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Online Learner Discussion Self-Grading: Sharing of an Innovative Teaching-Learning Strategy

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Our Goals

- Share the what's, why's, how's and successes of online discussion self-grading.
- Provide a step-by-step how-to for execution of online discussion self-grading
- Share empirical findings from a first of its kind study on learner perceptions supportive of this innovation as further support.
- Discuss how we have shared our discoveries and successes of this innovation with others who have in turn gone on to implement it with positive results.

Objectives, Participants will:

- Describe theoretical framework and constructs that support discussion self-grading
- Explain how to implement discussion self-grading
- Examine results from a study that investigated learner perceptions of discussion self-grading in the online environment.

What is Discussion Self-Grading?

- Empowering students to assess their own discussion performance through use of guidelines (rubric) using reflection and reflective learning in the process.

Why-Logistics of instructor grading

- Time consuming
- Volume
- Disproportionate workload
- Accuracy-painstaking/difficult/frustrating
- Unhappy learners if not accurate
- Learners not reading/using rubric
- Learners not reading/using feedback

Why-Theory: **Andragogy**

- **Andragogy:** The theory of how adults learn
- Principles are learner-centered, embrace learning circumstances unique to adults (Knowles, 1984).
- Self-directed adult in charge of own learning (Knowles, Holston, and Swanson, 2015)
- Differentiated from **Pedagogy**: theory of how children learn: teacher in control & evaluates all learning learner is submissive & dependent on teacher.

Andragogy Principles (Knowles, Holton, and Swanson, 2015).

Principles of Andragogy-Adults:	Application to self-grading
1. Need to know why, what and how	Provide rubric & faculty explanation
2. Autonomy and self-direction	Self evaluation is a characteristic of self-direction Self-evaluation=self-directed, autonomous
3. Prior experiences serve as a resource for learning	Learn from self-reflection during the self-assessment process and in turn this experience serves as a resource for future learning. Reflect back on what was done right and areas to improve.
4. Learn best when timing right and are ready	Several day window for posting, several day window for the self-grading-busy adults
5. Problem-centered	Application of the rubric, areas for growth
6. Intrinsic value and personal payoff are motivators for learning	Values: learning, doing well and improving work. Motivating factors: learn from accomplishments and mistakes, earning a good grade, successful course performance.

Why-Reflective Learning

- **Reflection:** introspective examination and evaluation of experiences, beliefs, knowledge, oneself, and practices, intent of improving the future (Kember, McKay, Sinclair, & Wong, 2008).
- **Reflection:** Critical analysis of an experience with the goal of making positive changes (Bulman 2008) .
- Learning from past experiences is a principle of Andragogy
- Self-grading process uses reflection
- Important skill for learning, problem solving, life, and career: helps improve performance/practice

How, Step-by-step implementation

1. Create a rubric
2. Create a self-grading quiz
3. Inform learners

Step 1: Create a Rubric-Our Criterion:

1. Spelling, Grammar and Sentence Format.
2. Discussion Participation Timeliness and Interaction
3. Content of Initial Posting
4. Content of Responses to Others' Postings
5. APA format

