Building Employability Skills in Math Course for Business and Economics Using UDL

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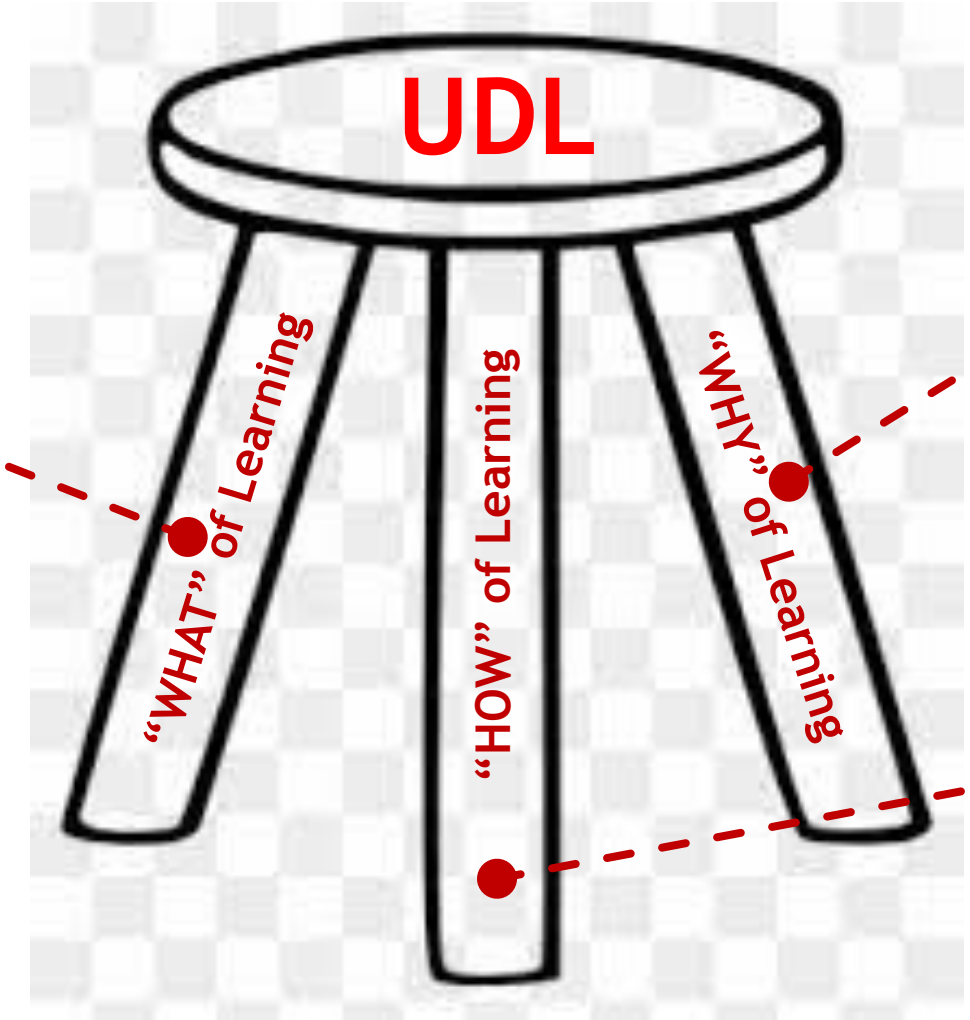
Agenda

- UDL (Universal Design for Learning)
- Individual and Collaborative learning Models
- Employability Skills
- Results of UDL Application on Teaching and Learning
- Conclusion

Three Pillars of UDL (Universal Design for Learning)

