

Action Research Report

Extrinsic Motivation – A Factor Of Assignment Completion

Andreas Johansson

MAT Program

Kent State University

Spring, 2007

For

Dr. Hutchison

Kent State University

What Was My Research Interest?

What Was My Teacher Question?

During my time as an observer in the classroom in the fall of 2006, I began to notice various student behaviors such as working only for points, inside as well as outside the classroom. The students would only perform if they could see an immediate return in favor of them, i.e. points toward their final grade in whatever class they attended. As such, it began to intrigue me whether or not there would be a point (on a graph) where the students would begin producing the most amount of work with minimal points given back from the teacher. My teacher question, which will later be developed into a researchable question, could be stated thusly: How can, and will, grades or the promise of points impact student performance inside and outside the classroom?

Why Was I Interested?

Intrinsic motivation is very interesting, but what struck me as even more interesting as a beginner teacher, was the role of extrinsic motivation, especially in the form of points for work, or any kind of graded performance in or outside the classroom. Some students possess a strong intrinsic motivation, and work not for points or grades but for themselves. This usually produces strong performances when it comes to projects, tests, papers, and other evaluations available to the classroom teacher. They will usually also see the value of the teacher and his or her teaching, rather than view it as a necessary boredom interrupting their already busy social lives. As such, before fully immersing myself into the world of intrinsic motivation, and how it may benefit my students and my classroom, I found it even more interesting to study extrinsic motivation.

Students who, for the most part, go to school on a regular basis do possess some intrinsic strength based on the fact that they decide to show up for school. However, for most of those

students, depending on course levels, producing results based on their own inner drive becomes very difficult as they see little to no reason why they should even attempt something that (in their minds) they will never use again. These students may cause an alarming sense of failure for teachers as we have a hard time reaching them with our teaching, and an even harder time getting them to work for themselves, rather than the grade only. It becomes even worse, in some cases, where students are forced to take a certain subject, government for example, which is mandatory at most schools.

How then to motivate these students? Well, an easy way out becomes giving them points for everything they do in the classroom or at home. Answering questions, now, are not used for furthering a student's thinking, but rather a pure opportunity to score points for a grade. Students that are in these classrooms often have been stimulated for years to respond only when given the chance to score, rather than when only given the chance to expand their knowledge. Hence, the answers to those questions often do not matter to the student, and the teacher struggles to keep a decent average on evaluations.

Now, what interested me most was the mix of intrinsic and extrinsic factors when it came to deciding student levels of participation, or completion of assignments. All students possess and are motivated by both intrinsic and extrinsic variables, and as such must decide where their equilibrium lies in producing for a grade. Do they perform only for points, or do they perform for themselves? That became the question, and furthermore, what could teachers do about it? Can we as designers of curriculum and instruction find accurate enough areas between intrinsic and extrinsic motivation which will indeed maximize student performance and production in our classroom environment? This was where my research interest lay and where my efforts would be spent.

What Did I Already Know?

Students are willing to become lazy if not prodded to take action on some, if not all assignments. Furthermore, some students will choose to simply not turn assignments in, such as journals or other homework, if they feel they will not be summarily rewarded, or the perceived point value for the assignment in question is not such that they bother to produce anything. In short, if students cannot see the clear benefits, in direct point value (read grade), to themselves personally, they will not produce or perform. This creates a huge problem for teachers, when we assume, most likely naïvely, that students are in school to learn, and as such, want to learn.

Students in my classes during my observation period were asked to complete a current events journal of about one typed, double-spaced page per week. It was an assignment that I had created, and one I had borrowed almost directly from a class at Kent State University in the History Department. It was worth ten points per assignment, and we graded them very liberally. As such, if a student turned it in, it was an easy ten points. However, what I found out was that ten points was not high enough for some students to actually bother doing the assignment. Some simply choose to disregard it altogether and seemed not to care. In the end, they figured, ten points per week would not do much to impact their grades. However erroneously they had calculated that assumption can be debated, but those same students found themselves begging for extra credit at the end of term. Unfortunately for them, my cooperating teacher does not award extra credit assignments unless all other assignments have been completed. Needless to say, their behavior caused a major upset as they had failed to properly plan for their final grade down the road.

Ultimately, ten points per one typed page seemed to be not enough for most students to engage and produce. Hence, when creating this semester's syllabus and graded opportunities, I

modified the point values as well as gave each student a copy of all assignments due throughout the semester.

What Do Others Know?

In research it is always necessary to find out what others know, and where others have already researched in depth as to avoid pit falls, or possible repeats of writing. Researching external motivation turned up various, and copious, sources on motivation. Many economical models included studies in incentives, especially where the subjects were treated to a pay off as a means to perform a certain task. Fehr and Falk (2001) show that incentives themselves may not always be what lie behind true motivation in studied subjects, rather other factors play a huge role in determining whether or not a subject will perform a task. For example, grades may not be the single motivating factor in a student's choice to perform when factors such as the avoidance of social disapproval play a larger role in that student's decision (p. 22). Nickerson (1943) describes work in more industrialized terms, and put work with wage on an even playing field, where the laborer (and in these studies the student) is expected to work according to set schedules regardless of expected payoff or return of investment. For us, studying production and completion by students in a secondary setting, the students then should produce without the expectation of payoff, or grades. Nickerson goes on to add, though, that improvement upon work shall never be hindered, and that only when a worker is truly invested in his work shall he reap the benefits of labor. This rings true in the classroom as well, where students need to invest themselves emotionally and sometimes physically for them to reach their pre-destined goals or grades.

On the matter of debating extrinsic versus intrinsic motivation, the report from the Institute for Academic Excellence (IAE) (1997) suggests that historically the two have been

pitted against each other. The report cautions against using extrinsic motivation in dealing with students as to avoid having whatever behavior cease as soon as the extrinsic factor is removed from the student's environment (p. 2). However, the report goes on to say that the two, extrinsic and intrinsic, are located on a continuum, rather than polar opposites (p. 2). The two relate so closely that they are inseparable, and both are valid parts of a student's motivational factors in the classroom. Oldfather and Dahl (1995) suggest that intrinsic motivation stems from the learner's social experiences, where the learner's drive to succeed in a materialistic world forces the subjects to motivate themselves from within. Furthermore, extrinsic motivators are encapsulated in the learner's drive to succeed, and to avoid certain negative consequences, much like the suggestions from Fehr and Falk (2001). This would result in a mix of motivating factors when it came time to determine whether or not to complete an assignment, and as such, make the distinction between which type of motivation was used even harder for the lay researcher.

In addition to above mentioned research on intrinsic and extrinsic motivation, some authors claim that it is possible to foster intrinsic values in students using extrinsic motivators throughout coursework and classroom interactions, such as positive reinforcement, rewards, and encouragements. In fact, Gambrell and Marinak (1997) suggest that "When incentives are linked to the desired behavior and promote engagement in the desired behavior, motivation can become self-determined and can foster high-quality learning" (p. 215).

This then, made my research even that much harder, as the line between the two sets of motivation no longer seemed to be clearly drawn, rather the two exist on a scale of gray with no clear boundaries, perhaps blending together at times. Extrinsic motivation, in fact, can lead to intrinsic motivation, and cataloging what type of motivation the students are using, and by what they are motivated becomes extremely difficult. However, for the purposes of clarification, this

research would have to keep itself on a single path of focus, as it did not deem itself ready to tackle both, and how that might relate to student production and completion of work.

