Measures used at the Division of Developmental Studies at the University of Georgia in constructing a student profile (specifically, of high-risk college freshmen) are discussed. The areas measured concern: goals; learning styles; career exploration; stress and academic anxiety; developmental tasks; and locus of control. The goals checklist assesses the freshmen's reasons for pursuing a college/university education and for selecting the University of Georgia. One or more instruments of learning style are also administered early in the first quarter of the college semester. These include: (1) a Myers-Briggs Type Indicator; (2) the James and Galbraith Learning Styles Inventory; and (3) the Kolb Learning Styles Inventory. Career exploration is undertaken with the Self-Directed Search or similar instrument. Several instruments are used to assist in identifying sources of stress, including the: (1) Developmental Inventory of Sources of Stress; (2) Spielberger Test Attitude Inventory; (3) Mathematics Anxiety Rating Scale; (4) Fennema-Sherman Mathematics Attitude Scales; and (5) sentence completion questionnaires. A developmental tasks inventory and the Rotter Internal-External Locus of Control Inventory are also given. Other academic variables, such as past performance, are included. Sample data on each of the profile sections are tabulated. (SLD)
Creating Profiles of High Risk Students

Dr. Jeanne L. Higbee
Dr. Patricia L. Dwinell
Division of Developmental Studies
University of Georgia

Presentation at the Annual Conference
of the American College Personnel Association,
Student Profile

I. Goals: Goals Checklist

This instrument was developed for use in the Division of Developmental Studies at the University of Georgia, and is in the public domain. A copy is attached. Participants are welcome to adapt the checklist for use at their own institutions. The purpose of the checklist is to assess students' reasons for pursuing a college/university education, and for attending our institution in particular. This information provides insights regarding student motivation, level of autonomy, and attitude toward learning. The instrument is administered during the first week of classes. Results are shared with the student at the end of the first quarter. At that time the student is asked to review and sometimes rethink his/her reasons for attending. (See Table 1 for means.)

A. Reasons for attending college scales

____ Career
____ Academic
____ Personal
____ Social
____ Other directed or avoidance
B. Reasons for attending the University of Georgia scales

- Academic or career-related reasons
- Financial
- Housing and/or transportation; location
- Social/activities/athletics
- Campus size/type
- Influence of significant others

II. Learning Styles

One or more of these instruments are administered early in the first quarter. Students enjoy learning the results, and in general evaluate the information provided as "very helpful." Activities are then introduced to assist students in adapting preferred learning styles to the traditional lecture/textbook format of the university classroom.

A. Myers-Briggs Type Indicator (MBTI)

- Extroversion (E) - Introversion (I)
- Sensing (S) - Intuition (N)
- Thinking (T) - Feeling (F)
- Judging (J) - Perceptive (P)

Type: _____ _____ _____ _____
Research indicates that high risk students are more likely to be extroverted and sensing. We interpret MBTI results in terms of learning style, academic achievement, career choice, and interpersonal communication.

B. James and Galbraith Learning Styles Inventory

This instrument was designed to examine preferred perceptual modality. It is in the public domain; a copy is attached. UGA Developmental Studies frequencies are provided in the Appendices.

<table>
<thead>
<tr>
<th></th>
<th>Print</th>
<th>Aural</th>
<th>Visual</th>
<th>Interactive</th>
<th>Haptic</th>
<th>Kinesthetic</th>
<th>Olfactory</th>
</tr>
</thead>
</table>

C. Kolb Learning Styles Inventory

<table>
<thead>
<tr>
<th></th>
<th>Concrete Experience</th>
<th>Reflective Observation</th>
<th>Abstract Conceptualization</th>
<th>Active Experimentation</th>
<th>Abstract-Concrete</th>
<th>Active-Reflective</th>
</tr>
</thead>
</table>
III. Career Exploration

We consider career exploration critical, since many high risk students enter the institution "undecided." Others have set unrealistic career goals, or have been strongly influenced by significant others, and will need to reassess their career choice. Progress in choosing a major can have a significant impact on motivation and student persistence. At the present time we are using the Self Directed Search (SDS). However, any number of instruments are effective.