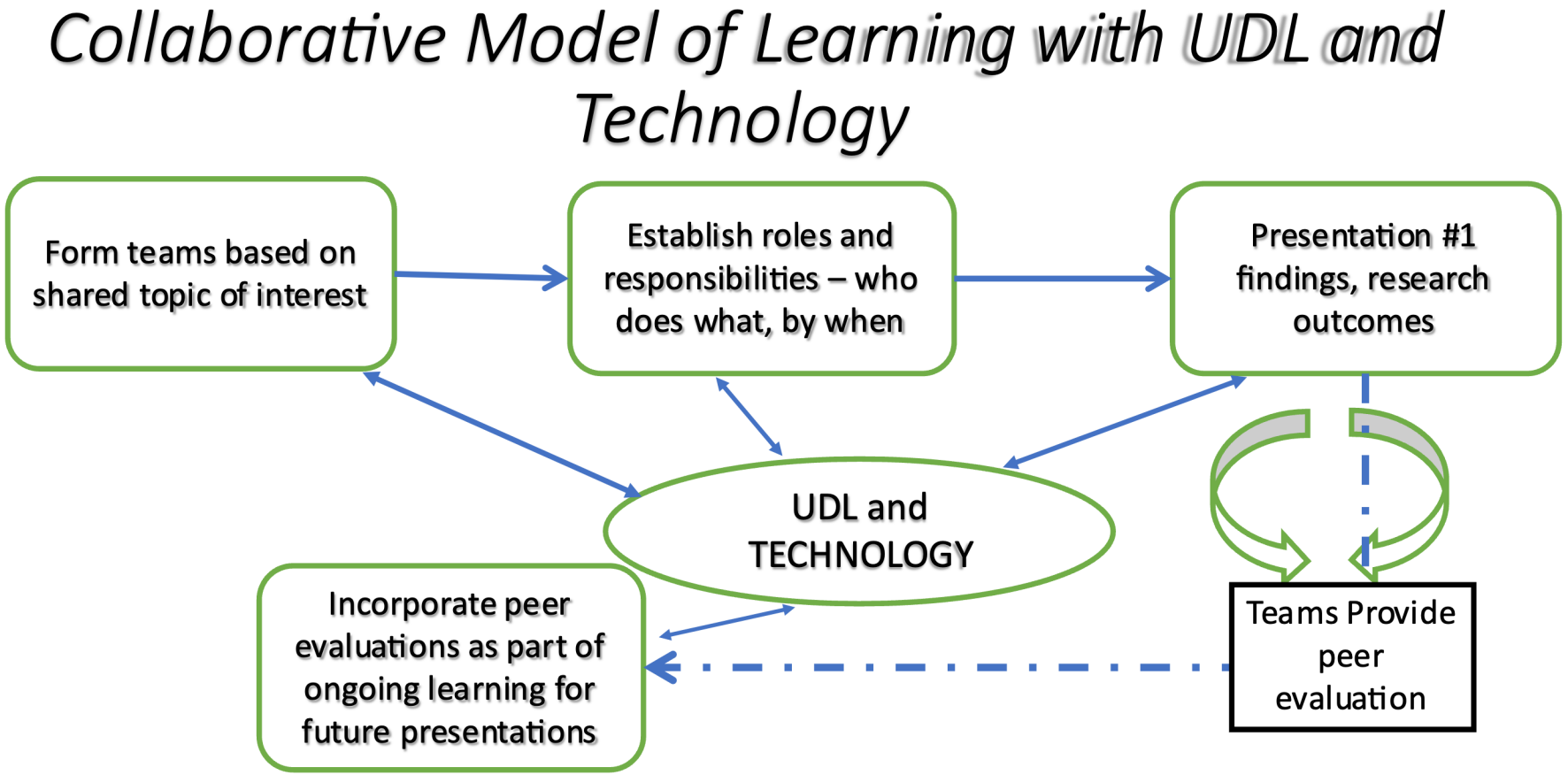
Information can be conveyed in multiple ways



Skills development through collaborative learning

Learners can learn in multiple ways

Collaborative Project or Team Presentation



Current Study

- **Where**: Bloomsburg University Campus of Commonwealth University of PA
- **Using**: General Education Courses
- **Specific Course**: Econ 156 – Foundational Math course for Business, Statistics, Finance and Economics Students

