University High School Admissions Revision Plan
APPENDICES

APPENDIX A

1. Dr. Kay Hockett interview (August 21, 2013)
2. Dr. Chester Finn interview (August 22, 2013)

   Martha G. Taylor – notes

   1. In your review of "exam schools", what would you consider are some of the 'best practices' that exam schools are using in terms of admissions criteria? and what would you consider are some of the least successful ? obviously this is weighed against what a schools objective's might be and there are several that we have identified: e.g. A student's preparedness for the advanced coursework, success in completing a 4 year rigorous AP curriculum, and ability to attract a diverse demographic population including underrepresented students

   - _Best practices are holistic, much like colleges use. A multi-faceted approach is best as you need to move beyond on factor. Single criteria process is antiquated; should not be "do or die." Good examples of holistic approach are IMSA and TJHSSM._
   - _Multiple factors need to be examined. It is not diverse vs. qualified; it is "what does qualified mean?" Not appropriate that it only means good test takers – one moment in time. Should not be just one measure to determine qualified._
   - _Many exam schools believe that test is effective because it is "clean"; this is an engrained belief – that it is not about race. However, everything is subjective to a degree and has philosophical implications._
   - _This holistic type of process is defensible for both political and best practice perspectives. Goal should be to have student population that mirrors community._
   - _Recruitment should be in community (churches, neighborhood centers, etc.)_
   - _Should have multiple people looking at applications. Rubrics are good to use._
   - _Admission process should have internal consistency with school & district's mission and vision._
   - _Not one way; test score and cut-off can be subjective not just objective; prefer holistic method like a small private college (grades are frequently not used, recommendation, personal statement, test scores, interviews, problem-solving questions_
   - _Good when admissions is divorced from school TJ & NYC); removes onus from school and insulates principal from political process._
   - _If there is a large demand from community for this type of program, district should increase number of schools instead of making process more selective._
   - _Admissions processes that are problematic? Pure exam schools that use a single test score are not recommended. This is not a good way to make any important decisions in life. One point in a score should not make a difference. It is efficient and safe but not much else is going for it._
   - _Some quantitative approach based on market-basket factors (GPA, Test, etc.) Some admit all over cut-off score so no further selection (New Orleans)_

   2. Academic tests: Schools use a variety of different tests to assess academic achievement (e.g. standards based, achievement tests, cognitive assessments). Were there any differences you noticed between the type of these assessments that led you to believe that the implementation of 1 was more successful than another.

   - _Not necessarily. Some used professionally developed and others used tests developed at school level. All are similar. Some use IQ-type tests; this is what the CoGAT is most aligned with._
     a) Just recently we have begun to see an increase in "institutional" test prepping from schools in our community – was this a common problem for the schools and how were they addressing this issue? Was this a motivational factor in creating their "own" assessments?
   - _It has come up. Test prep is a cottage industry in parts of the country – CA & NY._
   - _Chicago Public Schools (CPS) – measures achievement on test AND achievement relative to peers. Now have a minimum score all applicants have to achieve._
   - _Some schools do own test; some hire Pearson or another company to do one for their specific school. One kind of test is not better than another._
   - _I am wary of one test score/number being the determiner._
   - _Test Prep programs rampant in high SES; Proliferation argues for the holistic approach. Produces own SES discrimination._
   - _Some schools (TJ) make everything known. Even public info does not solve this problem._

- *HS are captive of feeder schools preparation of students. The drawbacks and limitations students bring with then are out of a HS's control.*

3. Non-academic assessments: As a result of the review we are conducting, UHS is looking at other types of measures to assess students' preparedness – and specifically proposed the use of an "academic resiliency scale" or a "motivation" scale that measures student persistence or motivation around learning. In your research, did you come across other schools that had adopted such instruments as part of their admissions policy and what was their experience using this type of instrument?
- *No. It is not used, although some schools are interested.*
- *Can tap into motivation using personal essays, etc. This helped TJHSST*
- *Most schools use GPA – many said at least a 3.); some looked at courses taken (higher level).*
- *Some considered what the student's options were if not admitted (rural area, math/science interest, etc.); this results in a more practical and realistic look at S*
- *I don't know. Our research did not get into types of tests used.*
- *I am skeptical that a test can measure motivation but maybe I don't know of a good one.*
- *Any opportunity for student expression (interview, personal essay) and/or a teacher recommendation could reveal motivation. Could ask: Why do you want to come to this school? Can you give evidence from your personal experiences that will show that you will do well in this school?*

4. "Subjective measures": One area of controversy has been the use of more "subjective" measures.   What did you find was the most successful way schools used "personal statements" and student essays? Teacher recommendations?
- *Success should be based on mission and vision of district/school.*
- *TJHSST and IMSA use multi-faceted approach. Big-Committee model for first round; Committee does not see anything quantifiable and makes recommendation using rubric. There is close examination of S an as individual and not just as a number. No great success yet but working towards a worthwhile goal.*
- *Teacher Recommendations: frequently used with GPAs*
    - *The traditional T. Rec. is not taken very seriously. Seen as opportunity for teacher to explain low achievement or other problems. Used with student who have low numbers in as process that traditionally looks at only the numbers.*
    - *More holistic type (IMSA & TJHSST) – taken as good evidence; several options for qualities of character. Particularly like the one used by IMSA that has personal qualities and then a rubric for each quality.*
- *Personal Statement – trained members used rubric*
    - *Concern about subjectivity? Even the choice to use a test is a subjective decision. You cannot take the human element out of it. Most important is follow-up.*
    - *Many schools use matrix; this is the old way and the reasoning is, "This is the way we've always done it." Not recommended.*
- *This is the challenge of holistic system – validity and reliability not possible in the traditional sense. No fancy measure because you are dealing with the human element.*
- *Quantitative is easy to explain to the public vs. human judgment that is an evaluation of others*
- *Not easy*

5. The use of race: Obviously one of the issues surrounding admissions policy is the question of diversity and the use of considering "race/ethnicity" a factor in admissions.   What did you find had been the schools' experience with using race/ethnicity as part of the criteria? Geography often seems to be a common proxy for that? Others – e.g. income?
- *Usually a proxy for race is used. SES or Free & Reduced are most common proxies. Sometimes geographical location can be used (CPS).*
- *Schools frequently don't want to talk about this sensitive subject. Pleasantly surprised by diversity of school studies as a group vs. individual schools that have predominantly one race.*
- *Exam schools frequently best integrated by % but almost never reflect the community as a whole*

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- *Tough to balance in admission process; can't use race itself but can be a factor. Geography & SES are frequently proxies.*
- *I don't believe in admitting only on race; need other qualities but can do proxies. Broader reach than just TUSD would be good. (explained to him that there are no % limits in place currently although the priority is to TUSD students).*
- *Heroic efforts seen – reaching out to MS, summer programs, school visits, etc. BUT feeder system needs to do a better job of education and preparing these students.*
- *Some schools take students on a trial basis (Austin, TX); don't quite meet but have a fighting chance. Risk for all parties; don't know how successful this model is.*

6. You conclude in your final summary that schools' admissions processes typically fall into 1 of 2 categories – heavy reliance on "numbers" vs. a "more holistic student by student approach.   Did you draw any conclusions about the pros and cons of each approach?   Do you have an exemplar?
- *Our book was about identification only so we didn't evaluation pros and cons.*
- *My opinion – should work to closely mirror community; many schools are now trying creative approaches although none are yet completely successful.*
- *Should contact Scarsdale HS principal in NY (was in Queens); proud of not relying on test scores alone, proud that his school is not like exam schools; argues that test score reveals good test takers but not other qualities like motivation; direct and thoughtful comments from him.*
- *IMSA – J. Hockett believes this is optimal admissions process – multi-dimensional and they consistently reevaluate; I did not visit and defer to her expert opinion.*

7. Factors that make most difference and have the most impact?
- *Feeder Schools – not much emphasis on this approach; acknowledge there are differences that must be dealt with.*
- *Going into community (like IMSA and Jefferson County in Kentucky) is crucial. Leads to broader outreach and more success in recruiting. Do not rely on them coming to you (at schools).*
- *Money and resources affects what any school can do; different depending on if school or district is responsible.*
- *Advocate for broader more inclusive holistic system in general that aligns with mission/vision of district/school.*
- *Need to widen applicant pool with qualified students & build large and diverse pool of applicants; again comes back to feeder system and problems endemic with that. Building feeder system is surest way to increase diversity.*
- *High-achieving students of color don't apply to selective colleges because they don't know about those opportunities; no one in their life has encouraged or told them about those options. Community college is usually their only known option.*
- *Outreach needs to include local influential Af Am and Hisp individuals; organization outside of school system (Civil rights, political, religious), mentors that aren't scholastic (Sunday school teacher, YMCA coach)*
- *Largest waste of human capital in USA is smart poor kids*
- *Conclusion of our book – open more selective schools; there is a strong place for stand-alone schools – need them + AP, IB, etc. in regular schools; whole-school approach has a lot going for it – peers, curriculum, environment, critical mass → all are needed by some students*
- *Whole-school approach could be completely open – have to pass certain courses or you must leave; this is harsher than than being selective at the beginning.*