Discussion Self-Grading Rubric

By: Laura Schwarz, DNP, RN, CNE ©2014

CRITERIA	Points Possible
Spelling, Grammar and Sentence Format.	
Sentences are well organized, complete and free of spelling and grammar errors. (Composed in a word document and used spell and grammar check for errors before posting to help ensure this)	1
Sentences are well organized and complete but some grammar and/or spelling errors (2 or less per paragraph)-i.e. did not use spell and/or grammar check	.75
Sentences are complete and comprehensible, but organization needs improving to present a coherent argument or statement and/or has grammar and/or spelling errors (3 or more per paragraph)	.5
Sentences inadequate organization/structure, several grammar and/or spelling errors; run-on sentences	0
Discussion Participation Timeliness and Interaction	
Makes postings on at least two different days (Wed initial post due by 11:59PM, Sun. response to two other people due by 11:59PM). Responds to at least 2 peers' postings and reads all posts in assigned group	1
Late first post and/or posts everything 1 day only. Responds to at least 2 peers' postings and reads all posts in assigned group	.75
Responds to only 1 peer's posting	.5
Does not reply to or provides minimal comments and information to other participants	0
Content of Initial Posting	
Initial posting is clear and concise, completely addresses all parts of the discussion, and demonstrates that the course content was reviewed, analyzed, understood and well synthesized. Content was applied through use of relevant examples. Posts by 11:59PM Wed.	1
Initial posting reasonably clear and concise, addresses most, but not all of the discussion, and demonstrates sufficient understanding, analysis and application of the content through use of examples. Posts by 11:59PM Wed.	.75
Initial posting shows superficial understanding and analysis of the content, or is limited to substance that could be derived from others' postings, and/or late initial post	.25
No initial posting, or discussion was not related to the content.	0
Content of Responses to Others' Postings	
Response to others' postings advances discussion such as: critical analysis or another interpretation of posted idea, provide example(s) to illustrate post, provide additional information/explanation on the topic, provide additional resources (e.g. a journal article or URL), reflect on the content in the context of your practice, discuss how you might apply something you learned in the post to your practice, share a related experience from work or life	
Response to others' postings incomplete (i.e. less than 3 sentences) and/or superficial	.5
Response to others' postings limited to agreed or disagree	.25
Does not respond to others' postings	0
APA Format	
Provides evidence-based, scholarly resources to support one's position on the posed topic or idea; resources are correctly & accurately presented in APA Format as cited in text and referenced at the bottom of the discussion	1
Provides evidence-based, scholarly resources, but uses incorrect APA Format in text citation and/or at the incorrect APA format for referencing at the bottom of the post	.75
Does not cite sources within the post, but does provide scholarly references at the bottom of the post	.5
Provides no scholarly reference to support position	0

Example of One Criterion

Discussion Participation Timeliness and Interaction	pts
Makes postings on at least two different days (Wed initial post due by 11:59PM, Sun. response to two other people due by 11:59PM). Responds to at least 2 peers' postings and reads all posts in assigned group	1
Late first post and/or posts everything 1 day only. Responds to at least 2 peers' postings and reads all posts in assigned group	.75
Responds to only 1 peer's posting	.5
Does not reply to or provides minimal comments and information to other participants	0

Step 2: Self-Grading Quiz

- Use quizzing tool
- One quiz per discussion (e.g. 1 for each unit/week)
- Create one question for each criterion-for our quiz, there are 5 questions
- Automatic Grade
- Auto-export to “grades” so grade populates there after student completes self-grading

Example

Stem

Which of the following best reflects your participation in discussion according to the rubric?

Options with
corresponding
points

- a) Makes postings on at least two different days (Wed initial post due by 11:59PM, Sun. response to two other people due by 11:59PM). Responds to at least 2 peers' postings and reads all posts in assigned group **(1 point)**
- b) Late first post and/or posts everything 1 day only. Responds to at least 2 peers' postings and reads all posts in assigned group **(.75 point)**
- c) Responds to only 1 peer's posting **(.5 point)**
- d) Does not reply to or provides minimal comments and information to other participants **(0 points)**

Tips

- Set parameters so learners can start the discussion grading when discussion begins and have it close within a few days after the discussion closes
- Click “display in calendar”-helps as reminder
- No time limit
- Allow Unlimited Attempts (in case of mistakes)
- Click “last attempt” under “overall grade calculation”

Quiz Item in D2L Brightspace

When taking the question, it would appear as:

Which of the following best reflects your participation, timeliness and interaction in discussion according to the discussion Rubric?