What becomes of grades then, in terms of currency for the students to share and spend? Birney (1964) suggests that a grade “assumes the added role of incentive to behavior, and is endowed by society with the value of currency, redeemable in public honors, admission to further training, and consideration for employment opportunities” (p. 96). If this is true, then grades are equal in status to cash money among students, and as such, the above study on workers and their production (Nickerson, 1943) becomes hugely important in understanding why and how students are motivated to produce. Cash and grades alike are spendable in society, each with their own special set of deterministic values and outcomes. Birney goes on to argue that grades have been studied in-depth as measures of achievement but ignored as social capital, and as stimuli to behavior (p.96). This information put this kind of action research in a whole new light, as it gives validity to its methods and subject in prior research, and will perhaps provide new angles on and often forgotten view of grades, production and completion. Students are, after all, more likely to produce if they see a direct beneficial outcome for themselves, and grades play a large role in that direct outcome.

However, research by Pestello (1987) suggests that we must take the social construct of grades into consideration whenever we study grades and the outcome they have on students. He suggests that based on the organizational settings (p. 414), students may be pre-determined by the teacher as to what kind of grades they are destined for. By supposing that a class will achieve according to a pre-arranged scale of grades, and communicating this to students, some students will simply own up to that arrangement, and produce accordingly. This creates an enormous danger area in research, as researcher bias plays a role, especially in action research where the

teacher also acts at the independent researcher and checker of validity throughout the research time frame. Furthermore, Pestello goes on to suggest that pressure by others (such as mentor teachers in this case, or peer advisors for beginner teachers) to grade assignments a certain way may sway students to perform differently than they would have in a neutral condition (p. 415). Pestello's work warns against this type of behavior but recognizes its inevitability as part of daily classroom routine.

When researching incentive based (externally motivated) behavior in students, it is always interesting to find examples of true incentive based manipulation in school children. As such, Lipe and Jung (1971) offer a description of stimulus manipulation from the field of experimental psychology. In their description, researchers were able to make students read or behave in certain ways using very simple stimuli such as fruit, cookies, and sandwiches (p. 251). One must of course take into consideration the environmental settings for this type of study, but it is interesting to note that a simple stimulus such as food can have dramatic outcomes in terms of production and completion, as well as behavior modification. It could probably be argued that if students were offered treats such as candy for every assignment they turned in, the overall completion and submission statistics would be close to 100 percent. Crespi's (1947) study on the incentive driven performance in the white rat concludes that food acts as one of the number one incentive mechanisms by which to gauge performance. Hence, incentives, such as grades, are very important to the human organism, even if only to produce for the incentive's sake, and not for the intrinsic values we as educators hope all students cherish and strive for.

One interesting note on grades comes from Lewis (1978) who wonderfully describes what happens when students are faced with not getting graded on assignments. Students, "regardless of their academic achievement levels, become angry and resentful" (p. 63). This aids

in understanding why so many students see grades and points as their only reason for performance, and why some educators wish to relinquish grades altogether in hopes of producing not only better students, but also better adjusted classrooms and learning environments (Please see Appendix F for a further discussion and field notes regarding this type of students as experienced by the author directly). It is with these studies and writings in mind that I would now engage in action research in order to perhaps contribute a few lines of my own to the ongoing motivational debate.

What Was My Researchable Question?

With all of the above in mind, when it came down to creating a question narrow enough for research, yet broad to allow additions during the project, I crafted a question which I believed would suit the purposes of this study. The mix between extrinsic, as well as intrinsic motivation and the levels of student participation and production generated the following: *How could I, using extrinsic motivational variables, find correlation and balance among points awarded, student involvement, and the amount of work turned in for evaluation?* This question steered me in the right direction, as well as provided ample space for additives that emerged as the research progressed.

Interventions

Who?

I performed my study in only one of the two government classes I taught, namely eighth period. They served as the basis from which I collected data and analyzed behaviors. Additionally, I taught three other classes where I gave similar assignments, so I used those students for further data in order to gain a broader range in which to measure performance as well as check my hypothesis against.

The class consisted of 22 students, males and females. The majority of the students were juniors, with a mix of some seniors. The government class is college-prep track, and most of the students attend other college-prep classes throughout the day. I held high expectations for them, and they met these expectations with a high rate of success. As this study did not address any race-related issues, the racial mix in the classroom does not matter, although the majority of the students are Caucasian. The income levels in the area range in the mid to mid-high levels according to the latest SES data from the national census reports. Most students in my class have a driver license and either drive themselves or get a ride to and from school. Most of the students in my class agreed they will go to college, but may not have decided where yet as most are juniors. One will definitely join the Armed Services after high school.

When?

The research process was conducted throughout the entirety of my student teaching, dating between January 22nd and April 20th, 2007. I began to collect data and evidence at the beginning of the semester, and employed interventions throughout the time period by modifying already existing assignments, or creating new ones to fit the student population in the classroom.

Where?

This study took place in an eleven and twelfth grade classroom in a suburban high school located in Northeast Ohio. The school houses about 1400 students in four grades which come from a combination of cities and villages in the surrounding area. The school district enjoys steady growth with a recent influx of inner city students from a major urban area in northern Ohio.

What?

As an intervention, I planned on simply modifying the various, already planned, assignments for my students in such a way that they would be more likely to participate and complete the assignment. For example, a WebQuest that was worth 20 points last semester when I taught it during my observation period was worth 50 points this semester in order to test whether or not point value does matter. It is interesting to note here that there seems to be a scale by which the students operate, that is fairly common to all, as they will raise the same kinds of, or at least similar, concerns when it comes to new assignments.

The interventions were ongoing, and as acting evaluator and observer of the action research I made most of the decisions during the planning phase, but chose to adapt assignments during, or even after their execution. As such, the students' behavior was observed, and modified, via the alteration of their point expectation. For example, in the middle of an in-class assignment that was scheduled to take two days, announcing to the class that they had an extra day in order to complete the assignment impacted their immediate reaction and motivation to keep working. Conversely, telling them they had half the time produced very different results. I found that by pressuring students sometimes produced better results than when they appeared to have ample time. Either raising or lowering their, the students', level of concern seemed to have drastic impact on their performance.

How?

As described above, the assignments given to students in the subject class were modified in order to gain information and insight into their external motivational factors as to why they may complete one task and not another. Students were given a syllabus at the beginning of the semester, and as such knew what was expected of them. Had I planned a more extensive research

project I may have left the syllabus out from one of the control classes, but felt that using one was key to my student teaching, my own teaching style, and for the students' benefit while in class with me. Nonetheless, some of the assignments were altered in order to test my theory against actual class performance, which upset some students. However, while some students saw this as a problem, others (I suspect most) would not notice due to lack of attention to detail, a healthy future outlook, and overall lack of semester long performance.

Documentation

In order to gather the most accurate data I used numerous sources and inputs, both from students and my fellow educators in the school regarding my research. Both methods as well as data were questioned in order to produce the healthiest data set with which to analyze and interpret trends in and outside the classroom. As such, there were a variety of methods by which to collect such data, and they are described here. In addition, samples of forms, journal prompts, etc are located in the Appendices.

At the beginning of the semester, in order to familiarize myself with the students in my classes, and to be better prepared for questions, problems, and classroom management issues, I administered a student inventory (Appendix A). This inventory covered areas of both school and personal nature for the students, and also allowed them to express areas of interest and disinterest among topics in school, or in a particular class. In addition, it asked questions of motivation where students were asked if they were willing to do their best on all assignments, and if they believed they were in charge of making all of their own decisions. This inventory has helped tremendously when researching student conflicts in the classroom, and classroom management issues. Additionally, it helped in making personal connections that have been extremely valuable

when forming close personal bonds with students in order to gain trust, performance, and personal satisfaction.

