

# **Developing Learner-Centered Content for Introductory Computer Science**

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- We call this Learner-Centered Content development

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- A way to distribute content and assess effectiveness

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- Available on-line; free of charge

# Sample Questions

Once I understand

- (a) all the parts, I understand the whole thing.
- (b) the whole thing, I see how the parts fit.

When I start a homework problem, I am more likely to

- (a) start working on the solution immediately.
- (b) try to fully understand the problem first.

# Sample Results

ACT X REF

11 9 7 5 3 1 1 3 5 7 9 11

<-- -->

SEN X INT

11 9 7 5 3 1 1 3 5 7 9 11

<-- -->

VIS X VRB

11 9 7 5 3 1 1 3 5 7 9 11

<-- -->

SEQ X GLO

11 9 7 5 3 1 1 3 5 7 9 11

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- Student product checked for correctness
- Publish on course web space

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  - Open submissions as an extra credit assignment
  - Encourage students to submit examples from their major



# Summary

- Self-awareness
- Students are helping each other
- Students are sharing examples from their major
- Students are bringing ideas to their major professors

# References

- **Index of Learning Styles (Description)**

<http://www4.ncsu.edu/unity/lockers/users/f/felder/public/ILSpage.html>

<http://www4.ncsu.edu/unity/lockers/users/f/felder/public/ILSdir/styles.htm>

- **Index of Learning Styles (Questionnaire)**

<http://www.engr.ncsu.edu/learningstyles/ilsweb.html>