3. **Dr. Lannie Kanevsky (on Academic Resilency/Motivation scales)**
   July 2, 2013 (conducted by Juliet King)
   - What are we trying to measure?
     Resilience definition: a) "persistency" - "adapt" to challenging situation; "stick to it ness"; "support"
        b)   *"resourcefulness"*
   - *Explained that split in the literature between "positive" vs. "clinical" - identifying positive strengths within teachers vs. using it to identify at-risk students for interventions. Such measures have been used to analyze medical school applicants in Canada*

- *Resources: Ordinary Magic: Resiliency practices in development – Marsten; Mind Set; Currently studies "character" ; mentioned Andrew work*
- *Measures: Measure of Academic Intrinsic Motivation – Godfried/ Godfried; Children's Academic Intrinsic Motivation Inventory – Mind Set*

4. **Dr. Tonya Moon, University of Virginia, College of Education**
   August 22, 2013 (conducted by Juliet King)

- Has consulted with Thomas Jefferson High School in Fairfax County and Richard Maggie Walker in Richmond in planning, implementing, and evaluating admission policies.
- Spoke mostly about TJ because that was the school she was most familiar with:
- Key findings:
- 5-6 year process in revising and implementing admissions process
  - TJ is primarily a math-science school and therefore math/science emphasized in testing
  - Admissions process is 8 months long
  - Every year there is a ½ day training for using the Rubric scoring scheme in February – week long scoring
  - Every year there is a ½ day training for how-to review the teacher packets in March – week long scoring
  - Final decisions go out in April
- Create "student score profiles"
- Use multiple measures that include:
  - December: Standards based assessment that measures student's knowledge in core content areas (math/science emphasized). Assessment is created every year and taken in December . 3000 applicants go down to 1500-1600.
  - January: Students write 2 essays (drawn from essay bank) for 1 hour. 1 essay is a self-reflection. The other is responding to a question about a problem in a real world context. Essays are evaluated as to how well responses align with the TJ mission. Up to 30 raters
- 480 students selected.
- Admissions does not result in increased diversity.
- Maggie Walker is currently in planning stage to address admissions.

5. **Kenneth Bonano, Principal @ Scarsdale High School**
   September 4, 2013 (conducted by Martha Taylor)
   (recommended by Dr. Chester Finn as expert on holistic approach to high school admissions)
   - Personal beneficiary of same type of school with holistic method– Staten Island Technical High School (SITHS) – returned to teach in 1998 for ten years
   - 2005 school switched to specialized test; taken in fall of 8th grade – optional on Sat or Sun; admission to seven schools based SOLELY on results of this test
   - <u>SITHS</u> opened as gifted high school and used data of MS record and picked indicators of student who could succeed in academic challenging school: Grades core subjects, state test reading and math, attendance (90%) – many applications so could not use subjective measures (85-2005)
   - <u>Townsend Harris</u> in Queens – also uses more holistic approach; 5000 applicants for class of 280. Principal. Did the same as above – see web site. 1) 90% av. in each class, 90% on state test, <u>90% attendance</u>. 2) rank students based on average of seven numbers
   - Could use geography (as proxy for race) with straight rank all seats will fill from top schools SES. To mitigate you could group students by zones high schools. Then take top % from each middle school.
   - Professional using personal experience: When you use only one test end up with highly intelligents but not all good students = unmotivated; when you use holistic approach almost always end up with good students, most of whom are intelligent = hard working, eager to please, even if not the highest IQ; succeeded in easier environments and now

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in a more challenging environment; provided support and very few existed out. Found a way to help them succeed. Tended to work out bc they were good students.

- At SITHS when we went to sole test – had students who were smart and capable but were sociopathic; no T would ever have given them more than 85% on a grade = test does not allow T subjectivity. With holistic approach the T subjectivity is factored in (through grades = academic behavior [resiliency, cooperation] → helped set tone in school
- With holistic approach – no cutting class, homework always done; With just test – S don't do homework, have bad attitude
- 75-80% percent are the same students. Remaining 10-20% can change the school environment completely; within a year so much admin time was directed to recalcitrant students and troubled students; with test there is no way to filter out these students. Which fringe do you want?
- Magic Wand – Verbal/Math aptitude test and holistic evaluation; grades and state test more content/achievement based and are better measures than aptitude (can do it but not if they actually do it)
- Could use Buckets metaphor – by geography / middle schools; top 10% from each MS – TX does this for college; argument for geography as proxy – GPA differs from school to school by at each school they rise to the top among their own classmates;
- Attendance – always allowed for extenuating circumstances. Guidance Counselors flags. Waive attendance requirement.
- Familiar with principals at both high schools – happy to make introduction

APPENDIX AA

Taylor, Martha

From:	Kelly Lofgren [klofgren@imsa.edu]
Sent:	Friday, August 16, 2013 1:57 PM
To:	Taylor, Martha
Subject:	Re: Copy of Application
Attachments:	Review Committee Training Draft for '13.ppt

Hi Martha,

When our counselors read the admission files we simply take notes to present the file to the Selection Committee. Prior to that we have a group of internal and external evaluators (a process we call Review Committee) assign a value from 40 - 80 to the qualitative aspects of the file. The values are used in the decision-making process and are assigned based on the guidelines in the attached training.

The application itself hasn't really had any impact on recruiting and enrolling underrepresented students, though in the decision-making process we certainly look for academic achievement and passion for math and science based upon an applicants unique circumstances.

For recruitment purposes we've created many pipeline programs, which you can learn more about here: https://www.imsa.edu/admissions/multicultural/multiculturalPrograms, and here: https://www.imsa.edu/admissions/multicultural/multiculturalPrograms. These programs have been very effective, but they are quite time-consuming and expensive.

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Kelly Lofgren
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On 8/16/2013 11:15 AM, Taylor, Martha wrote:

> Kelly – Thank you SO much. I have two additional questions:
> 1. Would it be possible to send me the rubric you use to evaluated the student essays?
> 2. Has your application process/requirements been effective in increasing the number of underrepresented students admitted to IMSA?
>
> Again, thank you so much for responding to me.
>
> **From:** Kelly Lofgren [mailto:klofgren@imsa.edu]
> **Sent:** Friday, August 16, 2013 9:04 AM
> **To:** Taylor, Martha
> **Subject:** Re: Copy of Application
>
> Hi Martha,
>
> Attached is our admissions application from last year, and our new one will be posted on September 1st. We are planning to change several of our essay questions this year, but have yet made final decisions. Please feel free to reach out during your review process. We are always looking for ways to improve our processes and recruitment as well.
>
> Best,

Kelly

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On 8/15/2013 10:47 AM, Taylor, Martha wrote:

Dear Kelly and/or Phyllis:

I am currently investigating admission policies of "exam schools" as our district is under a court order to revise the admission process of our exam high school. I am very interested in the process IMSA uses and have found quite a bit of information on-line. However, I cannot find a copy of your application since it is now closed nor any sample essay questions, which I would like to see. Would it be possible to send me an old application from 12-13 and some examples of essay questions used in the past?

Thank you so much for your help.

Martha G. Taylor, M.A., J. D.
Director of Advanced Learning Experiences (ALE)
Tucson Unified School District
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martha.taylor@tusd1.org

APPENDIX B

UHS Freshman Applications by Ethnicity - TUSD students only

	2009-2010			2010-2011			2011-2012		
	Tested	Qualified	Enrolled	Tested	Qualified	Enrolled	Tested	Qualified	Enrolled
Anglo	252	113	85	235	121	57	196	78	71
Af-Am	53	5	1	28	3	2	39	5	4
Hisp	414	94	49	339	63	60	363	71	67
Nat Am	18	5	0	11	1	1	21	3	2
Asian	43	20	22	33	23	15	34	16	14
Multiple	14	4	10	10	6	5	17	6	6
Total	794	241	167	656	217	140	670	179	164

Note: From 2009-2011 UHS handled its own admissions/selection process.   A&R handled the testing.

The admissions process was moved completely to A&R in Summer 2011.

UHS Completion by 9th grade EOY enrollment

	2007-2008		2008-2009		2009-2010		2010-2011		2011-2012	
	9th enrolled	Graduates	9th enrolled	Graduates	9th enrolled	Graduates	9th enrolled	11th grade	9th enrolled	10th grade
Anglo	105	91	105	90	126	101	125	103	129	117
Af-Am	5	5	4	2	5	5	2	2	3	3
Hisp	48	40	52	47	64	54	89	82	70	65
Nat Am	0	0	2	1	3	3	2	2	0	0
Asian	28	25	28	24	27	24	30	27	27	25
Multiple	4	4	8	8	9	9	6	6	14	10
Total	190	165	199	172	234	196	254	222	243	220

APPENDIX C

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1. Illinois Mathematics and Science Academy (IMSA)   Aurora, IL
Admission to IMSA is determined by a competitive process in which all applicants are required to submit a specific set up materials. The competitive nature of the selection process does not permit the establishment of a pre-specified set of cut off scores but rather students who present the strongest combination of credentials are invited to attend. IMSA utilizes an accomplishment-based selection process that incorporates performance on projects and participation or leadership in extracurricular activities with more traditional indicators of talent such as test scores and grades. For this reason, students with the highest test scores may not emerge as the strongest applicants in the pool for the purpose of selection. Along with these criteria, geographic and demographic variables are considered to ensure a diverse student population.
Application evaluated on the following questions:
- To what extent did student take advantage of local resources?
- To what extent student clearly demonstrate talent, interest, and motivation beyond the bounds of the classroom when available?
- Is this student enrolled in the most challenging curriculum available to them?