One of the ongoing assignments that I used to collect data was a weekly journal, or blog, due every Friday in all of my classes. The journals were short, needing only to consist of one typed, double-spaced, page in normal font. The students were handed a schedule at the beginning of the semester that listed all of the due dates for each assignment, as well as ten prompts on which to write each journal. Additionally, the students were asked to write five free journals, or free writes (from the language arts area – I created my assignment before knowing about free writes, hence calling them something else), that may cover any topic they choose, using the same requirements as above. The free journals were due at the end of the student teaching period, and students were reminded that they should not wait until then to begin writing and submitting them. In hindsight, however, the majority of the students did indeed wait until the very last moment, and email submissions went through the roof, as I had already left the school. The students had a choice of either turning the journals in in-class, or submitting via email to the teacher by midnight on the day due. Only a handful of students chose to use blogs on the internet in which case they were checked there for completion, negating the need for a paper copy. The journal prompts for the government class are listed in Appendix B. They do not include due dates, as that schedule was handed out separately, but journal one began on the first Friday of their 3rd grading period.

A survey instrument was constructed to gauge the effectiveness of the journals, and the students' affection for the assignment. This survey may be viewed in Appendix C, and will be discussed later in the Analysis portion of this paper.

Raw quantitative data were collected throughout the semester. As this project aimed to gather information related to completion of tasks and assignments, such data were tabulated continuously. The school district uses ProgressBook, and the reports from this database management tool were used to analyze completion rates, grade averages, and student participation grades (as concerned with external and internal motivation). A sample report from ProgressBook can be seen in Appendix D. Another, sometimes more useful report can be seen in Appendix E. This report shows the missing assignments in the subject class. All names have been protected, and will remain as such throughout the study. Selected field notes, often in the form of an online blog entry, were used to gauge the researcher's validity and serve as insight into personal biases, thoughts, and concerns. See Appendix F for a sample blog entry, as well as expanded notes on students, discussions on behavior, etc. Other forms of collected data were added during the research period as deemed necessary.

Validity

Validity in action research is key, and must be for action research to become anything other than a wasted effort. As such, when planning for any action research project, and in this case studying external motivation in assignment point values, validity is necessary to both explain and make, literally, the research process valid as a project.

For my project, dealing with mostly statistical, but also some qualitative, data through journaling and surveys, I hoped to gain validity not only through the use of solid methodology (process validity), but also through descriptive validity as well as structural validity. I benefited from more sources as well, however for these purposes I focused on the above three as methods themselves for planning the validity question in action research.

I wanted to establish validity through solid methodology first, mainly by going about the research process in an ordered way, and keeping as good track of material, data, and journals as I could. Being organized is important to producing good methodology, and planning goes hand in hand with good methods. Keeping accurate records, notes, data, and other material throughout the action research process will help to establish this kind of validity.

Secondly, accurately describing my research was another aspect of creating validity. Being able to set up the study from a point of view where the reader understands the entire aspect of the action research was important to the project itself and to me as a researcher.

The last element is structural validity that I created by collecting multiple sources of data for my project. Journal entries themselves counted as one part, but also surveys, student inventories, test scores, journal scores, and data on submission would all count toward creating a stable measurement and strong validity. It is paramount to all research, especially action research, to be as careful as possible, especially in planning, but also in questions of validity, should one ever wish to publish research or other work. Setting high expectations and constantly reflecting on research and actions must be one of a researcher's main and prime goals. Validity, no less, tells the world you have done your work correctly and fairly, as well as kept to your own goals and promises in research, and as a teacher.

Additionally, democratic validity was established by working closely with peers and fellow educators in the building, as well as with the students. The faculty was very willing to aid in my research, and some students were interested in helping out as well. I used a few students in assisting me with survey creation, administration, and scoring. That way, they got some experience, I got immediate feedback, and we all benefited from the process. Working closely

with colleagues, professors at the University, and mentor teachers, democratic validity served as one more layer of defense against research scrutiny.

Analysis

When analyzing the information that has been gathered in the research effort, several new pieces of information have come up, as well as more questions have been formulated as a result of findings during the research effort. All of these will hopefully be addressed here, or in a supplemental paper or report on a later date. As always, it is difficult to estimate the amount of data, and the type of data, as well as what that new data may tell about the research effort as a whole, or in parts. This project has certainly awakened new areas of interest to the author, as well as created local discussion among educators, both at the subject school and on University level.

The research effort for certain set purposes has not allowed the author the time nor the effort to seek out more angles by which to address the stated problem, and perhaps this is a good thing. The author wished to mainly focus on data collected during the specified period of time, if only to limit page length and eventual discussion. The main table of data that is discussed and analyzed can be found in Appendix G, Table 1. The table displays data collected from the subjects during a nine-week period in the spring of 2007. As such, the data are only limited, and perhaps for neatness' sake, to the time span of the school's third grading period. The table lists the journal entries on top, the score achieved, the average scores for each assignment, as well as for each individual student. Additionally, the table is sorted according to overall weighted course grade in an ascending order, highest to lowest. On the bottom lists the amount of missing journals from each assignment opportunity, and the subject student that did not turn one in is marked by a 0 in the table. The table has been color coded to aid in detecting trends.

As only a limited amount of analysis will be performed and offered via this report, only the main points and trends will be discussed in detail. Several of the additional tables and figures are offered as a perhaps brief view into other, and highly interesting, areas of action research.

The first, and most obvious trend that was detected, and is displayed in Figure 1, is the fact that the amount of journal assignments that were not turned in kept increasing as time went on. The trend line that has been added in Figure 1 clearly shows, as well as predicts, what has happened, and what one may suspect will continue to increase, if the journal assignments kept going. Connecting the researcher's interest in extrinsic, as well as intrinsic, behavior coupled with assignment completion, it seems evident that the longer an assignment type is continued, the less likely it is that the majority of students will submit theirs. Should the journal assignment continue, more and more students would most likely, according to the predicted behavior, regardless of the fact that they would lose out on extrinsically awarded points, choose to not submit assignments. This in turn points to the fact that students may feel either bored with the assignment, or feel that they do not gain anything from completion. Of note here, when discussing and analyzing the trended performance of journal completion and submission, is that the students choosing not to turn assignments in are also the ones with lower grades in the class. As previously hypothesized, this may in fact prove that students that are such intrinsically motivated will submit assignments regardless of time, and or level or concern for extrinsic rewards. Or, those students at the top of the grade dispersion may very well completely focused and motivated *only* by promise of external rewards, i.e. grades. Please see part of the field notes in Appendix F for a further discussion of this theory.

Additionally, when analyzing the journal submission and completion data, one has to consider some of the data on an individual basis. At the bottom of Table 1, and as such the

lowest grade achievers in the subject class, it is easy to see that their submission schedule is almost equal to zero. Perhaps this data throw the rest off, however, it is interesting to have these two or three records in mind when discussing student behavior overall. Again, for a longer discussion on student behavior as it pertains to grades, see Appendix F and the field notes. However, there is still a clear and marked decrease in submission as well as overall average journal score.

The averaged journal scores, as noted in Table 1, decrease over time. In Figure 2 we see the average journal score as graphed over the nine weeks of the study. A trend line has been added here as well. The trend shows a similar result from that above, where the longer the time elapsed, the lesser the average score. Again, there are the students at the top and bottom that have consistent scores all throughout, but the middle-ground students tended to slip the longer time went on. Could this also show a decreased effort on their part? And is that perceived behavior as predicted by the data a decrease of effort due to boredom, energy as the semester wears on, or other events? The author would like to point out here that around week six, the subject school went on spring break, and assignment numbers six and seven were in and around that time frame. Perhaps the lackadaisical attitude noticed in the classroom and in the hallways during that time period translated into assignment completion, rate of submission, and level of effort put in assignments. This, however, is one of those other areas of study which this report unfortunately finds little room for at the present moment.