UDL Question

The “What” of Learning – Multiple Methods of Representation

“What” of learning: Multiple Methods of Representation- Individual and Collaborative Learning Models Learning

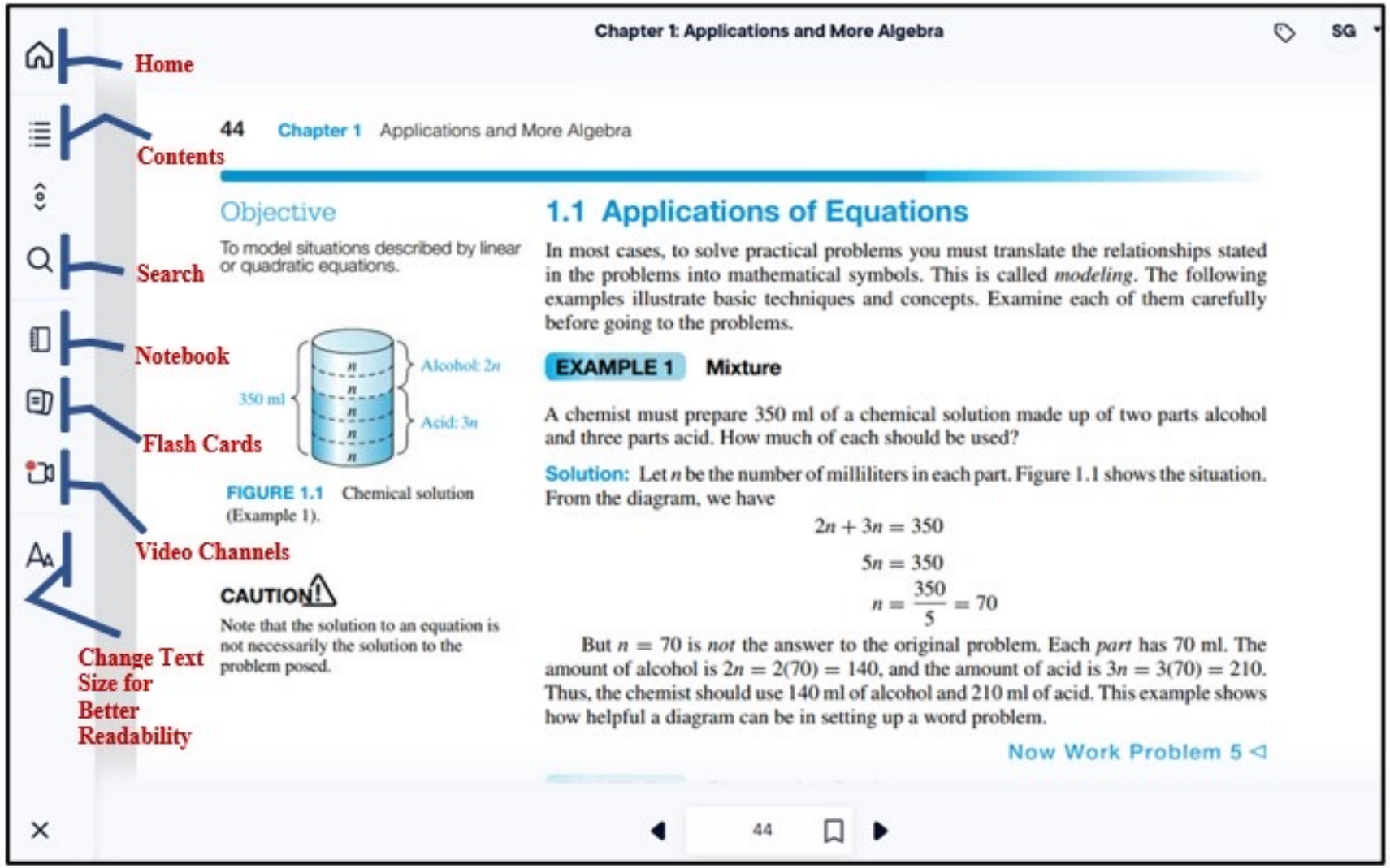


Fig. 1a: Multiple Methods of Representation using Technology

UDL Question

The “How” of Learning – Multiple Methods of Expression

How of Learning-Multiple Means of Expression- Individual and Collaborative Learning Models