Reviewers will look for:
- Reasoning and curiosity demonstrated by specific achievement or activities
- Communication skills demonstrated by written responses to questions
- Interpersonal skills demonstrated by evidence of understanding viewpoints other than your own
- Skill application demonstrated by activities such as computer programming, musical performance, construction of models, etc.
- Leadership based on reports from teachers of observed behavior and/or specific accomplishments

Application
- Biographical Information
- Activities, Involvements, Achievements
    - Optional Statement (*We attempt to identify those applicants whose previous school grades or admission test scores may under predict academic success. Among the factors we consider in making admission decisions are whether the applicant 1) is from an economically disadvantaged environment, 3) had a health problem which is significantly affected for a period of time, an otherwise exceptionally good academic record; 3) has a permanent physical disability, learning or attentional difference; 4) has completed an exceptionally rigorous academic program; 5) does not speak English at home, or 6) has other exceptional circumstances. This information is considered with your academic credentials. It is particularly relevant if your qualifications place you slightly below the competitive applicants. **Describe any factors like those listed above that you believe the selections committee should consider as they review your credentials.***
- Student Essay Questions → Examples: Describe a time when you experienced success and its impact on you. Please describe yourself to your classmates and teachers. What interesting information would you want others to remember about you? (500 words on less).
- Parent Statement
- Teacher Evaluations
- Principal/Counselor Evaluation
- GPA/Transcript
- SAT exam score

Multicultural Recruitment Programs:
EXCEL: During the process of admission to IMSA, students are sometimes identified as having exceptional potential but as not having had access to key academic opportunities. The Excel program serves students who are conditionally admitted to IMSA, pending their successful completion of the Excel program. Successful completion of Excel allows full admission status to IMSA. The three-week, residential program takes place during the summer immediately prior to the planned admission. Excel program activities include the three-week summer program and ongoing support programs throughout the school year including: study groups, academic advising, connections with faculty and staff, tutoring opportunities, cultural enrichment and appreciation activities, and an overall support network designed to help students be successful at IMSA. During the summer program students engage in mathematics, science, and English classes designed to expose students to concepts they may be unfamiliar with, which will be critical to later success at the Academy. In addition, the co-curricular component of Excel allows for interpersonal skills development, and a chance to become familiar with the IMSA environment and culture. The summer portion of the 2013 Excel program will take place in July on IMSA's campus. Two to three weeks after placement testing students will be notified if they have been selected to participate in Excel.
PROMISE: Serving underrepresented and economically disadvantaged students who have talent and interest in mathematics and science is a high priority of the Illinois Mathematics and Science Academy. We believe that we must actively recruit from all regions of the state of Illinois. In addition, we believe we must address the challenges of underrepresented and economically disadvantaged students through contact and intervention in the form of academic enrichment programming early in students' educational experience. After enrolling at IMSA, it is important that students experience the Academy as a place that is welcoming to them as individuals and

supportive of the unique cultural components that each student brings with him or her. The Academy continues to create and develop a culturally rich and inclusive environment that affirms and celebrates individual differences.
- o   Each application is reviewed by a committee that has a rubric and training before this commences. I have been sent the power point that is used at this training.

2.   Thomas Jefferson High School for Math and Technology   Alexandria, VA
Students are selected for TJHSST through a competitive admissions process. We are looking for highly motivated students with diverse backgrounds, talents, and skills, who demonstrate:
- *High ability, aptitude, and interest in math, science, and technology.*
- *Intellectual curiosity and self-motivation to pursue scientific research.*
- *A desire to be challenged with an extensive curriculum focused in math, science, and technology.*
- *The highest academic and personal integrity.*
- *An aspiration to become a member of a community of learners, explorers, mentors, and leaders.*
- *The capability to become citizens and leaders of the 21st century.*
Round 1: Screening (using sliding scale): GPA + Test Score
Round 2: Semi-Finalists: Essays – 25% + Student Information Sheets – 20% (*Example questions: What are you best at doing? Explain your choice. If you could spend one entire day learning about one topic, what would it be? Why? What is your best subject in school? Why?)* + 2 Teacher Recommendations – 20% + Math Score from Admissions Test = Math & Science GPA

3. Liberal Arts and Science Academy High School   Austin, TX
- From the Principal's Letter: *We have a very diverse student population. We are lucky to have students from every zip code in Austin. This diversity encourages even richer discussions and debates in class. In addition it allows us to have clubs and organizations that match any and all student interests.*
- Application Process:
  1. Application
  2. Activities Chart (includes information on: awards, extracurricular, leadership, outside-of-school activities, volunteering, community service)
  3. Short Answer Responses → Examples: What three words would others use to describe you and why? How do you spend your free time?
  4. Essay
  5. Math/Science Reference Form
  6. English/Social Studies Reference Form (academic achievement, academic potential, intellectual curiosity, effort and determination, ability to work independently, organization, creativity, willingness to take intellectual risk, concern for others, honesty and integrity, self-esteem, maturity (relative to age), responsibility, respect accorded by faculty, emotional stability, personal character)
  7. Grades
  8. Testing Results (EOC/STAAR & LASA)
- Admissions rubric used to evaluate applications, which I have.

The following is not an exam school, but we will be interviewing personnel regarding its admission policies.
4. Montgomery County Public School (Sam Brown) – Interview with Jeannie Franklin Pending
- UHS admissions committee made up of a diverse group of CENTRAL people and maybe one or two site people
- Criteria
  1. Test scores
  2. Grades
  3. MS they come from
  4. ALEs they took
  5. Personal Statement to describe their situation (must be done on sight in a controlled setting, so we know they actually wrote it)
  6. References from MS Principals – each principal could advocate for 3-5 kids who are not "high flyers"
- Every table gets some applications, they look holistically (like and admission committee for a university) and then you
  o   Select the clear high flyers

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- o Select the students up for discussion with the whole group
- This would be a one day process
- Montgomery County
  - o Written statements from candidates, previous grades, coursework, and test scores
  - o Biomedical Magnet Program
  - o Communication Arts Program (CAP)
  - o Engineering Magnet Program
  - o Leadership Training Institute (LTI)
  - o Science, Mathematics, Computer Science

APPENDIX D

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School	Location	9th grade seats	Student count	% unrep	% frl	Eligibility to Apply	Admissions Criteria	Notes	Fee
2. Thomas Jefferson High School for Science and Technology (highlighted in ES)	Fairfax Co, VA	480 out of 3300	1792	4	2	Live in regional area; Alg 1 or higher	Take test in math and reading; Semifinalists determined by GPA(3.0) and overall test scores (65/100) and math score(30/50); 2 Essays (25%); 2 Teacher recommendations; Student information sheet comprise final components	*2/3's of students need remediation; New to geog can apply in summer; test prep handbook - use Pearson; over 3000 applicants; Requires 3 reviewers. Admissions handled by sep. office Semi-finalists = 1500*	*Yes - process*
4. University High School	TUSD AZ	245	934	37	15		50 point system - based on test scores and 2 semester GPA in core classes		
30. Pine View (ES school)	Sarasota SD FL	242	2170	6	9	Residency; min score on IQ test	WISCIII, Woodcock Johnson; Renzulli required. Report cards and achievement tests	Gate School; Private testing; Handled by District	

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7. Oxford Academy (ES school)	Cypress CA	199 out of approximately 700 applicants	731	16	27	District Residency; 2.5 total GPA over 2 years. No grades below C. Meeting CST in math/ eng. Must take pre-Alg or Alg	Oxford Entrance test (4 hours) - Eng, Math, essay. Created by teachers and Standards based. Scores rank ordered by geog.	Main entry point is 7th grade. Test prepping	
31. Whitney High	ABC Unified CA	176	1022	14	15	based on space availability	2.5 GPA; Standardized test scores; writing sample	MS entry	
27. Academic Magnet	Charleston CSD SC	165	606	13	7	District Residency; Algebra 1; 85%ile in reading and math - Explore	grades in core subjects; writing sample; teacher recs		$10 to take test if not in District
33. Carnegie Vanguard	Houston ISD TX	156	426	47	22		Stanford 10 and Naglieri; Teacher recs; 7th grade report card	GATE students do not test; contact for criteria	