When considering the collected qualitative data, through a survey – see Appendix C, as a means by which to attempt to find the key to high or low motivation, and tie this to journal submission and completion as supported by the quantitative data, it is interesting to note some of the students' comments in regards to liking the weekly journal assignment. Several students, if

not the majority, expressed gratifyingly that they benefited from the assignment, and were able to deepen their knowledge and increase their reflective thinking behaviors. When asked on the end of class evaluation, see Appendix C, question five, whether or not they liked the writing assignments, students shared the following (selected responses): “Yes, I think it’s better than having homework every night... and it makes you think a little bit – it improves your writing skills,” or “Yes I did. It got me to think about my views and opinions and how to express them,” and finally “I think they helped me understand more about what we had learned in class.” These were some of the positive responses offered by the subject students. On the other hand, some students did not like the assignment: “[I only] sometimes liked them. I think they should of [sic] been every other week,” or “No, well... sometimes [I liked them] depending on if the topic interested me or not,” and lastly “No, it should have been a choice and extra credit.”

The second trend that can be identified without too much trouble is the fact that the majority of subject students did submit most assignments, and participated wholeheartedly. As such, one of the questions asked earlier on may have been solved. The question of points, and how points for an assignment, as an extrinsic factor, play a role in assignment participation and completion, and whether or not 20 points per one page assignments is enough, may have been answered by the above supporting data. Is it possible that the amount of points offered for this specific weekly journal assignment fell within the desirable and acceptable range for most students, in order for the majority to comply and submit an assignment? Perhaps, as the data certainly suggest, that point equilibrium has been located, or at least more evidence has been gathered toward a renewed understanding of what drives students to participate in classroom assignments. However, some of the qualitative data would suggest, as seen above, that this may not be the case, and simply students will, or will not, participate based on other reasons and

variable for which this study has not accounted for. As always in studying human behavior, one has to account for the unknown, and the fact that some students will behave according to a completely unknown, and perhaps non-displayed, and certainly in some cases non-recognizable, patterns.

Several quantitative efforts were made to track the relevance of classroom behavior and how it would affect the outcome on overall grades. These efforts can be seen in the remainder of figures and tables in Appendix F. Additionally, data were gathered and displayed on students' overall performance in the classroom, as well as performance within specific subgroups of work, such as projects, homework, tests, and classroom participation. This data suggest that there are connections between student motivation and performance, as well as links between overall participation and performance. Most of the students with higher participation scores also scored well in the class overall. This may perhaps be a coincidence, or simply a variable that others would take for granted. However, as a beginning teacher, it is both interesting and insightful to gather such data in order to become more familiar with student behavior in the classroom, and how best to alter assessment, assignments, and activities for all students. The tables and figures offered in Appendix F offer but the briefest of insight into this interesting world of student behavior.

In conclusion of the analysis part, and even though there are droves of data left to analyze more in-depth, as well as several other evaluative angles by which to dissect the known variables from the unknown, a basic understanding can be found among the numbers. What we know for sure is that student submission schedules seem to drop slightly throughout the semester, or as time goes by, and the level of care by which a student has written a journal entry drops – evident by the decreasing average grade overall. Additionally, students seemed to enjoy the assignment

overall, so there is certainly some already intrinsic offset among the studied subjects, as some students would have completed the assignment regardless of points awarded as extrinsic motivators. Several variables are left out however, and will perhaps be studied more in depth in another effort. Such variables include the connection between overall class performance and the willingness to perform on individual tasks, or whether or not a student's behavior and attitude, as well as classroom participation can be a single indicator of overall performance. Another area of study is measuring if, and how, it would be possible to focus more attention on any one particular assignment (feedback from teacher to student, individual conference about said assignment, etc) in order to affect overall class performance. These are only a few of the questions and areas that have come up during the analysis portion of this action research project. Many more are certainly left in the dark, and as some would suggest - that which we cannot observe, we cannot know. However, as is true with any research, and particularly with action research, that which you are looking for *you will almost certainly find* – however, you may also find things you were *not* looking for.

Democracy & Community

How Will These Actions Make Life Better?

Conducting in-class action research is very important to both students and educators. It is a good process for improving classroom practices, dealing with problem areas in education, as well as furthering the teaching craft in improving methodology, technique, and curriculum. My particular topic, extrinsic motivation as compared to student participation and completion of assignments, is perhaps less complex than others. However, as a new teacher I feel it is necessary to understand my students in their context rather than my own – that of a clearly intrinsically motivated student in higher education. In this light it becomes evident that all students are not

motivated by their own inner drive to succeed, but various other external stimuli play a large role in determining student achievement, participation, and assignment completion.

Understanding these elements of secondary students will clearly benefit both me and my students in the future as I will be able to better tailor instruction, curriculum topics, and assignment designs to suit the needs of my students, fellow educators, and community alike. Students are motivated by extrinsic factors, and we as educators must be aware of those factors and how they impact the lives of our students. Intrinsic motivation is very interesting, but understanding the basics first allows us to be better prepared to fill the need of all students, all the time. Students with plenty of inner drive will be motivated regardless, but not all students have been blessed with such aptitude. Our first priority must be to meet the need of all students, and as such, researching what gets all students motivated is imperative to educational success.

What Will I Do Next?

As this research project will not allow time to study external motivation in students more in-depth, I will continue to use this initial study as a tool and guide once hired as a full time educator. It is a good start in what I believe to be an essential part of teaching – to understand our students. As such, developing new and innovative ways in which to improve our education to all secondary students must be a top priority, and will be, for me. In the future, more emphasis will be put on intrinsic motivational factors, and that is fine. However, we as educators cannot afford to neglect those students who may not possess such skills or wants. Some students simply want to get through high school without doing much, or needing much from it. I have plenty of students now who (according to their beliefs) will not use most of their skills learned in high school, already have a job lined up, and are performing in the real world while waiting for school to be over. Those students are arguably hard to motivate using intrinsic values, and

understanding what makes them complete assignments, get decent grades, and succeed enough to receive a diploma is, and should be, important to all teachers. For some, it may be difficult to comprehend students' disinterest in a subject, as it is for me when teaching contemporary issues, but nonetheless, we owe it to the students to meet all their educational needs prior to letting them leave for good.

Ongoing reflection is necessary to make teaching enjoyable for both students and teachers. Leaving work each day feeling bad about a spoiled lesson or a difficult student will not work in the long run. Action research serves as the necessary, and convenient, tool by which to improve the classroom and learning environment. Ongoing research and tweaking of one's methods and curriculum is mandatory to good education. This project is a start in the right direction, and I look forward to continuing researching, adjusting, and altering my own teaching in the future in order to grow as an educator and as a person. Research is what good teachers do. Without it, teaching becomes stale and filled with lost hope and misaligned ideals. In the end, the students lose out on the education they deserve and desire.