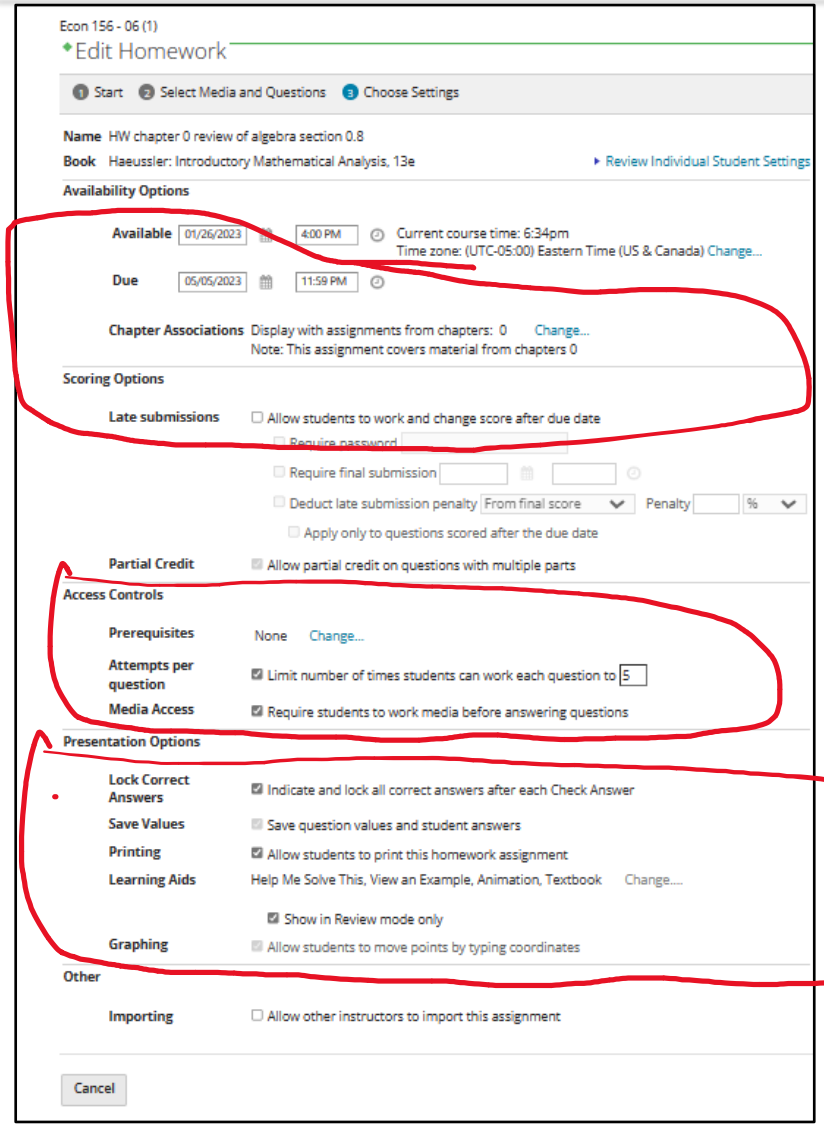


Fig. 2: Students Attempt Homework Multiple Times Before Final Submission

UDL Question

The “Why” of Learning – Collaborative learning and Employability related Skills Development

