see THAT something works, but I need to know and understand HOW and WHY it works. I am confident in my work, and prefer to do things myself than to let others do them for me. I enjoy teaching and helping others whenever I can.

It has helped me to take control of my learning and to view education in such a way that I believe will ultimately help me to succeed in life. Also, because of the multi-age classrooms at FMES, I am used to helping other students and I have discovered that this helps me to learn and to solidify my understanding of materials.

(16) I feel very confident with myself, and I know how to work in a tight group of friends because I'm with the same people every year.

I believe my desire to "think before I speak" and to fully understand issues before forming thoughts and opinions about them comes from my Montessori education. I think am a more thoughtful person because of my Montessori education. When a subject interests me so much that I explore it exhaustively, I am reminded of my Montessori education.

My Montessori experience has given me confidence and self-discipline.

(20) My Montessori experience has taught me to be self-reliant and that no one will do "learning" for me. I must do it myself.

I handle situations very calmly and address the important issues of it. I said earlier that I learn easier seeing things visually. With all of my work, I set up graphs or systems to help me better understand what I'm learning. I am very personable and do well one-on-one with others. I pay attention to detail in my work. I really cannot think of much else right now. But, at random times I realize that I did something or am the way that I am because of my Montessori teaching.

No comment

(13) I have been more open and know more people. I enjoy who I am and expect more out of the people here at the school.

I know who I am and where I am going. I know what I stand for and what I will not. I push in my chair and carry it in the Montessori way. I respect others' differences, and know that no one is perfect, including myself.

No comment.

No comment.

I really like experiential learning (such as through travel) and I like interdisciplinary academic work.

I understand myself fairly well, I consciously realize what I am doing and I know when I'm learning and when I'm not. I understand what teachers want, and I understand synthesis. I am not used to large schools and I think this dumb 200 person school is big. I think myself capable of most things that I want to do.

(14) I think it has helped me to be more independent and creative.

I think of my self as a very open minded person. I like to argue but really as a way to flush out other ideas and views. I think the environment of Montessori established this for me. I also attribute my hands on approach to life and learning to Montessori, education does not stop in the classroom, in fact sometimes the classroom is just a prolog to learning. There is a certain quality to myself and the way I think that I consider purely Montessori, it's hard to put into words. I just really liked my education, and the ideas that it promotes stick with me. I consider myself not just educated in a method or technique called "Montessori," I consider myself a Montessori person. My approach to life is much like children's house: I see something interesting and I examine it, question it, try to understand it. If everyone looked at life as a learning process and stopped taking themselves so damn seriously all the time I think the world would be a much happier, interesting place.

Well, I suppose that it helped formed a great deal, looking back at what I wrote it sounds very Montessori. I basically have Montessori as a basis of my life. My first memories are when I was attending that school. I think it may actually affect me more than I realize all the time.

(14) I feel confident. I can achieve anything I really want to achieve.

I would consider behaviors to be Montessori like, but again I don't know if that is the best behavior to have. I believe that Montessori "shelters" their students from too much of the real world. It can be a rude awakening when faced with social, political, religious, etc. situations.

It has taught me self-discipline and given me the ability to want to learn.

(15) I am more caring and smarter.

I'm not really sure. I think that I try to enjoy my education as opposed to earning good grades, which could be considered Montessori-like.

How can I answer that? It has led to my hating lectures, for one, but I think that it also is the reason that I left my old school, Saint Francis Academy, because I realized that it wasn't giving me the hands-on experience I needed. I think it is the reason that

I became so creative, and why I love English so much, all though maybe I am just a creative person.

(14) It makes me find who I am on the inside so that I don't always have to conform to society.

I'm very affected by my environment. I enjoy civilized debates. I like adventures and new experiences. The respectful care of people and spaces is very important to me.

Any school I spent over ten years at would have a profound effect on who I was and what I wanted to do in the future. But the specific things about Montessori that have inspired me are the holistic approach to history, the emphasis on being a responsible member of a community, the respect for environment, the teamwork and the overall respect for human existence.