References

- Birney, R. (1964). The effects of grades on students. *The Journal of Higher Education*, 35, 96 – 98.
- Crespi, L. (1942). Quantitative variation of incentive and performance in the white rat. *The American Journal of Psychology*, 55, 467 – 517.
- Fehr, E. & Falk A. (2001). Psychological foundations of incentives. Working Paper No. 95. *Institute for Empirical Research in Economics, University of Zurich*.
- Gambrell, L and Marinak B. (1997). Incentives and intrinsic motivation to read. *Reading engagement: Motivating readers through integrated instruction*, 205-217. John T. Guthrie and Allan Wigfield, (Eds.). Newark, DE: International Reading Association.
- Institute for Academic Excellence, Inc. (1997). *Toward a balanced approach to reading motivation: Resolving the intrinsic-extrinsic rewards debate*. Wisconsin Rapids, WI.
- Lewis, C. (1978). Grades don't have to hurt. *The English Journal*, 67, 63 – 64.
- Lipe, D. & Jung S. (1971). Manipulating incentives to enhance school learning. *Review of Educational Research*, 41, 249 – 280.
- Nickerson, J. (1943). Why wage incentives work. *The Public Opinion Quarterly*, 7, 391 – 402.
- Oldfather, P. and Dahl K. (1995). Toward a social constructivist reconceptualization of intrinsic motivation for literacy learning. *National Reading Research Center: Perspectives in Reading Research*, 1 – 19.
- Pestello, F. (1987). The social construction of grades. *Teaching sociology*, 15, 414 – 417.

Appendix A – Student Inventory (Condensed for space purposes)

Student Inventory

Instructions: Please fill in all the questions, and be as thorough as you can. The more I know about you, the better the course will be since I'll be able to tailor the content based on you, the student.

Name: _____ Grade: _____

Email Address: _____

Age: _____ Best friend in this class: _____

Do you have access to a computer with printer at home?	YES	NO
Do you have access to the Internet at home?	YES	NO
Do you use websites such as MySpace, or use AIM?	YES	NO
Do you own or use an MP3 player?	YES	NO
Do you know how to use Microsoft's PowerPoint well?	YES	NO
Are you good at writing?	YES	NO
Do you feel comfortable speaking in front of others?	YES	NO
Do you want to get a good grade in this class?	YES	NO
Have you ever used a blog, or message board on the Internet?	YES	NO
Do you believe you make your own decisions?	YES	NO
Are you ready to do your best on all assignments in this class?	YES	NO

List Three (3) areas you wish to learn more about, or study more in-depth:

- 1.
- 2.
- 3.

List Three (3) areas you do not wish to learn more about, or care not to study:

- 1.
- 2.
- 3.

Appendix A – Student Inventory (Condensed for space purposes)

- What do you do for fun? Do you have any hobbies?
- Do you plan on going to college or university? If so, where, and what do you plan on studying?
- Have you traveled abroad? If so, where did you go, and what did you learn?
- What's your worst fear?
- What kind of music do you listen to?
- Do you have a favorite, or comfort food? If so, what is it, and do you know how to cook it?
- Do you work after school, or during summer break? If so, where, and do you like it?
- How do you see yourself 10 years from now? Will you have a great job, or no job at all? Are you married with kids, or live alone? Be realistic, yet optimistic... (Continue on back in needed.)

Appendix B – Journal Prompts, Government

Journal**What is required for this assignment:**

Journal # 1

Please watch the Presidential address to the nation on Tuesday night (1/23/07). What are your thoughts and comments on his speech? Name two main points made by the President, and discuss how you feel about them. Do you agree or disagree?

Journal # 2

In a brief narrative, tell the reader why the study of government is important, or why not. In either case, provide four solid arguments as to why or why not the reader should study government. Then, share your own thoughts on the subject. Do you like government, or is it something that you think you may never use? Would you rather study something else? Provide examples.

Journal # 3

Imagine you were one of the forefathers of this country. What are some of the things you would have done differently in the beginning? Would you have opted for more amendments right away, or perhaps not had a constitution at all? Provide the reader with at least three good arguments for each point you make. Be concrete, yet specific.

Journal # 4

Imagine that you are a member of an interest group. Choose a position for your group: to keep the Electoral College, or to abolish it. Write a persuasive speech explaining your position. Include at least four solid persuasive points in your speech. And remember, it's a speech, so use dramatic and descriptive language as best you can.

Journal # 5

Please comment on the WebQuest activity done in class. Include in your comments what you liked, what you didn't like, and what could have been better. Did you like the pamphlet, or would you have preferred another format altogether? What did you learn from the WebQuest? Would you like to do more in the future?

Journal # 6

Determine if there should be greater limits on the president's powers. Comment on your beliefs, and then compose several catchy slogans supporting your view. For some example of slogans, see <http://en.wikipedia.org/wiki/Slogan>.

Appendix B – Journal Prompts, Government

Journal # 7

What decisions by a president affect the direction of the nation's economy? Explain your answer as thoroughly as you feel necessary. Add examples from media.

Journal # 8

To be announced in class.

Journal # 9

Reflect a bit on writing and on this class. Have you learned anything new this semester? Have you applied anything you used this class anywhere else (other classes, other arguments). What did you do really well this semester? What did you struggle most with? Is there anything else you want to say about the class, the writing, the semester, or the teacher?

Journal # 10

Visit www.despair.com. Scroll through their demotivating posters and pick one that interests you. Explain why you picked that particular poster, and make sure to either link to the poster or copy and paste the picture into your journal entry. See the [Information](#) tab on how to do this if you're unsure.

Appendix C – Student Survey (Room to write removed for display purposes.)

Student Teacher Evaluation

Teacher being evaluated: *Andreas Johansson*

Instructions: Now that my student teaching is coming to an end, it is your turn to grade me and my performance as a teacher in your classroom. Please spend some time filling out the below survey regarding my performance, making sure to add insightful information, suggestions, likes and dislikes, as well as whatever commentary you feel necessary. I appreciate any and all feedback that you may submit. This evaluation will help me improve my teaching and strategies for the future as a teacher. Your responses will in no way impact your grades – so feel free to be as honest as you'd like!

1. What were some activities during this past semester that you really liked? Why?
2. What were some activities that you did not like? Why?
3. What are some suggestions you would make in order to make activities in the classroom more fun and engaging? Be specific, and as detailed as possible.
4. What are three (3) things that you learned this semester that you would take with you to other classes, or use in the future? Why?
5. Did you like the writing assignments (weekly journals)? Why or why not?
6. Are there areas you wish we would have covered more in detail? Why?
7. How could I improve my classroom management technique, i.e. discipline in the classroom? Be specific.
8. If you had the chance, would you choose to have me for another class in the future? Why, or why not?
9. On a regular grading scale, A – F, how would you rate my overall performance as a teacher, as compared with other teachers you have had currently or in the past?
10. Please give me some open feedback about teaching, learning, classroom setup, activities, assignments, tests, projects, or anything else you may think of here:

Appendix D – Sample ProgressBook Report (Student Grades)

S_ID	AV%	TEST%	HW%	CW%
1	99.70 A+	98.00 A+	100.00 A+	100.00 A+
2	97.27 A+	92.00 A-	96.15 A	100.00 A+
3	98.48 A+	90.00 A-	100.00 A+	100.00 A+
4	98.79 A+	116.00 A+	98.46 A+	93.33 A
5	81.52 B-	96.00 A	81.54 B-	76.67 C+
6	42.73 F	72.00 C-	0.00 F	70.00 C-
7	100.61 A+	104.00 A+	100.00 A+	100.00 A+
8	92.42 A-	102.00 A+	83.85 B	96.67 A+
9	88.48 B+	104.00 A+	76.92 C+	93.33 A
10	51.21 F	78.00 C+	0.00 F	86.67 B+
11	83.94 B	78.00 C+	67.69 D+	100.00 A+
12	83.33 B	68.00 D+	73.85 C	96.67 A+
13	93.94 A	104.00 A+	90.77 A-	93.33 A
14	66.06 D	56.00 F	69.23 D+	66.67 D+
15	86.67 B+	86.00 B	90.77 A-	83.33 B
16	95.76 A	82.00 B-	100.00 A+	96.67 A+
17	76.36 C	80.00 B-	78.46 C+	73.33 C
18	96.36 A	78.00 C+	99.23 A+	100.00 A+
19	90.30 A-	68.00 D+	87.69 B+	100.00 A+
20	95.45 A	90.00 A-	92.31 A-	100.00 A+
21	95.45 A	110.00 A+	84.62 B	100.00 A+
22	93.64 A	88.00 B+	92.31 A-	96.67 A+
	86.7	88.2	80.2	92