Holland Code Preferences:

-  Realistic (R)
-  Investigative (I)
-  Artistic (A)
-  Social (S)
-  Enterprising (E)
-  Conventional (C)

IV. Stress/Anxiety

Although research findings are contradictory, we believe that stress in general, and academic anxiety in particular, can be a factor in determining achievement among high risk students. At the present time we use several instruments to assist students in identifying sources of stress. Relaxation techniques are presented in class. Students are also given the opportunity to participate in individual and group counseling sessions to reduce stress.
A. Developmental Inventory of Sources of Stress (DISS). This instrument was created for use with Developmental Studies students at the University of Georgia. It differs from other instruments in that it focuses only on sources of stress over which students have control. One of our goals in designing the instrument was to help students develop confidence in their ability to control the direction of their lives. This instrument is in the public domain. A copy is provided.

- Time Management Scale
- Physical Stressors Scale
- Chemical Stressors Scale
- Academic Scale
- Interaction Scale

(Lower scores indicate greater stress on 5 point scale).

B. Spielberger Test Attitude Inventory

- Raw Score

The highest possible score is 80; the lowest is 20. Higher scores indicate greater anxiety. We generally target students with scores of 50 or above for participation in test anxiety desensitization.

C. Mathematics Anxiety Rating Scale (MARS)

- Raw Score

The highest possible score is 490; the lowest is 98. Higher scores indicate greater anxiety.
D. Fennema-Sherman Mathematics Attitude Scales
   — Mathematics Anxiety Scale
   — Mathematics Confidence Scale
   — Teacher Scale
   — Father Scale
   — Mother Scale
   — Mathematics Usefulness Scale
   — Mathematics as a Male Domain Scale
   — Effectance Motivation Scale
   — Attitude toward Success in Mathematics Scale

You may choose to administer one or more of the Fennema-Sherman Scales, which are in the public domain. A copy of the anxiety, confidence, and usefulness scales are provided.

E. Sentence completion questionnaires. Although less standardized, sentence completion items can also be useful in assessing academic anxiety. A series of sentence completions related to anxiety in mathematics tests is provided.

IV. Developmental Tasks

Academics is not the only concern of the high risk student. Educators must be aware of the other pressures which are critical to student development.
The Student Developmental Task and Lifestyle Inventory (SDTL) is one standardized measure available for assessing progress in developmental tasks.

- Educational Involvement Subtask (EI)
- Career Planning Subtask (CP)
- Lifestyle Planning Subtask (LP)
- Life Management Subtask (LM)
- Cultural Participation Subtask (CUP)
- Peer Relationships Subtask (PR)
- Tolerance Subtask (TOL)
- Emotional Autonomy Subtask (EA)
- Academic Autonomy Scale (AA)
- Salubrious Lifestyle Scale (SL)
- Intimacy Scale (IN)

VI. Locus of Control

Rotter Internal-External Locus of Control Inventory

- Raw score
  14 + considered external, 10-13 moderately internal
  and external, 9 and below is internal.
VII. Additional Information

A. Sex
B. Race
C. High school grade point average (HSGPA)
D. HSGPA in English
E. HSGPA in mathematics
F. Highest mathematics course taken: year
G. SATV __________; SATQ __________
H. Placement test scores
   1. Basic Skills Exam - English (BSEE)
   2. Basic Skills Exam - Reading (BSER)
   3. Basic Skills Exam - Mathematics (BSEM)
   4. Algebra Supplement
I. Predicted Developmental Studies GPA
J. Handicap
   ______ Mobility
   ______ Visual
   ______ Hearing
   ______ Learning Disability
   ______ Other
## Division of Developmental Studies