(16) My Montessori experience has made me more confident in who I am, made me think more clearly and critically and taught me many things about people and problem solving.

Independence and self stability. Working with others constructively to accomplish a task. Being dissatisfied with simple answers.

So many ways that a short paragraph won't hold them. I have learned independence and respect not only for myself but for others. Erdkinder and different earth experiences totally changed my perspective on life. Family and social life greatly improved. I was confident that I could do well anywhere else I decided to go to school. I know who I am and what I want, and the things that I don't know I am not the least bit afraid to explore them. I found friends in the people who taught me and I still keep in contact with them to this day. Those people weren't just teachers that I saw every day, but people that were supporting my life. I don't know or want to know who I would have been if I hadn't gone to Montessori.

(14) It guides me in the right direction for my future.

Let's see, I'm patient and calm. If I have many tasks to get done, I let one activity be a "vacation" from the others. I work well in small groups, and see great value in being able to teach something I have learned to someone else.

It is so much a part of me that I'm not sure exactly how it has affected me. The ideas I learned in Montessori carry over into all aspects of my life, and have helped me to become just the kind of person I want to be.

(16) I feel very confident with myself, and I know how to work in a tight group of friends because I'm with the same people every year.

Montessori has left its mark on my personality in the sense that I enjoy group work and don't feel intimidated by people with different opinions from my own. I also like to see a practical, real-life application for the things that I learn in school/books.

No comment.

(17) I think it has given me the ability to see things from different viewpoints; to step into another's shoes and understand where they are coming from. My Montessori experience also provided me with an environment in which to learn responsibility, self-direction and confidence.

My communication style is passive in groups, which may simply be due to natural introversion. My impression is that Montessori encouraged me to be a listener. I don't

often speak in class (or in social settings for that matter) unless I'm called upon. I'm also technically inclined and logical. I'm not sure if this is simply my personality, but I often relate it to the children's house exercises which emphasize physical experience of mathematical relationships.

No comment.

(17) It has helped me to develop critical thinking skills that tend to be beyond the abilities of my public school classmates.

Sharing an apt. has made me conscious I think there's a "right" and "wrong" way to do things (e.g. dishes, general housekeeping)...a holdover from Practical Life lessons no doubt. Definitely an inclination to observe first and not to feel I've mastered a skill till able to perform it unaided, in all aspects of life. Being not more self-aware, but better able to ARTICULATE my self-awareness-- than most of my non-Montessori contemporaries.

Drastically. I think that the Montessori experience I had allowed me to develop my academic abilities to their full potential. The Montessori environment, and also the particulars of my experience (e.g., small peer group at the Earth School) has also affected my social behavior.

(17) My Montessori experience has made me interested in learning and broadening my horizons.

The aboriginal really affected me-it seems like nowadays I have a definite connection with nature. I also have lots of memories from Erdkinder. I am still a bit shy, but nothing like I was in my earlier years. I am not sure, however, if this was caused by FMES.

No comment.

No comment.

When using public spaces I almost always return them to the condition in which I found them (leaving the communal kitchen clean). I am respectful of others' space and belongings. I try to understand my body and the earth in terms of natural order and function.

It has helped me to be an open understanding person who realizes the purpose of going to school and doesn't just try to get good grades or go through the workout. It had helped me become a more independent, person that other people can rely on.

(13) Smarter, more considerate.

Yes. I constantly can't stand when people do not put things away when they are done with them. I like my house to be clean, and for everything to have it's own space where it is to go. I also find that I am interested in many different things and am trying to take classes in every subject, just to have an educated taste of everything that I am interested in. I find that I am a strongly visual person when it comes to learning. I remember thing best when I touch them, see them, or physically do something while being introduced to a new idea. I find that I am very task oriented and do well on my own.

I find that I am much more able to take things into my own hands and begin them.

Also that I can learn in different ways, while few other people can learn better one way or another. With my Montessori school being so small it really gave me a more personal one on one relationship with my teachers.

