## GRADING AND MOTIVATION IN ALEKS

## Grading Best Practices

There are many different ways to assign a grade for students working in ALEKS. Following are some ideas and examples of possible ways to assign a grade. These are just examples; they are not meant to be used in a prescriptive manner. Use these ideas to begin a discussion regarding appropriate grading strategies for your school/district.

Please keep in mind...

- Set attainable goals for students. Involve students in the process and encourage them to take ownership of their learning.
- Communicate goals clearly to both students and parents
- Learning rates (topics learned per hour of use) may slow down as students progress through the course material since the topics become more complex and challenging. For this reason, goals based on topics learned per week may need to be adjusted throughout the school year.
- Since topics in some portion of the course may be more challenging, rates of progress toward mastery (as shown in the Progress Report) will vary over time.
- For students performing at or near grade level, we recommend at least one hour of usage in ALEKS per week. For students who could benefit from additional support or intervention, we recommend at least three hours of usage per week.


## Weekly Grading

## Time and Progress (based on Time \& Topic Report)

## Part One-Time:

In this example, the instructor's time goal for the students is 3 hours per week. Focusing on the time portion of the report, we see that John has spent 2 hours and 6 minutes in ALEKS over the selected week.


Since the goal was 3 hours, we will need to figure out what percentage of the goal John achieved:

1. Convert all time to minutes: 3 hours $=180$ minutes $/ 2$ hours 6 minutes $=126$ minutes
2. Divide the actual time by the goal time to calculate John's time score: $126 \div 180=70 \%$ or 7 points.

Note: Time in ALEKS does not necessarily reflect how much work a student has completed. For this reason, it is important to grade on student progress as well.

## Part Two-Progress:

The instructor has set a progress goal of 12 topics this week. We will use the report to compare John's progress with this goal.

| Click on the student name to view a detailed report. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Time | (Num | of topic | mastered | umber of | pics at | ted) |
| (All | Name (Login\|Student Id) | Total time in ALEKS (hrs) (i) | Last Login | Total Time (for date range) (i) | $\begin{aligned} & \text { Mon } \\ & 04 / 27 \end{aligned}$ | $\begin{gathered} \text { Tue } \\ 04 / 28 \end{gathered}$ | Wed 04/29 | $\begin{aligned} & \text { Thu } \\ & 04 / 30 \end{aligned}$ | $\begin{gathered} \text { Fri } \\ 05 / 01 \end{gathered}$ | $\begin{gathered} \text { Sat } \\ 05 / 02 \end{gathered}$ | $\begin{gathered} \text { Sun } \\ 05 / 03 \end{gathered}$ |
| 1 | Alberti, Bill E. | 45h 46m | 05/07/2015 | $\underset{(17 / 17)}{2 \mathrm{~h} 21 \mathrm{~m}}$ | $\begin{aligned} & 44 \mathrm{~m} \\ & (5 / 5) \end{aligned}$ | $\begin{aligned} & 18 \mathrm{~m} \\ & (3 / 3) \end{aligned}$ | $\begin{aligned} & 43 \mathrm{~m} \\ & (4 / 4) \end{aligned}$ | $\begin{aligned} & 15 \mathrm{~m} \\ & (2 / 2) \end{aligned}$ | $\begin{aligned} & 21 \mathrm{~m} \\ & (3 / 3) \end{aligned}$ | - | - |
| 2 | Alberti, Jill E. | 67h 40m | 05/07/2015 | $\begin{aligned} & 4 \mathrm{~h} 06 \mathrm{~m} \\ & (11 / 21) \end{aligned}$ | $\begin{aligned} & 46 \mathrm{~m} \\ & (3 / 4) \end{aligned}$ | $\begin{aligned} & 34 \mathrm{~m} \\ & (2 / 3) \end{aligned}$ | $\begin{aligned} & 34 \mathrm{~m} \\ & (3 / 3) \end{aligned}$ | $\begin{gathered} \text { 1h 17m } \\ (0 / 7) \end{gathered}$ | $\begin{aligned} & 55 \mathrm{~m} \\ & (3 / 4) \end{aligned}$ | - | - |
| 3 | Baker, John A | 46h 48m | 05/07/2015 | 2h 06 m <br> 11.11) | $\begin{aligned} & 11 \mathrm{~m} \\ & (2 / 2) \end{aligned}$ | $\begin{aligned} & 16 \mathrm{~m} \\ & (2 / 2) \end{aligned}$ | $\begin{aligned} & 30 \mathrm{~m} \\ & (4 / 4) \end{aligned}$ | $\underset{(3 / 3)}{27 \mathrm{~m}}$ | $\begin{aligned} & 42 \mathrm{~m} \\ & (0 / 0) \\ & \hline \end{aligned}$ | - | - |