Transferable Skills and Measurable Metrics

Transferable Skill/ Core Competency	NACE (National Association of Colleges and Employers) Definition
Career & Self-Development	• Proactive development through personal and professional learning • Awareness of one's strengths and weaknesses • Navigation of career opportunities • Networking\build relationships within and without one's organization.
Oral and Written Communication	• Clear & effective information exchange, incl. ideas, facts, perspectives
Critical thinking	• Logical analysis of relevant information • Identify and respond to needs based on situational context
Equity and Inclusion	• Demonstrate the awareness, attitude, knowledge, and skills required to equitably engage and include people from different local and global cultures • Engage in anti-racist practices that actively challenge the systems, structures, and policies of racism

Source: https://www.naceweb.org/uploadedfiles/files/2021/resources/nace-career-readiness-competencies-revised-apr-2021.pdf, last accessed 3/13/2023

Transferable Skills and Measurable Metrics (contd.)

Transferable Skill/ Core Competency	NACE (National Association of Colleges and Employers) Definition
Professionalism	• Understand, and demonstrate effective work habits • Act in the interest of the larger community and workplace.
Leadership	• Recognize and capitalize on personal and team strengths to achieve organizational goals
Teamwork	• Build and maintain collaborative relationships to work effectively toward common goals • Appreciate diverse viewpoints and shared responsibilities
Technology	• Understand and leverage technologies ethically • Enhance efficiencies, complete tasks, and accomplish goals

Source: https://www.naceweb.org/uploadedfiles/files/2021/resources/nace-career-readiness-competencies-revised-apr-2021.pdf, last accessed 3/13/2023

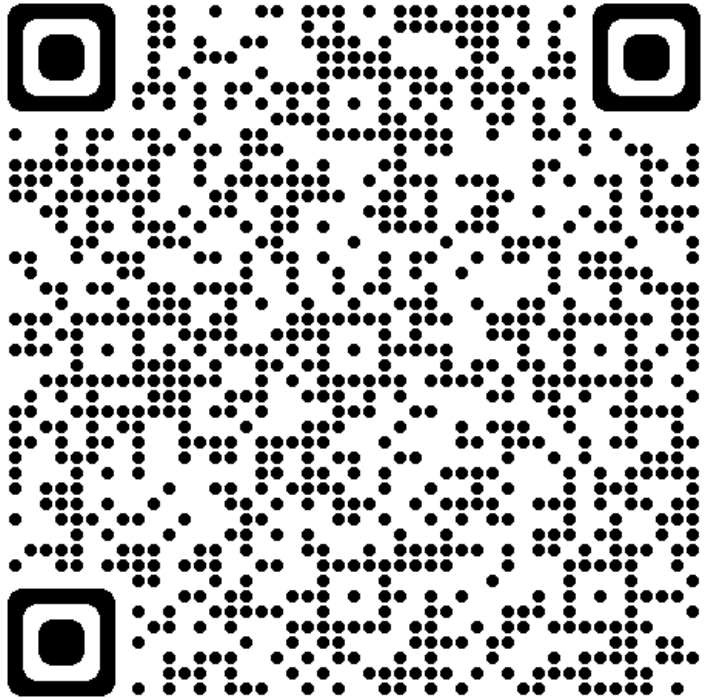
Retrospective Student Responses

Employability Skill	Number of Responses
Career & Self Development	26
Oral & Written Communication	24
Collaboration	18
Technology	17
Creativity	16
Critical Thinking	8
Leadership	2

Conclusions & Observations

- Addressing What, How and Why of learning using UDL helps in honoring student variability
- In the process of engaging themselves in UDL based collaborative assessments in teams, students get the opportunity to practice and develop employability skills.
- Current research has been applied to economics courses which are general education courses in areas of Microeconomics and Macroeconomics.

UDL Podcast Hosted by Lillian Nave



Math, Finance, Economics and Employment Skills with Subhadra Ganguli #ThinkUDL

TASKS FOR YOU

- Revisit the session agenda and use this presentations as a template for your own UDL application to your courses
- Now, can you think of ways in which UDL can enhance your teaching and your students' learning process in a particular course or topic of a course?

Suggestions?
Comments?
Questions?

THANK YOU

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