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School	Location	9th grade seats	Student count	% unrep	% frl	Eligibility to Apply	Admissions Criteria	Notes	Fee
16.Design &Archicture Senior High	Yonkers SD, NY	142	508	68	35		Audition, portfolio, sketchbook, interview	specialized	
32. Loveless Academic Magnet	Montgomery SD AL	138	445	34	10	Algebra 1	Personal Interview; attendance; academic grades		
25. High School for Dual Language & Asian Studies	NY City, NY	117	324	11	NA	residency; 50% chinese proficiency, 50% english proficiency	core class scores; standardized tests; attendance; writing sample	specialized	
3. School of Science and Engineering Magnet	Dallas Texas	105	407	77	60	District Residency; GPA(80) Score above 65 per on ITBS; Stan9	2 hour English exam (40%); math exam (40%); essay and interview (20%)	No information on rubrics; All district magnet schools have entrance requirements on Readistep	
8. Pacific Collegiate School	Santa Cruz CA	87	475	13	NA		Charter school - lottery		

34. International Community School	Lake Wash SD WA	77	380	3	NA		lottery	MS entry	
6. BASIS Tucson	Tucson AZ	69	165	27	NA		No criteria - Charter school	Steep decline in graduating class over 4 years	
10. High Technology High School	Monmouth CSD NJ	69	258	4	2	District residency; attend info. Session	min 75 points to qualify - GPA in core subjects and District standards based exam	1 of 4 career academies	
1. School for the Talented and Gifted	Dallas Texas	65	260	50	32	Residency in district	Min on National Assessment (82); GPA from 2 semesters (82); 82/100 portfolio - essay on topic; resume; project description; grades for 7th and Fall 8th; top 20 students selected on merit; rest filtered through geog	GPA and test minimums are similar; All district magnet schools have entrance requirements on Readistep	

IMSA	Chicago Il	none - 10th grade	200-250	13	ng			test scores - reviewed by Committee; 100 "outsiders" review apps with ruric. 5 admissions counselors - 16 people handle app	time-consuming
School without walls (SWW)	DC	470-500		70	20	3.0 gpa in 7th and 8th grade; 7th grade reading, writing, math assessments used as screens.	67% given SWW test (adapted from outside assessments). 200 applicants interviewed by school panel as finalists	time-consuming	
Central High School Magnet	Louisville KY	300 out of 900		Historically Af-Am school. 87%			writing sample; recommendations; transcript; test scores. Review by teacher committee	Career Magnet academy - students graduate with certifications ; not "top" school	
Liberal Arts and Science Academy	Austin Tx	300 out of 500-600 apps	880	27	20		5 part entrance rubric - MS grades; teacher recommendations; test scores; school aptitude exam; and TAK scores; essays	Shares campus; approx 66% of students come from 2 feeder magnets	

Jones College Prep	Chicago Il		823	57			7th grade grades; standardized test scores; entrance exam - 900 points total - 30% of seats awarded to top performers; 70% allocated based on scores relative to ses. Placement selected by computer	1 of 5 selective HS in Chicago system. Centralized admissions process. Income criterion - higher affluence, higher scores needed. automated	
Benjamin Franklin High School	New Orleans, LA	280 out of 700			30		grades and achievement test scores	Charter school. Under deseg order. Graduates approx 140	
Townsend Harris High	Queens NY	270 out of 5000. 1200 meet admissions	1100	18	40		Complicated screening process based on NYC entrance test and screening criteria (e.g. geography)	Admissions handled as part of NYC magnet program	
Bergen County Academies	Hackensack NJ	275 out of 1450	1050	8			7th and 8th grade report cards; state achievement tests; teacher recommendations; customize math and English assessments; 500 app are interviewed. Use geographic criteria	School comprised of 7 magnet academies. Ad criteria differs for each one	

APPENDIX E

University High School: Admissions Revision for SY 2013-14
Appendix E: Review of Case Study Schools in *Exam Schools*

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IMSA	Chicago Il	none - 10th grade	200-250	13	ng		test scores - reviewed by Committee; 100 "outsiders" review apps with ruric. 5 admissions counselors - 16 people handle app
School without walls (SWW)	DC	470-500		70	20	3.0 gpa in 7th and 8th grade; 7th grade reading, writing, math assessments used as screens.	67% given SWW test (adapted from outside assessments). 200 applicants interviewed by school panel as finalists
Central High School Magnet	Louisville KY	300 out of 900		Historically Af-Am school. 87%			writing sample; recommendations; transcript; test scores. Review by teacher committee
Liberal Arts and Science Academy	Austin Tx	300 out of 500-600 apps	880	27	20		5 part entrance rubric - MS grades; teacher recommendations; test scores; school aptitude exam; and TAK scores; essays
Jones College Prep	Chicago Il		823	57			7th grade grades; standardized test scores; entrance exam - 900 points total - 30% of seats awarded to top performers; 70% allocated based on scores relative to ses. Placement selected by computer

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Benjamin Franklin High School	New Orleans, LA	280 out of 700			30		grades and achievement test scores
Townsend Harris High	Queens NY	270 out of 5000. 1200 meet admissions	1100	18	40		Complicated screening process based on NYC entrance test and screening criteria (e.g. geography)
Bergen County Academies	Hackensack NJ	275 out of 1450	1050	8			7th and 8th grade report cards; state achievement tests; teacher recommendations; customize math and English assessments; 500 app are interviewed. Use geographic criteria

APPENDIX F

Black Students on White Campuses: 20 Years of Research

William E. Sedlacek

Literature is discussed in terms of eight non-cognitive variables affecting Black student life. The author recommends actions for student affairs professionals.

From the 1960s to 1980s people in the United States have witnessed a broad sweep of social change in the country. With issues pertaining to Blacks, people have seen a complex mixture of overt repression, social consciousness, legal changes, backlash, assassinations, political interest, disinterest, and neglect. Higher education has gone about its business during this turbulence.

There are many ways in which student affairs professionals might try to understand what Black students have experienced during the last 20 years. The purpose of this article is to examine this period through student affairs research on Black undergraduate students at White institutions. Such an article accomplishes several purposes. First, it allows for a focus on an area in which Black students have had to deal directly with a system largely run by Whites for Whites (Sedlacek & Brooks, 1976). Second, it allows one to step back and get a perspective on where student affairs has been and where it to be going. Third, it puts an emphasis on empirical research rather than commentary, wishful thinking, or frustration.

An index of the maturity of the student personnel profession may be found in its success in providing systematic knowledge on which to base its development. The May 1986 issue of the *Journal of College Student Personnel,* with articles by Brown, Cheatham, and Taylor, provided a lively discussion of how student affairs professionals can learn about Black students on White campuses. Should student affairs professionals go to the literature and see what the research says (Brown, 1986; Cheatham,

1986) or offer broad generalizations about Blacks based on a nonempirical synthesis (C.A. Taylor, 1986)? This article is in support of the former position.

The literature was organized using a model based on noncognitive variables that have been shown to be related to Black student success in higher education (Sedlacek & Brooks 1976; Tracey & Sedlacek, 1984, 1985, 1987; White & Sedlacek, 1986). Arbona, Sedlacek, and Carstens (1987) found that the noncognitive variables were related to whether Blacks sought services from a university counseling center.

There are limitations to using the noncognitive model. These include limiting the articles included, not using conventional categories (e.g., admissions, student activities) that may be easier to understand than the noncognitive model, and forcing a structure in areas where it does not belong. The two major questions addressed in this article are: (a) What have we in student affairs learned in 20 years of research? and (b) How can we use what we have learned?

DESCRIPTION OF THE MODEL

Sedlacek and Brooks (1976) hypothesized that there were seven noncognitive variables that were critical in the lives of minority students. How students adjusted to these dimensions and how faculty and staff encouraged this adjustment would determine the success or failure of the minority student. Tracey and Sedlacek (1984, 1985, 1987) demonstrated the validity of the seven variables plus an eighth, nontraditional knowledge acquired, by showing the usefulness of a brief questionnaire (the Noncognitive Questionnaire [NCQ]) in predicting grades, retention, and graduation for Black students for up to 6 years after initial matriculation. White

and Sedlacek (1986) demonstrated the validity of the NCQ for Blacks in special programs. The noncognitive variables of the NCQ are:

1. *Positive self-concept or confidence.* Possesses strong self-feeling, strength of character, determination, independence.

2. *Realistic self-appraisal.* Recognizes and accepts any deficiencies and works hard at self-development. Recognizes need to broaden his or her individuality; especially important in academic areas.

3. *Understands and deals with racism.* Is realistic based on personal experience of racism. Not submissive to existing wrongs, nor hostile to society, nor a "cop-out." Able to handle racist system. Asserts school role to fight racism.

4. *Demonstrated community service.* Is involved in his or her cultural community.

5. *Prefers long-range goals to short-term or immediate needs.* Able to respond to deferred gratification.

6. *Availability of strong support person.* Individual has someone to whom to turn in crises.

7. *Successful leadership experience.* Has experience in any area pertinent to his or her background (e.g., gang leader, sports, noneducational groups).

8. *Knowledge acquired in a field.* Has unusual or culturally related ways of obtaining information and demonstrating knowledge. The field itself may be nontraditional.

SELF-CONCEPT

Many studies demonstrate that the way Black students feel about themselves is related to their adjustment and success at White institutions (Bayer, 1972; Bohn, 1973; Desionde, 1971; Dixon-Altenor & Altenor, 1977; Gruber, 1980; Kester, 1970; Stikes, 1975). An early study by Bradley (1967) of "Negro" undergraduate students in predominantly White colleges in Tennessee showed that they had not achieved a feeling of belonging. This aspect of self-concept,

that of seeing oneself as part of a school, or identified with it, is a common thread running through the literature on Black students' self-concept for several decades. For instance, Sedlacek and Brooks (1976), Astin (1975, 1982), and Tracey and Sedlacek (1984, 1985, 1987) provided evidence that identification with an institution is a more important correlate of retention for Blacks than for other students.