(14) It has kept me very close to the people here. I am going to a larger school next year, and that will be a lot different. But I will never lose my very close friends here.

I was the "Montessori" child and therefore have become the "Montessori" adult. To think outside the box, to question everything, to learn from life, to see myself evolving and be able to analyze my growth, intellectually, emotionally, physically, to recognize my own potential and talents and let that be my journey in life.

Somewhat, it was definitely a good introduction to education as a whole.

(19) I think the Montessori school helped to provide a solid foundation for the rest of my educational experiences.

Some MEY

Curiosity and independence.

Other than having a few good friends from my years there, I would say that I am probably the same as if I didn't have a Montessori experience.

(20) I've found it has made it easier to deal with some, but not all, of life's situations.

I am very social. I am very mature, which Montessori promotes.

No comment.

(12) Montessori has taught me that you are who you are and that you should do your best at whatever is shoved in your face.

I believe that my Montessori education fostered an ability to learn in different ways and made me able to understand many things well. I find I can pick up something that I have no background in and I can begin learn about it by approaching it from different sides, and experiencing it in different ways. Recently, I was trying to understand the difference between the two and four stroke internal combustion engines. Though I have very little knowledge of automobiles or mechanics, I was able to understand the concepts by looking at diagrams, reading about combustion, and watching a car engine. Learning through experience, not just through reading and reciting, is something I have always tried to do, and I associate this with my Montessori education.

I enjoyed Montessori schooling very much. It was a nurturing educational environment in which I felt confident in my ability to succeed. I know that the Montessori education made me a better student and it made me interested in learning and becoming the best person I could be.

(12) I'm ahead of most people in my class and usually finish work faster.

I did not learn any of my personal attributes from Montessori or the Montessori program...other than a respect for what actual learning is rather than what they provide. I do not remember what is considered "Montessori-like" though, but I wouldn't give them any credit towards my present self.

I feel I did not learn very well at Montessori. I am glad I switched schools.

No comment.

I have very little idea about what Montessori promotes in terms of personal life, but I feel that I am really an individual. I am able to do things on my own and be my own person. I take care of things on my own, am very responsible and know how to use time wisely. Some of these qualities may be due in part to how Montessori runs things--giving students their own responsibility and accountability.

When I look back on my time spent at Montessori, I remember many great things. I remember having so much fun, but I also feel as though I learned a lot. I liked the setting there. I felt comfortable, because it was set up so that you could become very familiar with things. For example I was in the same classroom with the same teacher for three years in a row. I think this was both a good experience, and a bad one. I grew very comfortable and that helped to overcome a little bit of my shyness. The only problem was after I left the school, it wasn't like that any more and I regained my shyness because nothing was familiar. Another positive thing about Montessori is that it opened me up to music. I love to sing, and I don't think I ever would have known that without Montessori.

(14) There are a lot of things that I learned in third grade there, that I have done again in middle school. For example, learning the 50 states and many things in math. I'm glad I had the experience that I did at Montessori. I think that if I had stayed there, I would be smarter now.

I left when I was, 11ish? That school had no effect on me. Had I known what I know now, I would have asked my mom to be sent to a boarding school in Switzerland!

It hasn't.

(17) I went to your school many years ago. I've come from a brat to a young lady. I feel that if I never went to your school I would have never figured out what was right and wrong. You also taught me how to read, and I keep reading to this day. I read more than I write. Maybe I'll become a journalist or something. I have so many ideas in my head from reading books.

I think I approach a lot of situations, especially in the work environment in a more creative less "structured" method than those around me. I have a difficult time dealing with people who can't see out of their structured "boxes" and who don't learn new concepts quickly and on their own. I attribute my own ability to learn this way to my Montessori education.

I think my Montessori experience has made me a very independent worker and a self-motivator.

(19) I think the fact that the school itself was small and I continued to go to small schools until this year [participant is at the University of Oregon], it is a bit harder for me to make friends and feel comfortable. The actual schooling I think made me the type of person who does homework and such at my own pace, which in college you don't have that option to do. I think structure during growing up is necessary for such things.