AV% - Average Student Score in Class

TEST% - Test Score

HW% - Homework Score

CW% - Class-work Score

Appendix E – Missing Assignments Report

Missing Assignments

	Date Due
Journal # 1	01/26/07
EG	
RM	
Journal # 2	02/02/07
EG	
RM	
Journal # 3	02/09/07
EG	
RM	
Journal # 4	02/16/07
NB	
AC	
EG	
RM	
CV	
PW	
AW	
Chapter Summary 1-4	03/05/07
EG	
ZM	
RM	

Appendix F – Field Notes

Sunday, January 28, 2007

The beginning...

So, I have just finished my first week as a student teacher. Overall, I think it went very well, but thought I should probably review the week for myself, as well as reflect on incidents, learning moments, and list what could be improved. The week began with me taking over four classes, two preps. The first prep is Contemporary Issues I which I have 22 students in the one class, and 29 in the second. Then I have Government for two classes, each with 22 students. I share two classrooms, the one for CI being the smaller one. This has proven to be quite a challenge, and I'm constantly dealing with the little space in which to operate. I ended up rearranging the classroom on the second day (with the blessing of my cooperating teacher), and after that it seemed to work a bit better. It created more room in the middle, as well as allowed me to move around a lot more – solving various classroom management issues.

In the other classroom, which is much larger, I was able to acquire another table as well as a total of twenty some chairs for group work. I also arranged that classroom to face each other, rather than the classic rows and columns. I have some photos, but they are on the other computer, so I'll put them up later. That arrangement works really well, and I've run centers (Thanks, Bonnie!) and other group work in this setting, and can't wait to run a debate!

So, here's the list of what went well, and what could improve:

Good

- Classroom arrangements
- Use of syllabi and administrative handouts
- Personal introductions
- Student Inventory

Needs Improvement

- Asserting authority immediately
- Dealing with issues in the classroom
- Taking attendance (I completely forgot one day...)
- Grading – needs to be done ongoing
- Organizing handed in work from students

So, the above lists are just a reflective exercise to get myself on track as a student teacher, and to make sure I don't forget to work on issues that need addressed. Most of the ones I had issues with have been dealt with, and I think this week will go much better in terms of managing the administrative parts of of teaching. There are so many things that need handled throughout the day, and yet, there seems to be no time for teaching alone! Attendance, checking against the master list, reporting absences, planning, grading, eating lunch, organizing handouts, making copies (which takes forever!), and so on...

Well, we'll see how it goes, and I'll report back when I have the time. I have never been so tired in my life as this last week! I think it'll be better as I am getting used to the sleep schedule as well as getting back to working full time. Feel free to leave comments and encouragements!

Appendix F – Field Notes

Tuesday, March 20, 2007

Lessons learned & attempting to gratify all needs...

Here's what I learned today:

Students are unable to appreciate anything they are not able to immediately perceive as beneficial to their surroundings, themselves, or others. Henceforth, students have a hard time accepting and appreciating advice on and about the future – it's simply too far out for most students to grasp the concept. Naturally, this does not pertain to all students, and certainly there are those who have the necessary skill, intuitiveness, and foresightedness to accurately predict future actions, impacts, and outcomes.

The above phenomena helps explain why some students are so very intently worried about their grade at any given point in time, even though that grade may not end up being the grade they earn at the end of a grading period, or end of a semester. Many high schools use online systems to track and report student progress, i.e. grades, and many students take advantage of this tool when tracking grades themselves. This can be both good, and bad, at the same time.

The good part is that the student is able to perceive progress and success with immediate effect. Thusly, the data is processed by the teen brain as instant gratification as they are able to either celebrate success, either on their own or with friends and family, or prepare a battle plan to confront the teacher (especially since many students are surprisingly poor at reflective thinking and self-criticism). Little time is allowed to elapse between the submission of work and the demand for a satisfactory mark, or any mark at all for that matter.

Now, I agree that prompt and speedy feedback makes for a better learning environment, as well as supplies the student with quick tools by which to remedy eventual faults or improve the unimprovable (as some students view substandard work as 'just fine, as long as it gets the grade they perceive as acceptable – in many cases a D or a C'). Additionally, online grade tracking allows the parents, and other teachers to take an active role in the schooling of students. However, with the good comes some bad...

Some students, and particularly often, the students who are already doing very well in class, or in school in general, will obsessively monitor posted marks. This creates a culture of submission for gratification (for the submission's sake!), rather than submission for self. Students who are performing well in an average high school often recognize themselves as perfectionists, and both need and demand full credit on all assignments, regardless of meeting the highest of standards or not. Oftentimes, the teacher is not allowed, by their perception, to question their right to a high grade, much less their right to an entitled grade for so-so work. This creates a difficult situation for any teacher, and one that must be dealt with on a personal level with the individual student, rather than addressing the entire class.

Having spoken to a few students that are indeed high achievers, but also self-conscious about their performance and progress in school, I have found that those same students who generally do well in school also feel a need for additional recognition outside of stated parameters, such as grading rubrics, in order to feel they are performing to their perceived level of success or standard. However, by allowing this behavior, it further promotes the cycle of checking grades, and taking valuable time away from other students who quite frankly need the teacher's attention more in order to reach personal and academic success.

Appendix F – Field Notes

The above argument for the teacher's need to attend to struggling students while having to deal with those students who constantly need to approve themselves by spending social capital, i.e. grades, (even though they need little to no help in order to excel at assigned tasks) in order to gratify themselves on a psychological level in comparison to others, only proves the constant struggle between extrinsic and intrinsic motivation in the classroom.

I have had the fortune to see both methods of motivation in my classrooms, and must say that having had the benefit and pleasure, as well as horror, of watching historically extrinsically motivated students turned intrinsic, and vice versa, have been extremely beneficial to my own personal growth, understanding of students, and developing as a teacher. I could have wished for no better scenario than what I have been given, and wish only that all teachers be as fortunate as I have these past few weeks.

A sincere 'thanks!' go out to all of my 95 students.

Appendix G – Tables and Graphs

DATA SET	Journal 1	Journal 2	Journal 3	Journal 4	Journal 5	Journal 6	Journal 7	Journal 8	Journal 9	S_AV Score
EC	20	20	20	20	20	20	20	20	20	20.00
KB	20	20	20	20	20	20	20	20	20	20.00
LM	20	20	20	20	20	20	20	20	20	20.00
MY	20	20	20	20	20	20	20	20	20	20.00
BN	20	20	19	20	20	20	20	20	20	19.89
EE	20	20	20	20	20	19	20	20	20	19.89
MB	20	19	20	20	20	20	20	20	20	19.89
LA	20	20	20	20	20	18	20	20	20	19.78
SN	20	20	20	18	20	20	19	20	20	19.67
RA	20	19	20	20	20	18	18	20	20	19.44
WP	20	20	20	15	20	20	18	20	20	19.22
WB	17	16	17	18	20	18	17	20	20	18.11
CA	20	20	20	20	20	20	20	20	0	17.78
KA	20	18	20	20	20	0	20	20	20	17.56
OR	20	20	20	20	20	17	20	20	0	17.44
SM	19	18	19	20	20	17	18	0	20	16.78
MZ	20	18	20	20	0	0	18	20	20	15.11
SA	20	19	20	18	0	20	0	18	20	15.00
WA	16	20	20	19	20	20	19	0	0	14.89
VC	17	15	18	0	20	0	15	0	20	11.67
GE	0	0	0	0	0	0	0	20	0	2.22
MR	0	0	0	0	0	0	0	0	0	0.00
J_AV	17.68	17.36	17.86	16.73	16.36	14.86	16.45	16.27	15.45	
Missing	2	2	2	3	4	5	3	4	5	

Table 1 – Journal Scores, showing average scores per assignment and students, as well as missing assignments (indicated by a 0), color coded to aid in interpretation.