- ☐ a) Makes postings on at least two different days (Wed initial post due by 11:59PM, Sun. response to two other people due by 11:59PM). Responds to at least 2 peers' postings and reads all posts in assigned group (1 point)
- ☐ b) Late first post and/or posts everything 1 day only. Responds to at least 2 peers' postings and reads all posts in assigned group (.75 point)
- ☐ c) Responds to only 1 peer's posting (.5 point)
- ☐ d) Does not reply to or provides minimal comments and information to other participants (0 points)

Quiz Item Graded

When grading the question, it would appear as:

Which of the following best reflects your participation in discussion according to the discussion Rubric?

-  ☒ a) Makes postings on at least two different days (Wed. initial post due by 11:59PM, Sun. response due by 11:59PM). Responds to at least two peer's postings
-  (75 %) ☐ b) Late first post and/or posts everything 1 day only. Responds to at least 2 peers; postings
-  (50 %) ☐ c) Responds to only 1 peer's posting
- ☐ d) Does not reply to or provides minimal comments and information to other participants

Step 3: Inform Students & Explain

- Clear instructions attached to the grading rubric
- Faculty-led live web-conferencing instructions or “how-to” video instructions
- Explanation for learners on the importance of developing the skills of self-reflection & self assessment
- Let them know you will be auditing each week (helps with honesty).

Talking points for informing learners

- *Andragogy, reflection & self- growth concepts*
- *You will be grading your own discussions each week after you have completed discussion (through “quiz” in d2L).*
- Please read and understand the entire rubric, this will impact your discussion grade
- Be honest, I reserve the right to change your grade, and if I find that your grade is significantly “inflated,” I will change it to “zero”.
- “Practice” Discussion Self-Grading Quiz
- Due date for each & reminder

Results-Anecdotal

- Over 600 of our students have used so far
- Discussion quality improved over instructor grading, particularly after the first week
- Students were honest & accurate
- Student verbatim comments positive
- Most students completed the discussion self-grading before the quiz “closed” but a few did not and asked the instructor to re-open or post score for them

Student verbatim anecdotal responses

- Grading our own discussions is very nice. I feel like then I don't just fill my discussions with a bunch of crap to make it look longer.
- The self-grading was a great way for students to learn
- Self-evaluation opportunity (was a course positive)
- Self-grading our discussions was more beneficial than I expected it to be! It kept me accountable; who wants to have to take points away from themselves? :)

Study

- IRB approved, anonymous, voluntary
- AY 2014-2015
- **Purpose:** Determine nursing students' general perceptions of discussion self-grading, and their specific perceptions of the effectiveness of discussion self-grading