Independence seems like the big one. It requires not only the ability to think, but also the ability to decide what to think about; what is important. That ability for valuation is something not common among most people and to whatever degree I have it, FMES deserves credit.

I am very independent and can teach and think for myself. The math skills that I learned at Montessori have put me ahead of most kids in my class.

(15) Because of my attending Montessori schools, I feel that I am more prepared academically than my peers who haven't attended Montessori schools.

Inquisitive and socially aware.

I believe that I am independent, not fully, but getting there.

(18) In reality no. I do think I am a little more independent than my peers, but I am unsure if I should contribute this to Montessori.

Most significantly, I remember the process of creating as being central to my experience. My friends and I had a tremendous amount of freedom to come up with skits, presentations, to draw pictures and make maps or otherwise expand-on and interpret what we were learning.

I think that my Montessori experience has taught me two things. To be curious and self-disciplined and to appreciate the diversity of public school.

(16) It gave me a boost when I entered public school and helped me view the educational/learning process in a new light. It helped build my own confidence when it came to doing my best. I am happy, though, that I made my change to public school.

No.

No comment.

No comment.

Yes, especially when I'm doing something new or unique. I want to know everything about whatever I'm doing, I have tremendous thirst for knowledge that I think is partly due to my Montessori education.

I think I have become more open minded than my peers and while most of them think of school and learning as a burden, I enjoy learning all kinds of information. I also think Montessori has helped my problem-solving skills a lot.

No comment.

Few MEY

Cooperation and collaboration over competition. This theme in Montessori education has been with me my entire life. I work best when I'm working in a team and collaborating on projects. While I like to do well on things it is more from a desire for personal satisfaction rather than a competitive approach. This quality was instrumental in helping me choose my college.

My Montessori experience along with all of my other different educational experiences have given me a different perspective on education. I think about how things are taught more than most people. Montessori has mainly affected how I learn. It made me a very visual learner. I believe this is why I am interested in structural rather than electrical engineering. I like doing structural engineering because I can see what's going on where I can not visualize what is going on in an electrical circuit. It has also made it difficult for me to deal with deadlines and other restrictions on my education.

(17) Montessori has affected not only my education but also my personality. My Montessori education has made me a very visual learner because of the methods it uses to teach different concepts. It has also made me a trusting

person because of the closeness of the classes I was in and the generally supportive environment. Also, I enjoy having freedom in my educational choices because of the freedom given in Montessori classrooms. I also have a strong interest in educational systems because of the different systems I have encountered.

From what I can remember of "Montessori-like" I would probably say that I am accepting of other people, with completely no regard to their financial status, race, or other factors.

It has affected me greatly. I can look at many things more openly and not so stereotypically. It has let me see that everyone is different in how they learn and what they like but are still nice people. This is not something you see in public schools like the one I attend.

No comment.

I am independent, self directed, organized, confident, and detail-oriented.

I honestly think I am smarter than most of the people around me. I know how to think quickly, and learn quickly. I know how to figure things out on my own. I can read between the lines. I think that I am a very good writer (given a spell checker), and am able to communicate my thoughts very clearly. I am very detail oriented, and notice every inconsistency - especially in my own work. I have a feeling most of what I have described can be accredited to Montessori. (I am very reliant on my spell checker, and calculator though... I think that's my own fault!)

(16) I don't think it has helped at all. It was so long ago, Montessori has "washed out" of my system.

I like doing group work a lot. I really enjoy hearing other people's thoughts on a project and I also think that the assignment gets done in a better way when more people can work on it. I think that this definitely came from all the group work I did in Montessori when my teacher would teach a small section of us a lesson. I also think that I procrastinate a lot. I'm not sure if this came from Montessori or not, but I think having that freedom in elementary school made me less concerned with deadlines and grades. I like to do work for me not for my teachers and I think that emphasis on individuality at Montessori has really shaped who I am today.