In addition to the usual school pressures, a Black student must typically handle cultural biases and learn how to bridge his or her Black culture with the prevailing one at the White university. DiCesare, Sedlacek, and Brooks (1972) found that Blacks who made this transition were more likely to stay in school than were Blacks who did not. Burbach and Thompson (1971) and Gibbs (1974) found that cultural adaptation had an influence on the self-concept of Black students; Sedlacek and Brooks (1972a) and White and Sedlacek (1986) found that this was also true for Blacks in special programs.

Pfeifer and Sedlacek (1974) noted that successful Black students may receive considerably different profiles on standardized personality measures than their White counterparts. The successful Black student is likely not only to seem "atypical" but is also inclined toward and experienced in taking less common paths to goals than the successful White student. Thus, there is evidence that important cultural differences between Blacks and Whites affect the manner in which self-concept is put into practice.

An important area of literature that has been developing concerns racial identity. Cross (1971) presented the model and Hall, Freedle, and Cross (1972) studied four stages of Black identity: (a) *pre-encounter,* when a person thinks of the world as the opposite of Black; (b) *encounter,* when experience disturbs this view; (c) *immersion,* when everything of value must be Black; and (d) *internalization*, when it is possible to focus on things other than one's racial group. Hall et al. (1972) demonstrated that it is possible for lay observers to identify these stages.

Parham and Helms (1985a) found that Black self-esteem is low in the pre-encounter stage, becomes more positive as one reaches the encounter stage but drops as one enters immer-

sion, and is unchanged during internalization. Parham and Helms (1985b) found that Black male students were more likely to endorse the pre-encounter stage and less likely to endorse internalization than were Black female students. Ponterotto, Anderson, and Greiger (1985) found that Black female students in the internalization stage had more positive attitudes toward counseling than did Black men in the same stage. Carter and Helms (1987) found that these stages were related to value orientations of Black students. Using other instruments, Kapel (1971); Olsen (1972); Polite, Cochrane, and Silverman (1974); Smith (1980); and Semmes (1985) provided further evidence that cultural and racial identity are related to self-concept.

REALISTIC SELF-APPRAISAL

An important variable that exists in combination with self-concept is how well Black students at White schools are able to assess how they are doing. This self-assessment pertains to both academic issues and student life. Success for any student involves the ability to "take readings" and make adjustments before the grades are in or before fully developing a lifestyle that is not conducive to success. Because faculty members, students, and staff often view Black students differently than they do White students, it is harder for Blacks to get straightforward information on which to base their evaluations of how they are faring.

White faculty members may give less consistent reinforcement to Black students than they give to White students (Sedlacek & Brooks, 1976). For Blacks who are trying to make realistic self-appraisals, faculty reinforcements that are too negative cause as many problems as those that are solicitous. For example, Christensen and Sedlacek (1974) demonstrated that faculty stereotypes of Blacks can be overly positive.

Some researchers have identified poor communication with faculty, particularly White faculty members, as a problem for Black students (Allen, Bobo, & Fleuranges, 1984; Jones, Harris, & Hauck, 1973; Van Arsdale, Sedlacek, & Brooks, 1971; Willie, 1971; Willie & McCord,

1972). Thompson and Michel (1972) found that what they called *grade deflecting*, or the difference between the grade expected and the grade received, by Black students correlated positively with students' perceived prejudice of the instructor. Switkin and Gynther (1974) and Terrell and Barrett (1979) found that Black students were generally less trusting than were White students.

Blacks may find it especially difficult to get close enough to faculty, staff, and other students to become a central part of the informal communication system that is critical in making self-assessments. Nettles, Thoeny, and Gosman (1986) found faculty contact outside the classroom to be a significant predictor of grade point average (GPA) for Black students. Braddock (1981) found such faculty contact more important to Black student retention at predominantly White schools than at predominantly Black schools. Fleming (1984) found that Blacks in predominantly Black colleges were better able to make self-assessments than were Blacks at predominantly White schools, presumably in part because Blacks were more involved in the communication and feedback system in Black schools.

UNDERSTANDING AND DEALING WITH RACISM

There are two components in this variable. First, does the Black student understand how racism works? Can the student recognize it when it is occurring? Does the student have an effective way of handling racism, a way that allows Black students to pursue their goals with minimum interference? It is a curvilinear variable in that a Black student can have difficulty with racism because of naiveté about it or preoccupation with it. An optimal strategy is one in which Black students have differential response patterns to racism. They take action when it is in their best interests and do not take action when it might cause them more trouble than it is worth to them. Each student must make those decisions individually. A Black who "chooses" to confront all examples of racism may be effective in many ways, but he or she is unlikely to remain in school

or get high grades.

Handling racism is further complicated by the distinction made between individual and institutional racism (Barbarin, 1981; Racism/Sexism Resources Center for Educators, 1983; Sedlacek & Brooks, 1976). Institutional racism involves policies and procedures, either formal or informal, that result in negative outcomes for Blacks. Institutional racism is often more of a problem for Blacks than is individual racism. Tracey and Sedlacek (1987) pointed out the uniqueness of this problem for Black students. How well White students are able to negotiate the campus system predicts their success in school. The same is true for Blacks, except that their treatment by the system will, in many ways, be because they are Black (Deslonde, 1971; Garcia & Levenson, 1975; Webster, Sedlacek, & Miyares, 1979). The following are some of the more common forms of racism faced by Black students at predominantly White institutions.

Admissions

There is considerable evidence that traditional measures such as standardized tests and high school grades are not as valid for Blacks as they are for Whites (Baggaley, 1974; Borgen, 1972; Pfeifer & Sedlacek, 1971, 1974; Sedlacek, 1977, 1986; Tracey & Sedlacek, 1984, 1985, 1987). Most institutions, however, have continued to employ traditional measures for Black students from the 1960s to the 1980s (Breland, 1985; Sedlacek & Brooks, 1970a; Sedlacek, Brooks, & Horowitz, 1972; Sedlacek, Brooks, & Mindus, 1973; Sedlacek, Lewis, & Brooks, 1974; Sedlacek, Merritt, & Brooks, 1975; Sedlacek & Pelham, 1976; Sedlacek & Webster, 1978).

The negative outcomes in admissions for Blacks include being rejected for admission because of invalid measures or being accepted on the basis of "lower standards" that may result in reduced self-esteem of Black students and the increased probability that White students and faculty will stereotype Blacks as less able than Whites. This stereotype, in turn, leads to more negative treatment of Black students.

There are also many forms of institutional racism in the methods employed to study admissions of Black students, including predicting 1st-year performance before Black students have fully adjusted to the White campus (Farver, Sedlacek, & Brooks, 1975; Kallingal, 1971; Tracey & Sedlacek, 1984, 1985, 1987) and using statistical and research procedures that are biased against Blacks (Sedlacek, 1986). These procedures result in invalid bases for admission decisions made about Blacks. Sedlacek and Brooks (1973) presented an example of using research information to work against racism in admissions.

Relationships with Faculty

The difficulties Black students have with White faculty are discussed above under "Realistic Self-Appraisal." Black students have consistently reported believing that White faculty are prejudiced toward them (e.g., Allen et al., 1984; Babbit, Burbach, & Thompson, 1975; Boyd, 1973; Butler, 1977; Dinka, Mazzella, & Pilant, 1980; Egerton, 1969; Jones et al., 1973; Semmes, 1985; Smith, 1980; Thompson & Michel, 1972; Westbrook, Miyares, & Roberts, 1977). This prejudice can take such forms as lower expectations of Black students than are warranted, overly positive reactions to work quality, reducing the quality of communications, and reducing the probability that faculty know students well enough to write reference letters.

Black students have expressed concerns about the lack of Black faculty and staff in a number of studies (Boyd, 1979; Matthews & Ross, 1975; Southern Regional Education Board, 1971; Willie, 1971). Absence of powerful Black figures as role models has strong effects on the feelings of loneliness and isolation of Blacks. The lack of a variety of viewpoints or cultural perspectives relevant to Black students can also affect their learning, development, and identification with the institution. Sedlacek and Brooks (1973) discussed an example of racism in academic coursework and how to reduce it.

Campus Life

Problems for Black students have been documented in residence halls (Piedmont, 1967) and fraternities (Tillar, 1974), with campus police (Eliot, 1969; Heussenstamm, 1971; Leitner &

Sedlacek, 1976), and in interracial dating (Day, 1972; Korolewicz & Korolewicz, 1985; Merritt, Sedlacek, & Brooks, 1977; Patterson, Sedlacek, & Perry, 1984; Petroni, 1973; Schulman, 1974; Tillar, 1974; Willie & McCord, 1972), athletics (Green, McMillan, & Gunnings, 1972; McGehee & Paul, 1984), and campus life in general (Babbitt et al., 1975; Dinka et al., 1980; Fenton & Gleason, 1969; Fleming, 1984; Heyward, 1985; Lunneborg & Lunneborg, 1985; Minatoya & Sedlacek, 1980; Reichard & Hengstler, 1981; Trow, 1977; Westbrook et al., 1977; Willie & McCord, 1972).