Appendix G – Tables and Graphs

DATA SET	Weighted average	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
MY	99.87	25	25	25	25	25	25	25	25	25	25
WP	99.87	25	25	25	25	25	25	25	25	25	25
BN	99.6	25	25	25	25	25	20	25	25	25	25
LA	97.47	25	25	25	25	25	25	25	25	25	25
KB	96.67	25	20	25	25	25	25	25	25	25	25
EC	96.13	25	25	25	25	25	25	25	25	25	25
MB	96.13	25	25	25	25	25	25	25	25	25	25
CA	94.4	25	25	25	25	25	15	25	25	25	25
LM	93.33	25	25	25	25	25	25	25	25	25	25
SN	93.07	20	20	25	25	25	25	25	25	25	25
EE	92.67	25	25	25	25	25	25	25	25	25	25
KA	91.07	20	20	25	25	25	25	25	25	25	25
RA	90.93	25	25	25	25	25	25	25	25	25	25
OR	89.87	25	25	20	25	25	25	20	25	25	20
WA	84.8	25	25	25	25	20	25	25	25	25	25
WB	79.87	20	20	20	20	25	20	15	25	20	25
SM	77.47	15	15	20	20	20	25	20	25	20	20
MZ	77.2	25	25	25	25	25	25	25	25	25	25
SA	69.6	15	15	20	20	20	20	20	20	20	20
VC	68.8	15	15	15	15	20	20	20	25	25	20
GE	50.4	15	20	15	15	20	20	25	25	25	25
MR	40.93	20	20	20	20	25	25	20	20	25	20

Table 2 – Participation, based on rubric, color coded to aid in interpretation.

Appendix G – Tables and Graphs

DATA SET	Weighted average	CS 1	CS 2	CS 3
MY	99.87	40	20	30
WP	99.87	40	20	30
BN	99.60	40	20	30
LA	97.47	40	20	30
KB	96.67	40	20	30
EC	96.13	40	20	30
MB	96.13	40	20	30
CA	94.40	40	20	30
LM	93.33	40	20	30
SN	93.07	40	20	30
EE	92.67	35	20	0
KA	91.07	40	20	30
RA	90.93	25	20	30
OR	89.87	40	20	30
WA	84.80	40	20	30
WB	79.87	40	20	0
SM	77.47	30	15	20
MZ	77.20	30	15	0
SA	69.60	25	0	20
VC	68.80	30	0	30
GE	50.40	0	20	0
MR	40.93	0	0	0

Missing	2	3	5
---------	---	---	---

Table 3 – Chapter Summaries, coupled with Weighted Course Average, color coded to aid in interpretation.

Appendix G – Tables and Graphs

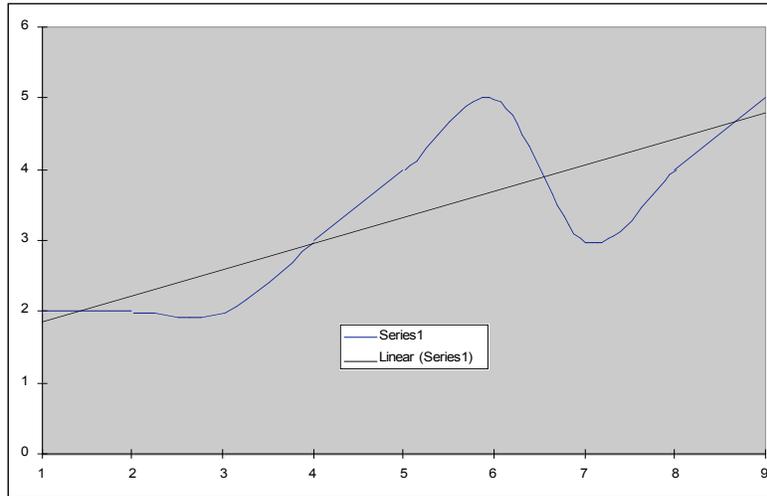


Figure 1 - Missing Journal Assignments, trended over a period of time (9 weeks), with trend line.

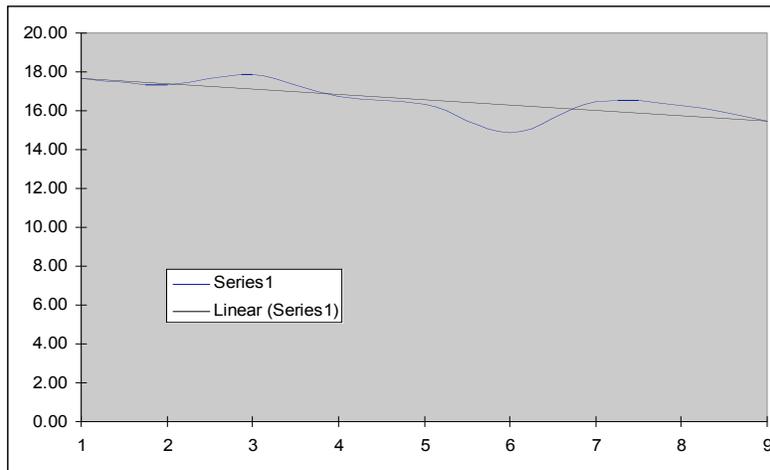


Figure 2 – Journal Assignment Average Score (out of 20), trended over a period of nine weeks, with trend line (black).

Appendix G – Tables and Graphs

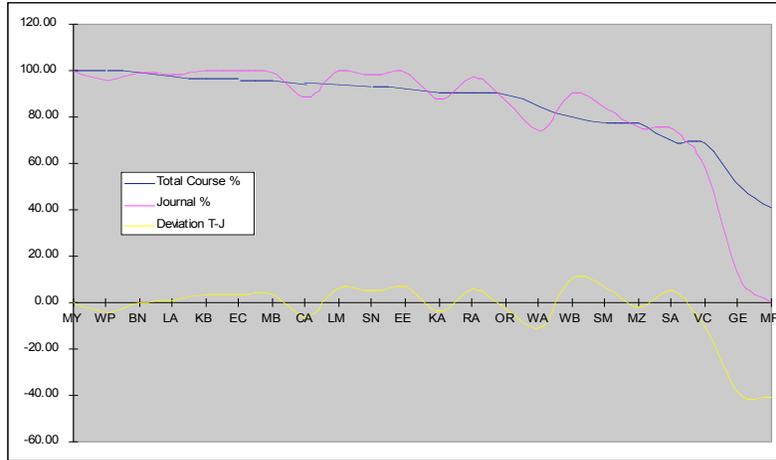


Figure 3 – Relative Data, comparing the Weighted Course Grade with Total Journal Scores. Additionally, showing a relationship between course performance and journal scores, as a deviation function of Total Course Score – Total Journal Score. The less deviation, the more related the two scores are.