Note: Total time is based on the date range selected for the report.
Since the goal was 12 topics and John learned 11 topics this week, we'll divide 11 by 12 to find his score: $11 \div 12=92 \%$ or 9 points.

## ALEKS Notebook

Points may be awarded periodically for students keeping an ALEKS notebook.

## ALEKS Worksheets

Points may be given to students for completing an ALEKS worksheet or for the number of questions they answered correctly. Worksheets can also be used as extra credit or as a way for students to make up weekly time requirements for $A L E K S$. (Note that worksheets do not count toward progress on the student's learning path. We encourage students to work on-line in ALEKS whenever possible rather than completing worksheets.)

## Monthly or Periodic Grading

## Progress Retention Grade

You may choose to give a periodic grade based on the amount of learned information retained at the next Knowledge Check. Use the Progress Report for the individual student to calculate.

For example, on June 11th, Kai completed a Knowledge Check showing mastery of 259 topics in this course. He learned 21 new topics before his next Knowledge Check on June 29th.


* Note: Make sure your report is showing Topics.

1. This number indicates topics mastered on the most recent Knowledge Check.
2. These numbers indicate topics mastered on the previous check and topics learned since the previous check. Together they represent the total topics needed to earn $100 \%$ retention.

To calculate Kai's Progress Retention Grade, we would apply the following formula:
Most recent Knowledge Check $\div$ (Previous Knowledge Check + Topics Learned Since) Example from above: $275 \div(259+21)$ Retention Grade:

## Ideas for Motivation and Fun in the ALEKS Classroom

## Motivating the Individual Student:

- Each ALEKS topic learned equals a point or "buck" that can be used to earn privileges or purchase school supplies or goodies in the school store. (Follows the incentive program already in place in classroom/school.)
- Students who achieve goals are highlighted in school announcements and/or assemblies.
- Students who achieve goals are recognized in the school newsletter/website.
- Personal pizzas delivered one day for lunch for students who reach their topic goal.
- A special prize/award/recognition for students who spent the most time in $A L E K S$ during the week/grading period.
- Homework pass-If a student meets the end of quarter/month/week goal, they get a "pass" on a specific type of homework assignment.
- Challenge of the Day/Week Winner-Set a challenge for that day/week, and whoever completes the challenge wins a small prize.
- Head to Head Challenge-Pair up students of similar ability levels and encourage some friendly competition to see who can gain the most topics in a particular period of time. Change pairs each week.
- ALEKS Madness-Extend the head-to-head challenge into a double-elimination tournament. Think "March Madness" only with math instead of basketball!
- ALEKS Stars-Put up a sheet and allow students to add stars to the sheet next to their name as they complete topics/assignments.
- ALEKS Notebook Rewards-It is recommended that students keep a notebook organized by date and/ or by pie slice to work out their math problems. Instructors can motivate students to use a notebook by collecting them for credit, prizes, and/or recognition. Consider having students use the same notebook to journal each week about their progress within ALEKS.
- Students who complete their weekly topic goal before Friday get to spend more time "playing" in QuickTables on Friday.


## Motivating the Whole Class or School:

- Assign points for topics learned during a specific time period. Provide whole-class incentives for reaching a certain number of points.
- Classroom bulletin board (using paper plates):
- Color In individual pie charts.
- Color in class pie charts-Different students are selected to color in different areas.
- Tie the bulletin board into topics taught that week to reinforce ALEKS classroom connection.
- Classroom bulletin board—The Pie Club (50 topic pie, 100 topic pie, 200 topic pie): students move their pies from club to club as they add more topics.
- Create a friendly competition between classrooms-The class with the greatest improvement or most complete pie gets a special recognition or reward.
- Hit topics learned goal for specific time period = pizza party for the class.
- If the class hits the "topics learned" goal for the grading period, the instructor, principal, coach, etc., takes a pie in the face.