### Goals Checklist

<table>
<thead>
<tr>
<th>Reason for attending college</th>
<th>N</th>
<th>Mean</th>
<th>Std</th>
<th>Min</th>
<th>Max</th>
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<tbody>
<tr>
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<td>23</td>
<td>3.13</td>
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<td>25</td>
<td>3.38</td>
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<td>Social</td>
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<td>2.21</td>
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### Kolb Learning Style Inventory

<table>
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<tr>
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<th>Mean</th>
<th>Std</th>
<th>Min</th>
<th>Max</th>
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<td>30</td>
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### Total Stress Score

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<tr>
<th>Stressor</th>
<th>N</th>
<th>Mean</th>
<th>Std</th>
<th>Min</th>
<th>Max</th>
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<tbody>
<tr>
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<td>3.08</td>
<td>0.57</td>
<td>20</td>
<td>4.73</td>
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<tr>
<td>Physical</td>
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<td>3.57</td>
<td>0.62</td>
<td>19</td>
<td>5.00</td>
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<tr>
<td>Chemical</td>
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<td>3.99</td>
<td>0.66</td>
<td>18</td>
<td>5.00</td>
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<tr>
<td>Academic</td>
<td>81</td>
<td>3.36</td>
<td>0.60</td>
<td>18</td>
<td>5.00</td>
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<td>Interaction</td>
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### Academic Variables

<table>
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<th>Variable</th>
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<th>Max</th>
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<td>85</td>
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<tr>
<td>BSER</td>
<td>101</td>
<td>75.49</td>
<td>10.35</td>
<td>20</td>
<td>85</td>
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</tbody>
</table>
Division of Developmental Studies
Student Profile
Frequencies of Selected Variables

Myers-Briggs Type Indicator (MBTI)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Extroversion (E)</td>
<td>64</td>
</tr>
<tr>
<td>Sensing (S)</td>
<td>58</td>
</tr>
<tr>
<td>Thinking (T)</td>
<td>37</td>
</tr>
<tr>
<td>Judging (J)</td>
<td>50</td>
</tr>
<tr>
<td>Introversion (I)</td>
<td>29</td>
</tr>
<tr>
<td>Intuition (N)</td>
<td>35</td>
</tr>
<tr>
<td>Feeling (F)</td>
<td>55</td>
</tr>
<tr>
<td>Perceptive (P)</td>
<td>42</td>
</tr>
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</table>

James and Galbraith Learning Styles Inventory

<table>
<thead>
<tr>
<th></th>
<th>1st Choice</th>
<th>2nd Choice</th>
<th>3rd Choice</th>
</tr>
</thead>
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<tr>
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<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Aural</td>
<td>2</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Visual</td>
<td>39</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Interactive</td>
<td>26</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Haptic</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Olfactory</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
I. Goals Checklist

A. Reasons for attending college
- Career
- Academic
- Personal
- Social
- Other

B. Reasons for attending UGA
- Academic
- Financial
- Housing
- Social
- Campus
- Influence

II. MBTI type

III. Perceptual modality preferences

IV. Holland code

V. Kolb Learning Style

Concrete Experience
Abstract Conceptualization
Reflective Observation
Active Experimentation

VI. Developmental Inventory of Stress

Time
Physical Stressors
Chemical Stressors
Academic
Interaction
Total Stress score

VII. Spielberger

VIII. MARS

IX. Developmental Tasks

EI
CP
LP
SL
LM
CUP

X. SATV

BSEENG

SATM

BSEM

HSGPA

BSER

PAV

1st GPA

DSPA

XI. Major

CAR
ACAD
PER
SOC
OTH
UGA
UGF
UGH
UGS
UGC
UFI
CE
AC
RO
AE
TIME
PHYS
CHEM
DEMIC
ACT
TOTSTR
SP
EI
CP
LP
SL
LM
CUP
INT
TOL
PR
EA
AA
SATV
SATM
HSGPA
PAV
DSPA
BSEENG
BSEM
BSER

Q1
Q2
Q3
Q4

13
14