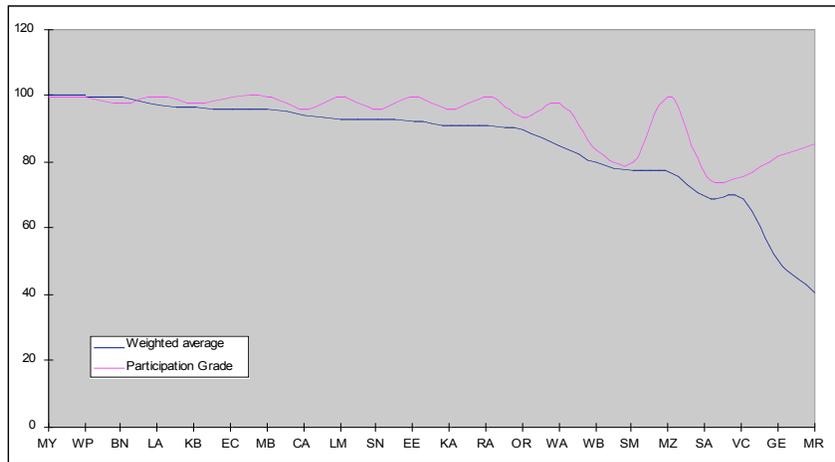


Figure 4 – Relationship between Weighted Average and the Participation Grade, shown across the data set (indicated on the X-axis).

Appendix G – Tables and Graphs

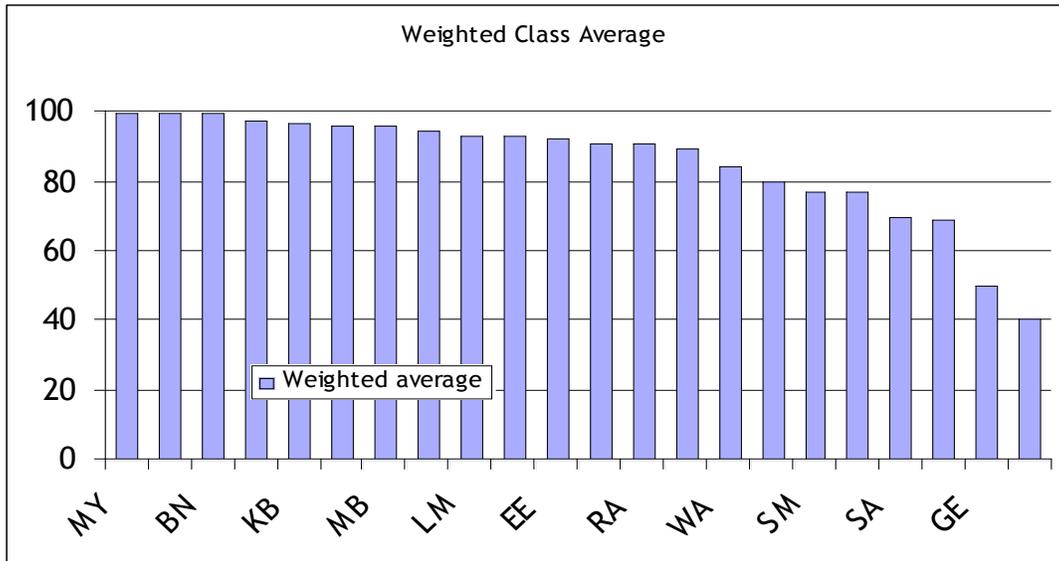


Figure 5 – Weighted Class Average, showing overall performance in the subject group.

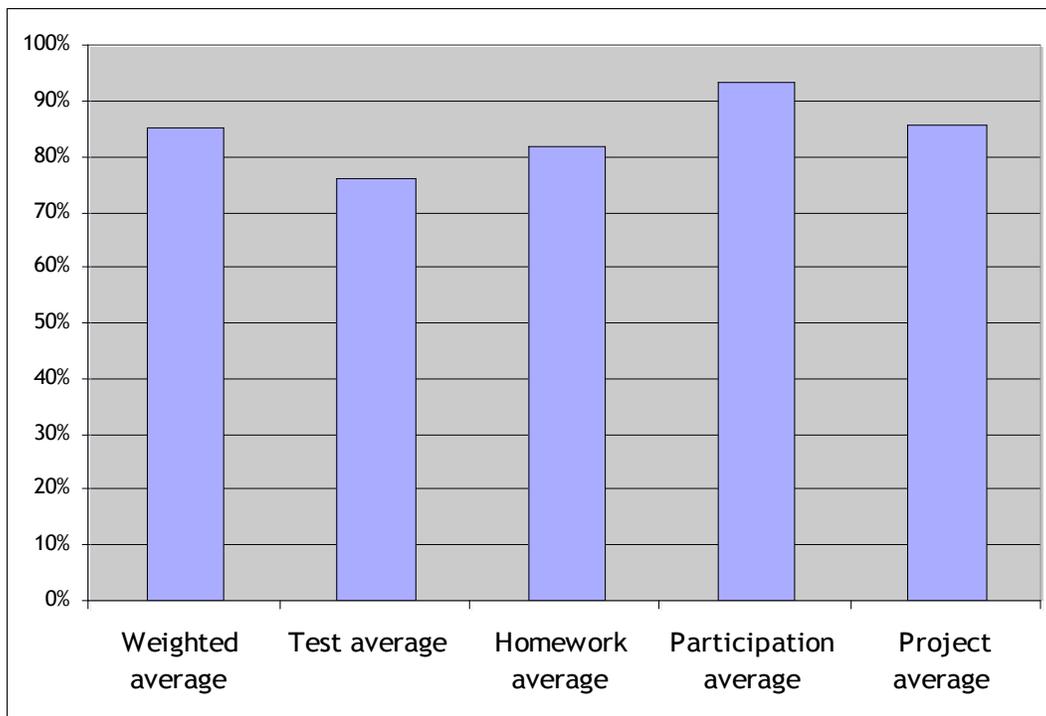


Figure 6 – Averages on various parts of grades in the subject group.

Appendix G – Tables and Graphs

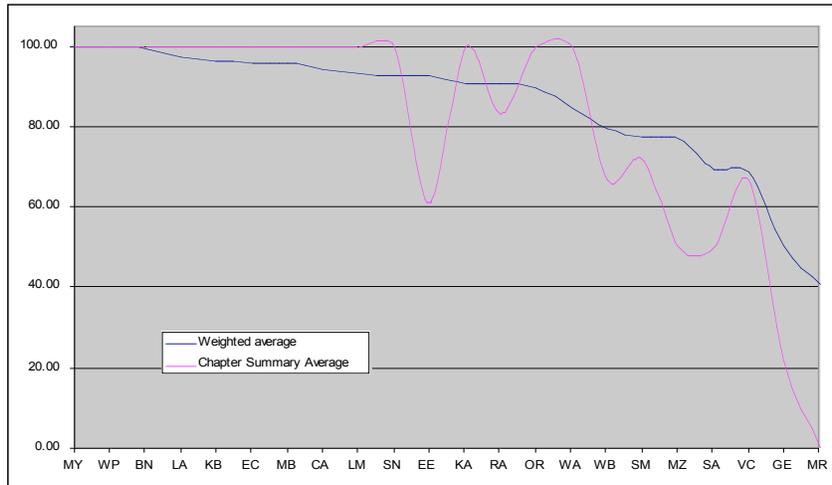


Figure 7 – Weighted Average compared to Chapter Summary Scores.