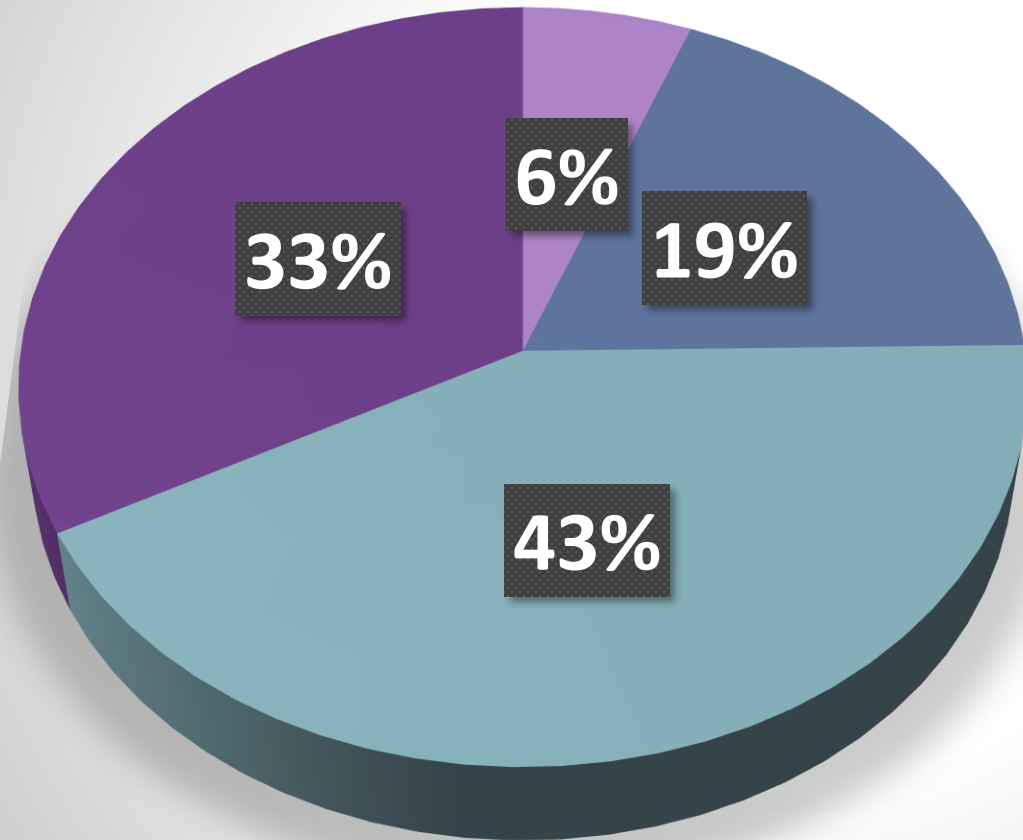
3 Constructs

1. **application** of grading rubric and quiz tool
2. **analysis** of their self-grading
3. **achievement** in online discussions related to assessing own work

Demographics

- N=57
- Mean age=31.87 (range 19-54)
- Program
 - 8 pre-nursing (14%)
 - 47 RN-BSN (84%)
 - 1 “Other”-Allied Health (2%)
- Have used a self-evaluation rubric prior
 - 17 yes (30%)
 - 39 no (70%)

Class Standing, N=54



- Freshman
- Sophomore
- Junior
- Senior

Application Subscale

Question	Mean (scale of 5)	SD
1. The rubric used in the discussion self-grading quiz was straight forward and easy to follow	4.63	0.64
2. The discussion grading rubric allowed me to critically assess my discussion postings for evaluation	4.42	0.80
3. The self-grading quiz provided clear directions.	4.65	0.69
4. The self-grading quiz grading criteria were fair.	4.51	0.62
5. The self-grading quiz grading criteria were easy to understand	4.60	0.65
6. The self-grading quiz was well organized.	4.61	0.62

Analysis Subscale

Question	Mean (scale of 5)	SD
7. I was honest in grading my own discussions.	4.75	0.43
8. I was an active participant in grading my own discussions.	4.68	0.51
9. I used reflective thinking in grading my own discussions.	4.28	0.73
10. I thought of ideas related to new posting knowledge	3.79	1.06
11. I thought of ideas related to peer responses	3.84	1.11
12. I applied analysis skills related to new posting knowledge	3.93	0.92
13. I applied analysis skills related to my responses	4.12	0.80
14. I discovered something I had not known before	3.35	1.16
15. Provided an opportunity to reflect on the quality of my discussion postings.	4.26	0.82
16. Provided an opportunity to reflect on the content of my discussion postings.	4.21	0.89

Achievement Subscale

Question: The discussion self grading..	Mean (scale of 5)	SD
17. motivated me to improve my discussion postings.	4.18	0.98
18. helped me to understand what to include in my initial discussion posts.	4.40	0.92
19. helped me to understand what I should be including in my responses to others' discussion posts.	4.35	0.90
20. motivated me to use spell check before submitting my discussion post to the discussion board.	4.35	0.88
21. motivated me to proof my posting before submitting my discussion post to the discussion board.	4.42	0.80
22. motivated me to post on time.	4.42	0.75
23. motivated me to post more than one time per week.	4.30	0.87

Construct Results Summarized

- 1) the rubric and self-grading quiz are clear, fair and easy to apply
- 2) learners are honest and use reflection in critical self-assessment of discussion performance
- 3) the rubric and process motivate and assist learners in improving their discussion performance.

