

## LAESE Subscales– LAESE v3.0

Numbers in parentheses correspond to item numbers from the LAESE survey (v 3.0).  
The following item subscales are for a total of 31 items (from items 16 – 46 in the LAESE survey).

Items 1 – 12 are items that gather background data, and data about how students have chosen their majors. Items 12 – 15 are “scenario” items that examine how students would choose to act in typical barrier situations.

- 1) Engineering career success expectations – 7 items, alpha = .84
  - 1) Someone like me can succeed in an engineering career (16)
  - 2) A degree in engineering will allow me to obtain a well paying job (25)
  - 3) I expect to be treated fairly on the job. That is, I expect to be given the same opportunities for pay raises and promotions as my fellow workers if I enter engineering (27)
  - 4) A degree in engineering will give me the kind of lifestyle I want (30)
  - 5) I expect to feel “part of the group” on my job if I enter engineering (33)
  - 6) A degree in engineering will allow me to get a job where I can use my talents and creativity (37)
  - 7) A degree in engineering will allow me to obtain a job that I like (42)
- 2) Engineering self-efficacy I – 5 items, alpha = .82
  - 1) I can succeed in an engineering curriculum (14)
  - 2) I can succeed in an engineering curriculum while not having to give up participation in my outside interests (e.g. extra curricular activities, family, sports) (18)
  - 3) I will succeed (earn an A or B) in my physics courses (20)
  - 4) I will succeed (earn an A or B) in my math courses (21)
  - 5) I will succeed (earn an A or B) in my engineering courses (22)
- 3) Engineering self-efficacy II – 6 items, alpha = .82
  - 1) I can complete the math requirements for most engineering majors (23)
  - 2) I can excel in an engineering major during the current academic year (26)
  - 3) I can complete any engineering degree at this institution (28)
  - 4) I can complete the physics requirements for most engineering majors (34)
  - 5) I can persist in an engineering major during the next year (39)
  - 6) I can complete the chemistry requirements for most engineering majors (43)
- 4) Feeling of inclusion – 4 items, alpha = .73
  - 1) I can relate to the people around me in my class (13)
  - 2) I have a lot in common with the other students in my classes (15)
  - 3) The other students in my classes share my personal interests (17)
  - 4) I can relate to the people around me in my extra-curricular activities (19)
- 5) Coping self-efficacy – 6 items, alpha = .78
  - 1) I can cope with not doing well on a test (29)
  - 2) I can make friends with people from different backgrounds and/or values (31)
  - 3) I can cope with friends’ disapproval of chosen major (36)
  - 4) I can cope with being the only person of my race/ethnicity in my class (38)
  - 5) I can approach a faculty or staff member to get assistance (40)
  - 6) I can adjust to a new campus environment (41)
- 6) Math outcome expectations – 3 items, alpha = .84
  - 1) Doing well at math will enhance my career/job opportunities (24)
  - 2) Doing well at math will increase my sense of self worth (32)
  - 3) Taking math courses will help me to keep my career options open (35)