It made me smarter. Because I learned a lot of things a lot earlier that I would have in a normal public school. So I was able to move at a faster pace and learn things at a higher level.

(12) I understand math more and I can write in cursive.

I think I'm interested in a very wide variety of topics...perhaps more so than many of my peers. I tend to get engrossed in random topics, and often find myself reading beyond what is required of me in school. I also think I'm a very open-minded & tolerant person. I'm not easily surprised & often just sit back and watch things. I don't often get excited about things, and it's difficult to provoke a heated response in me. I'm also very non-competitive. These are all characteristics that I remember developing during Montessori school. I'm not saying that attending Montessori school produced these traits in me...it's more like I directly associate these things with my Montessori school years.

I think I am able to make the smallest experience or piece of information into a learning experience...for me, learning doesn't just occur in the classroom, but

everywhere I am. The world is my classroom--I need only to make good use of the opportunities it offers me.

(17) I am a very strong visual learner; perhaps Montessori school had something to do with that. I am fairly independent.

I'd say mostly what I mentioned above: to learn any subject to its fullest, and to learn as many subjects as possible. I remember doing many different activities in Montessori school, and they were all integrated together; it wasn't just learning subjects, it was a learning experience.

My Montessori years were from Kindergarten to 3rd grade, and I don't remember much of what happened. But I do remember that the Montessori educational system was closer to my idea of good teaching than in the public schools. I was already learning cursive, country flags, and complicated math in Kindergarten. My five year-old brother is in a public school Kindergarten, and the things they do are very childish compared to what I did. In 1st grade, I remember doing long division. VERY long. So long it took up a whole sheet of posterboard. I remember doing squares, and square roots, and learning about pi. The education at my Montessori school was far advanced compared to other education and I am grateful for it. As I said in #10 [philosophy of education, maximizing ways to learn], the education given in the younger years, determines what the child excels in later. I was given so much education on various topics at the Montessori school, that I can pick up ideas of almost anything, and I understand them better than most people. With this ability in different areas, it has affected my grades in school (which are straight A's), my sports, and helped me with my violin (which I also started in the Montessori school).

No comment.

Lot's! Montessori taught me to be caring and thoughtful in all I do. Characteristics of my personality which may be attributed to Montessori are as follows: I care deeply about others. I am responsible. I want to succeed. I want enjoy helping other. I take time to do my best.

It was one of the most wonderful experience I have ever had. I gave me what many children are deprived of, higher learning, science, dance, theatre, math... I learned so much there and in the most wonderful surrounding a child could.

(17) I believe academically it has prepared me a great deal. I'm ahead of kids my age and am very dedicated to my work. I believe, however, that it made it harder for me to relate to kids socially.

Probably my ability to work through things very carefully with patience.

It has made me an absolute perfectionist! It has also given me self-motivation, courage, personality, self-esteem, responsibility, initiative, and leadership.

(15) It has taught me to be ahead of the rest of the class and that education is one of the most important things in life.

[No comment in Cycle 6.]

I think it helped me as far as being a group learner.

(13) It has helped me with my math mostly and some reading.



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: The Longitudinal Assessment Study (LAS) Final Report (Eighteen Year Follow-up)	
Author(s): Christopher M. Glenn, Ph.D.	
Corporate Source: None	Publication Date: 2003*

*Not yet Published

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

The sample sticker shown below will be affixed to all Level 2A documents

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY <i>Sample</i> TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY <i>Sample</i> TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
2A

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY <i>Sample</i> TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
2B

Level 1
 X
 X
 X

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Level 2A

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

Level 2B

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: 	Printed Name/Position/Title: Christopher M. Glenn, Ph.D.		
Organization/Address: Christopher M. Glenn, Ph.D. 19376 S. Ridge Rd. Oregon City, OR 97045	Telephone: 503-631-8642	FAX: On Request Only	
	E-Mail Address: cglenn@glenresearch.com	Date:	

07-31-03

PS 031434



III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: info@ericfac.piccard.csc.com
WWW: <http://ericfacility.org>