Burbach and Thompson (1971) reported that contradictory norms on campus cause problems for Black students. Martinez and Sedlacek (1982) found that when Whites entered a predominantly White university in the early 1980s they expected the social norms to be conservative on social and political issues (e.g., government policies, abortion rights) but liberal on personal freedoms (e.g., drug use, sexual behavior). Black students tended to expect the norms to be exactly the opposite. Martinez and Sedlacek (1983) also found that students in general were more tolerant of people with racist or bigoted attitudes in 1981 than in 1970 on a predominantly White campus. That the campus environment could be seen as confusing and hostile to Black students should not be hard to understand.

Attitudes of White Students

The discomfort of White students around Blacks and the negative stereotypes of Blacks held by White students have been well documented during the period studied (Peterson et al., 1978). These underlying attitudes do not seem to have changed throughout the years. For example, a series of studies at the University of Maryland employing the same instrument, the Situational Attitude Scale (Sedlacek & Brooks, 1972b), and the same methodology, has shown consistently negative attitudes of White students toward Blacks in a wide variety of situations (e.g., Carter, White, & Sedlacek, 1985; Minatoya & Sedlacek, 1984; Miyares & Sedlacek, 1976; Sedlacek & Brooks, 1970b; White & Sedlacek, 1987). Studies at other institutions have supported this finding (e.g., Gaertner & McLaughlin,

1983; Greenberg & Rosenfield, 1979). Sedlacek, Troy, and Chapman (1976) have demonstrated, however, that it is possible to alter racial attitudes in an orientation program using an experimental-control group approach.

COMMUNITY SERVICE

As part of a viable support system, Blacks need to have identification with and be active in a community. The community may be on or off campus, large or small, but it will commonly be based on race or culture. Because of racism, Blacks have been excluded historically from being full participants in many of the White-oriented communities that have developed in the United States and in the educational system. Thus, Blacks need a supportive group that can give them the advice, counsel, and orientation to sustain them as they confront the larger, often hostile systems they must negotiate. Many researchers have documented that Blacks seem to be more community oriented than are Whites (Bayer, 1972; Centra, 1970; Davis, 1970; Greene & Winter, 1972; Lyons, 1973; Reichard & Hengstler, 1981; Southern Regional Education Board, 1972). Additionally, Bohn (1973) and Pfeifer and Sedlacek (1974) found that a high score on the California Psychological Inventory (CPI) (Megargee, 1972) Communality scale, which measures a community orientation, was associated with Black student success (i.e., retention and grades).

Other researchers have shown that Blacks often believe that they do not belong on predominantly White campuses (Bradley, 1967; Kleinbaum & Kleinbaum, 1976; Lunneborg & Lunneborg, 1985; Madrazo-Peterson & Rodriquez, 1978). The idea that there needs to be a "critical mass" or sufficient number of Blacks on a campus to develop a community or communities has been discussed by Astin and Bayer (1971), Willie and McCord (1972), and Fleming (1981, 1984). Thus, a relevant community is probably harder for Blacks to develop on a White campus than on a Black campus.

Bennett (1974) reported that Blacks preferred a separate residence hall floor. Davis (1970), in an experimental study, found that

Blacks who lived on an all-Black floor in a residence hall were more positive toward their institution than were those who lived on a mixed-race floor.

Athletics may be an important way for Blacks to develop a community on campus (Mallinckrodt & Sedlacek, 1987; Reichard & Hengstler, 1981). Mallinckrodt and Sedlacek found that Blacks who made use of campus gymnasiums were more likely to stay in school than were those who did not.

Mallinckrodt and Sedlacek (1987) also found that Blacks who were interested in activities sponsored by the student union had better retention than did those who were not interested. Webster and Sedlacek (1982) found the student union to be a central part of Black students' community development.

LONG-RANGE GOALS

The extent to which Black students are able to defer gratification is correlated with their retention and grades in school (Tracey & Sedlacek, 1984, 1985, 1987). The reason this is an issue is yet another form of racism. Blacks have had a more capricious experience in setting goals and receiving reinforcement for their accomplishments than have Whites. Sometimes things work out for Blacks; sometimes they do not. Whites are more likely to understand that if they accomplish A they can go to B. For Blacks, this is less clear. A key assumption in the higher education system is that students work currently for rewards received later.

Astin (1975) found that those Blacks with lower aspirations and vaguer goals than other Blacks were more likely to leave school. Nolle (1973) supported Astin's conclusion by noting that Black high school students with specific plans for college were much more likely to attend college than were those with less clear goals. Bohn (1973) found that Black college students who made plans were more successful than were those who did not. Greene and Winter (1971) found that Black leaders in campus organizations were more apt to have long-range goals than were other Black students. Other studies that provide general support for the importance of this

variable include Baer (1972) and Stikes (1975). Berman and Haug (1975) and Wechsler, Rohman, and Solomon (1981) provided evidence that developing long-range goals may be a bigger problem for Black women than for Black men.

STRONG SUPPORT PERSON

Because Black students are dealing with racism and face difficult adjustments to a White university, they are particularly in need of a person they can turn to for advice and guidance. As discussed above, however, Black students often find difficulty forming relationships with White faculty and staff (e.g., Boyd, 1973; Dinka et al., 1980; Simon, McCall, & Rosenthal, 1967). Additionally, Black faculty and staff are often not available, and Black students have expressed a need for more Black faculty and staff in general (Burrell, 1980; Willie, 1971; Willie & McCord, 1972) and more Black counselors in particular (Abbott, Tollefson, & McDermott, 1982; Wolkon, Moriwaki, & Williams, 1972). Genshaft (1982) found that therapists believed that Blacks were less attractive clients and had a poorer prognosis than did other clients. Parham and Helms (1981) presented evidence that client race was not a predictor of counselor race preference, but racial identity was. Blacks in the encounter and immersion stages wanted Black counselors, whereas those in the internalization stage had no preference (see previous discussion). Brooks, Sedlacek, and Mindus (1973), R. L. Taylor (1977), and Webster and Fretz (1977) have found that Blacks often turn to friends and family for support, which is further evidence of the importance of the variable.

LEADERSHIP

Successful Black students have had successful leadership experiences. They have shown the ability to organize and influence others, often within their cultural-racial context. As with acquiring knowledge or in doing community work, Blacks often do not show leadership in traditional ways. Black students are more likely to exhibit leadership off campus, in the community, or in their church than are White

students. When Blacks show leadership on campus it is often through informal or Black-oriented channels, which are less likely to be validated by White faculty, students, or personnel workers.

Bayer (1972) found that Black students were oriented toward being community leaders. Greene and Winter (1971) showed evidence that leadership was important to Black students. Beasley and Sease (1974) demonstrated that scores of Blacks on the leadership portion of the American College Testing Program's student profile section correlated positively with GPAs.

Heyward (1985) concluded that Blacks do not look to White faculty and staff as role models for their leadership. They look to other Blacks or develop their own styles and forms of leadership.

NONTRADITIONAL KNOWLEDGE

Because Blacks have not always been welcomed in the formal educational system, they have developed ways of learning outside the system. These ways are often creative and culturally relevant. Astin (1975) found that Blacks who were able to demonstrate knowledge they gained in nontraditional ways through credit by examination were more likely to stay in school than those who could not. The increase in student retention associated with demonstrating knowledge in this way was more than twice as great for Blacks as for Whites.

Hayes and Franks (1975) reported that Blacks saw more opportunities than did Whites for public discussions and debates, which could translate into learning opportunities. Black (1971), in a study at historically Black colleges, found that Blacks who developed an independent learning year fared better than did a group of Blacks in a control group who pursued the regular curriculum.

DISCUSSION

There has been considerable research on Black students in the last 20 years. What has been learned from this research? Although it is difficult to determine whether the problems of

Blacks on White campuses have changed during this period, it is clear that it is possible to better measure, define, and articulate those problems than at any time previously. Blacks seem to have continued to have difficulties with self-concept, racism, developing a community, and the other noncognitive variables discussed. There is a model available, however, to organize thinking about Black student problems and ways to measure those problems, to work with Black students or others on campus, and to improve student life for Blacks. Perhaps most important, the variables identified correlate with Black student academic success. There is less need to guess or hope that what is being done is helpful. Appendix A contains some recommendations for improving Black student life on White campuses in terms of each noncognitive variable.

Some of the noncognitive variables discussed and conclusions reached may seem applicable to all students. Although this may be true to some degree, the evidence presented is intended to show that the points raised are unique to Blacks, in intensity if not in form. For instance, many White students may have self-concept problems, but these do not include the alienating effects of racism. Whites may lack a support person, but the process of developing such a relationship is not the same as for Blacks because of racial and cultural variables. The researchers have demonstrated the many unique aspects of being Black on a White campus.