Qualitative Results

- **Theme 1:** Good/great idea, makes learner look at own work, put in more time, effort
- **Theme 2:** Rubric was helpful/great guide for making sure cover all areas to receive full credit
- **Theme 3:** Worried about other learners' honesty, learners don't know what grades other students are giving themselves

Limitations/Recommendations

- Few studies on the topic
- Evidence from one study
- Need more studies with different programs & populations
- May not work well for those in high school or just out of high school (adjusting to adult learning)
- Next study look at instructor perceptions also (student honesty & accuracy)

Sharing & Results of Others

- Regional & International Conferences
- Local Presentations
- Word of mouth & webinars
- Publication Aug. 2015 in *International Journal of Instructional Technology and Distance Learning* (Schwarz & Leibold, 2015)
- Met with reception, enthusiasm, occasional nay-sayer
- Several faculty in different MNSCU facilities, MN and beyond have started using.
- Popular in nursing programs/courses

What Others are Saying

- BSU RN-BS Nursing Faculty:
- I found self-grading was quicker.
- I did a quick review of the surveys in my four courses. Most of the responses were in the agree/strongly agree categories (80 to 93%) with some neutral and a few disagree/strongly disagree. It seemed that it was a useful process for developing their discussion postings and some liked having the opportunity to self-grade.

What Others Are Saying

- Dean & Professor, College of Business, Education and Professional:
- Used in all the Department of Nursing courses due to the successful outcomes for learners.
- Adult learning principles ground the Discussion Self-Grading project and promote learner self-reflection, introspection, and writing improvement.
- Has allowed learners to develop their skills in reflection in order to improve their thinking and writing skills.

What Others Are Saying

- SMSU Nursing Faculty:
- Unique method to improve the quality of discussions
- Resulted in discussions that demonstrated a higher level of synthesis and met grading rubric criteria more completely.
- Some resistance from students was anticipated, as well as the possibility that students would artificially inflate their scores, these challenges were not realized. Students grasped the process readily following a guided orientation. Students understood that the professor was following their discussions and graded their own discussions accurately.
- Students are learning how important self-reflection is to their own learning process.
- As a faculty member, I am no longer writing detailed critiques that seemed to result in minimal improvement in student writing. Rather, more time can be devoted to activities that facilitate student learning and professional growth.

What Others Are Saying

- SMSU Nursing chair/faculty member:
- Addresses an important student need to encourage reflective learning while developing student skills of self-analysis and introspection
- Empowers students to analyze and reflect on their discussions
- Increase in student satisfaction and decrease in student frustration, increased attention to detail in assignments
- Exceptional way to address an important student need to immerse students in their own learning experiences.
- Increased understanding of assignments with increased depth of discussions

Conclusions

- Effective and efficient
- Discussion quality improves
- Self-rewarding when students do well
- Immediate feedback (no need to wait for instructor)
- Instructor should “spot-check” discussions/grading

References

- Bulman, C. (2008). Chapter 1: An introduction to reflection. In. Bulman & Schutz (Eds.), *Reflective Practice in Nursing*. (4th ed.). Oxford: Blackwell Scientific Publications.
- Kember, D., McKay, J., Sinclair, K., & Wong, F. K. Y. (2008). A four-category scheme for coding and assessing the level of reflection in written work. *Assessment & Evaluation in Higher Education*, 33(4), 363-379. doi: 10.1080/02602930701293355
- Knowles, M. S. (1984). *Andragogy in action*. San Francisco: Jossey-Bass.
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015). *The adult learner: The definitive class in adult education and human resource development*. (8th ed.). New York, NY: Routledge.
- Schwarz, L. M. & Leibold, N. R. (2015). Online discussion self-grading innovation using the quizzing tool. *International Journal of Instructional Technology and Distance Learning*, 12(8), 41-49. Available at http://www.itdl.org/Journal/Aug_15/Aug15.pdf