Another area of research that seems illuminating but did not exist until recently is the work on racial identity of Blacks, discussed under self-concept. One can measure change and development in an area that has been shown to be important to Blacks. There are many other specific results of the studies discussed above that should be interesting and useful to practitioners.

Why cannot one be more sure that life has changed for Blacks on White campuses? First, there has been very little evaluation research. Most of it has been descriptive. Descriptive research is helpful, but it does not focus on change. For instance, Black students have reported being concerned with racism from the 1960s through the 1980s. But is it the same

racism? Do past and present Black students mean the same thing when they refer to racism? Longitudinal studies over time or even cross-sectional studies done the same way in the same place are not common. Perhaps the way the literature was organized does not lend itself to the analysis of trends. The noncognitive variables are assumed to be underlying dimensions, which could take different forms at different times. For instance, institutional racism may be more likely to take the form of dropping a Black studies program or providing inadequate funding for a Black fraternity in the 1980s than involving police brutality or allowing Blacks into White fraternities in the 1960s. Some forms of racism (e.g., admissions, attitudes of White students), however, seem to have changed little over the years. In any case, it is still racism and it seems that Blacks are obligated to deal with it if they are to succeed in school.

As the research on Black students was examined one thought seemed to stand out. How ironic that educators so often think of Black students as less capable than other students. Black students need to have the same abilities and skills as any other student to succeed in school, and they are dealing with the same problems as any other student. They also, however, are confronting all the other issues discussed in this article. One could make the case that the best students in U.S. colleges and universities are Black students. The typical Black graduate from a predominantly White school may possess a wider range of skills and be able to handle more complex problems (e.g., racism) than most other students.

How can student affairs professionals use what has been presented here? Generally, one should be able to be much more sophisticated in student services work for Blacks using the information in this article. There exists much information demonstrating that Blacks are not a monolithic group and indicating how one might approach them individually or collectively. There is also more information about the many ways

the educational system works against the best interests of Blacks. One can use this information to work with non-Black students, faculty, and staff to improve Black student life. Below are a number of specific things that can be done based on a review of this literature.

1. Organize programs and services for Black students around some specific variables that have been shown to be important. Whether it is one of the noncognitive variables presented here or some other scheme, use it. There is little excuse for vague, general programs or "seat-of-the pants" needs analyses given the state of knowledge available.

2. Evaluate all programs. This should be done with an experimental-control group model if possible. If one has specific goals, and can measure concepts better, it should be possible to dramatically increase this type of research, and report it in student affairs journals.

3. Work at refining the variables and concepts presented here, either through programs or further research. The student services profession is on the brink of being able to work with more useful, higher order concepts than those currently employed on behalf of Black students; help the process along.

4. Share the information from this review and the results of individual work in Black student services with others outside student affairs. Much of what has been done in the profession would be of use to such people as faculty and academic administrators.

5. The last bit of advice is more personal. Be confident. Many researchers over many years have developed a literature that can be used. Whatever a person's role, he or she should be able to fulfill it better with this information.

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APPENDIX A.

Recommendations for Improving BlackStudent Life on White Campuses
by Noncognitive Variable

Self-concept: Measure self-concept (see Hall et al., 1972; Tracey & Sedlacek, 1984). Develop counseling programs or workshops employing racial identity (Helms, 1984) or noncognitive variables (Westbrook & Sedlacek, in press).

Realistic self-appraisal: Work with faculty and academic administrators on communication with Black students. Faculty should initiate contact more than they usually do and employ feedback in varied and frequent ways. Help Black students interpret feedback from system. Examine Kochman (1981) for differences in Black and White communication styles.

Understanding and dealing with racism: Become familiar with racism and what can be done about it (Racism/Sexism Resources Center for Educators, 1983; Sedlacek, in press; Sedlacek & Brooks, 1976). Specific forms of racism can be addressed by (a) employing nontraditional admission predictors that are more valid for Blacks than those currently employed (Sedlacek, 1986; Tracey & Sedlacek, 1987), (b) increasing the numbers of Black faculty and staff (Peterson et al., 1978), and (c) working to change attitudes of White students, faculty, and staff (Sedlacek, Troy, & Chapman, 1976).

Demonstrated community service: Help Whites understand the need for Black communities on and off campus. Use student union programming (Webster & Sedlacek, 1982) and facilities management (Mallinckrodt & Sedlacek, 1987) as methods of developing Black communities on campus.*Long-range goals:* Financial aid dispersed as a lump sum may hurt Black student development in this area. Consider a program that gives Black students funds for accomplishing individually set goals. Goals can be set at longer and longer intervals. A midwestern university employs this system successfully. In the short run, use the concept that Black students may be motivated to use available student services by promoting a more immediate reward system than commonly employed (Arbona & Sedlacek, 1987).

Strong support person: Develop relationships with Black students early, ideally before matriculation through recruiting and orientation programs. Develop a pool of faculty, staff, peers, or off-campus mentors and link Black students with others individually or in groups.

Leadership: Foster and identify nontraditional and racially based forms of student leadership on and off campus. Formally encourage schools and specific departments to offer leadership awards for such achievements as eliminating racism, Black journalism, and race-related community projects. Make faculty aware of nontraditional student leaders in their departments. Help students to recognize their nontraditional leadership and include such leadership roles in résumés and applications for jobs and further education.

Nontraditional knowledge acquired: Encourage Blacks to demonstrate knowledge gained outside the classroom through credit by examination or listings on résumés and applications. Encourage faculty to identify extramural learners and work with them.

APPENDIX G

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SECTION II. To be completed by the STUDENT.

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ACTIVIITIES, INVOLVEMENT AND ACHIEVEMENTS

1. Please attach a list *(in bulleted form)* of any IMSA sponsored activities/programs (Informational Meeting, On-Campus Visitation Event, PROMISE SEAMS, EIP, LS2S or Project School Visit, Summer Sleuths, Fusion, Kids Institute Program, IMSA CyberQuiz, etc.) in which you have participated. List full name of activity, date(s), and location, if known.

2. Please attach a list **and describe** *(in bulleted form)* your most <u>meaningful extracurricular activities</u>, organized or individual, during the past three years. Also indicate any leadership positions, as well as time involved per week, in these activities. *IMSA reserves the right to verify participation in activities listed.* (Do not use acronyms - please use full name for all activities.)

   a. Mathematics, Science and Technology related activities:
      (ex. Activity   Your Age at time of Involvement   Office/Position   Hours per week)

   b. Prioritize and describe your top three other areas of involvement: (ex. sports, clubs or organizations)
      (ex. Activity   Your Age at time of Involvement   Office/Position   Hours per week)

3. Please attach a list **and describe** *(in bulleted form)* the most <u>meaningful awards</u> you have received *in or out of school* during the past three years. Include full name of award(s), year the award was received, and whether won at the local, state, national or international level. *IMSA reserves the right to verify awards received* (Do not use acronyms - please use full name for all awards). **PLEASE DO NOT SEND ORIGINALS OR COPIES OF AWARDS/CERTIFICATES.**

   a. Mathematics, Science and Technology related activities:
      (ex. Activity   Your Age at time of Involvement   Office/Position   Hours per week)

   b. Prioritize and describe your top three other areas of involvement: (ex. sports, clubs or organizations)
      (ex. Activity   Your Age at time of Involvement   Office/Position   Hours per week)

OPTIONAL STATEMENT

We attempt to identify those applicants whose previous school grades or admission test scores may under predict academic success. Among the factors we consider in making admission decisions are whether the applicant (1) is from an economically disadvantaged environment; (2) had a health problem which significantly affected, for a period of time, an otherwise exceptionally good academic record; (3) has a permanent physical disability, learning or attentional difference; (4) has completed an exceptionally rigorous academic program; (5) does not speak English at home; or (6) has other exceptional circumstances. This information is considered with your academic credentials. It is particularly relevant if your qualifications place you slightly below the competitive applicants. *Describe any factors like those listed above that you believe the selection committee should consider as they review your credentials.*

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SECTION III. To be completed by the STUDENT.
Please respond on separate pages to the following questions.

STUDENT ESSAY QUESTIONS

1. If you are invited to attend the Academy you will be expected to adapt to new learning, living and social environments. You will be asked to live, study, and work with many people from different backgrounds from throughout Illinois. Please describe yourself to your classmates, teachers and others at the Academy. What interesting information **would you want others to remember about you? Secondly, what are some changes you** perceive you would need to make to thrive academically and residentially at IMSA?   *(Word Guideline - In 500 words or less)*

2. Success is achieved in many ways and by using numerous variable factors. It is your task to do all below:

    *   Develop a working equation/formula portraying the variables of being successful for advanced study in mathematics, science and technology.

    *   Discuss your personal understanding of how this equation/formula creates a path for success.

    *   Describe a time when you experienced success and its impact on you.
        (Word Guideline - In 500 words or less)

3. The mission of IMSA, the world's leading teaching and learning laboratory for imagination and inquiry, is to ignite and nurture creative, ethical scientific minds that advance the human condition, through a system distinguished by profound questions, collaborative relationships, personalized experiential learning, global networking, generative use of technology and pioneering outreach. Using your own words, describe how you will embrace, engage and advance the mission of IMSA if you are chosen to be a member of the class of 2016. *(Word Guideline - In 500 words or less)*

4. You have been awarded the resources required to initiate, design, and implement an innovative endeavor that will have an impact on the world through mathematics, science, engineering and/or technology. Describe your innovative endeavor, how you would go about starting it? What is its potential effect today and for future generations? *(Word Guideline - In 250 words or less)*

SECTION IV. To be completed by the PARENT/LEGAL GUARDIAN.

PARENT STATEMENT

Please describe your child's passion/interests/motivation in mathematics, science and technology. Also, please provide any additional information that the Student Selection Committee should consider when evaluating your child's application to IMSA. *(Word Guideline - In 200 words or less)*

APPENDIX H

TEACHER EVALUTION OF APPLICANT - *(Please check one)*

❏ MATHEMATICS   ❏ SCIENCE   ❏ ENGLISH   ❏ OPTIONAL

⌐IMSA

| Student Legal Last Name | Legal First | MI | Nickname (if different than first name) |

INFORMATION RELEASE AND EVALUATION WAIVER: Complete this section prior to giving to evaluator.
Please note: The Information Release and Evaluation Waiver for the applicant and Parent/Legal Guardian should be consistent. If they are not, we will follow the guidance of the Parent/Legal Guardian.

I, the undersigned, hereby request that all data in support of my application to the Illinois Mathematics and Science Academy to be available to IMSA officials.

As parent/legal guardian of the named student, I grant permission to release all school data in support of my son/daughter's application to IMSA.

| Student Applicant Signature | Date | Parent/Legal Guardian Signature | Date |

I, the undersigned, hereby **waive my right to review** any comments or information included in this evaluation form or their supporting documents. (optional)

As parent/legal guardian of the named student, I **waive my right to review** any comments or information included in this evaluation form or their supporting documents. (optional)

| Student Applicant Signature | Date | Parent/Legal Guardian Signature | Date |

TO BE COMPLETED BY THE EVALUATOR

For 8th grade applicants: Considering (1) Level of texts, (2) Complexity of labs (if applicable), (3) District curriculum, (4) ISBE State Standards, is this student's mathematics and/or science course taught at a high school level?   ❏ Yes ❏ No

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CLASSROOM BEHAVIOR: Please include behaviors that indicate potential for the areas listed below.

(Attach additional page if more space needed)

Please describe an example in which this candidate demonstrated exceptional **intellectual talent, curiosity, creativity and/or leadership.**
Please provide a specific example in which this candidate demonstrated a true **passion for mathematics, science and/or technology.**
Please provide an example in which this student **thought and acted outside of the "mainstream"** in relation to his/her **performance.**
If a lab based course, please describe this candidate's **performance in a laboratory.**
Please describe this candidate's **willingness and ability to work both in a group and independently.**
Please describe this candidate's **oral and written communication skills.**
Please describe this candidate's **preparation and study skills development.**
Please describe this candidate's **mathematical, science and/or technology reasoning ability and ability to communicate articulately about the subject matter.**

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IN YOUR OPINION:

Does this student have **a serious interest** in studying mathematics, science and/or technology? ☐ Yes ☐ No

Does this student have **an aptitude** for studying mathematics, science and/or technology? ☐ Yes ☐ No

Do you think that this student's grades are a valid reflection of his/her academic abilities? ☐ Yes ☐ No
If no, please explain:

COMMENTS:

Please use this space to provide any additional information that the Student Review Committee should consider when evaluating this student's application to IMSA, including your involvement with him/her outside the traditional classroom, his/her ability to meet personal responsibilities such as taking care of self, meeting deadlines, personal initiative, etc. Please also include any obstacles this student has had to overcome in pursuing his/her educational goals, if appropriate. *(Attach additional page if more space is needed)*

PERSONAL QUALITIES:

	Outstanding	Good	Average	Below Average	No Basis for Judgment
Reasoning ability	☐	☐	☐	☐	☐
Motivation and task commitment	☐	☐	☐	☐	☐
Self-sufficiency	☐	☐	☐	☐	☐
Leadership	☐	☐	☐	☐	☐
Maturity	☐	☐	☐	☐	☐
Seeking of challenges	☐	☐	☐	☐	☐
Social adaptability and responsibility	☐	☐	☐	☐	☐
Academic risk taking	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

EVALUATOR INFORMATION:

Among the students I have encountered in my teaching career, this student ranks in the (check one):

☐ upper 1-2%   ☐ top 5%   ☐ top 10%   ☐ top 25%   ☐ top 50%   ☐ bottom 50%

Number of years teaching _____   How long have you known this candidate? _____

Which year(s) did you teach this candidate? _____

Course(s) of instruction with this candidate _____

Evaluator Last Name	Evaluator First Name	Evaluator Title
School/Institution Name *(No Abbreviations)*	Office Phone (xxx-xxx-xxxx)	Email
School/Institution Address	Date Completed Evaluation	Evaluator Signature

IMSA's programs, services, and activities are accessible to disabled individuals.

Teachers/Evaluators: Please retain a photocopy of this form for your records.

Submit electronically *or* return original paper form (in a sealed school envelope) directly to student prior to postmark deadline of March 1, 2013:

Office of Admissions, Illinois Mathematics and Science Academy, 1500 Sullivan Road, Aurora, Illinois 60506-1000

APPENDIX I

Liberal Arts and Science Academy High School
Admissions Rubric, 2012-13

Criterion	Score of 5	Score of 4	Score of 3	Score of 2	Score of 1	Score of 0
Application and Student Responses (Each item is scored individually and averaged.)	Activities include service learning projects, in-depth dedication to a cause or organization, and long-term leadership positions; state or national level awards; polished and highly organized responses with advanced vocabulary.	Many activities with some leadership positions; some awards; above grade-level responses that are organized and polished with less advanced vocabulary.	Some activities; several awards; grade level responses with grammar and other technical problems.	Few activities; few awards, undeveloped written responses frequently straying from topic.	No activities; no awards, poorly organized and written responses .	Missing the application or the student responses .
7th and 8th core course grades from Report Cards. (Each grade level is scored individually.) If applying for other than 9th grade, we require only this year's and last year's report card or transcript.	All A's in mostly Pre-AP or Magnet core curriculum courses.	All A's and B's in mostly Pre-AP or Magnet core curriculum courses.	B's and C's in mostly Pre-AP or Magnet core curriculum courses or all A's in mostly regular core curriculum courses.	B's and C's in mostly regular core curriculum courses.	Any core course grade below 70.	Missing one or both report cards.
EOC/STAAR or other Standardized Test Scores. (Each test section is scored separately.)	All middle school subject tests 25 points above advanced academic scale score (Other tests: 90th percentile or higher.)	All subject tests advanced academics. (Other tests: 80th percentile or higher.)	Some subject tests advanced academics, some passed. (Other tests: 70th percentile or higher.)	All subject tests passed (Other tests: 50th percentile or higher.)	Some subject tests passed, some failures. (Other tests: 49th percentile or lower.)	All subject tests failed or missing TAKS scores.
Teacher Recommendations (Each recommendation is scored individually and averaged.)	Checklist and comments score the student as "Clearly Outstanding."	Checklist and comments score the student as "Excellent."	Checklist and comments score the student as "Above Average."	Checklist and comments score the student as "Average."	Checklist and comments score the student as "Below Average."	Missing one or both teacher recommend-dations.
LASA Admissions Test Scores (Each test section is scored separately.) * Percentiles refer to the total population of 2012 prospective LASA CogAT test takers.	The average of the raw scores fall between 99th--90th percentiles inclusive.*	The average of the raw scores fall between 89th--75th percentiles inclusive.*	The average of the raw scores fall between 74th--60th percentiles inclusive.*	The average of the raw scores fall between 59th--40th percentiles inclusive.*	The average of the raw scores fall at or beneath 39th percentile inclusive.*	Did not take the LASA test.

APPENDIX J

Points	45	46	47	48	49	Total	Additional Percent of students that could have been admitted
2010-2011							
Anglo	6	2	1	1	2	12	33%
Af-Am	0	0	0	1	2	3	8%
Hisp	1	6	4	2	8	21	58%
NA	0	0	0	0	0	0	0%
A-Am	0	0	0	0	0	0	0%
MR	0	0	0	0	0	0	0%
Total	7	8	5	4	12	36	
2011-2012							
Anglo	2	3	0	5	4	14	41%
Af-Am	0	0	1	0	0	1	3%
Hisp	3	3	0	4	6	16	47%
NA	0	0	0	0	0	0	0%
A-Am	0	2	0	0	1	3	9%
MR	0	0	0	0	0	0	0%
Total	5	8	1	9	11	34	
2012-2013							
Anglo	5	3	2	2	7	19	32%
Af-Am	0	0	1	0	1	2	3%
Hisp	7	5	5	3	11	31	53%
NA	1	0	0	0	0	1	2%
A-Am	1	0	0	1	1	3	5%
MR	0	1	0	1	1	3	5%
Total	14	9	8	7	21	59	

The three-year average of students that could have gained admissions through gaining bonus points from this additional assessment.

Anglo	35%
Af-Am	5%
Hisp	53%